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The International Labor Conference.¹

By MRS. V. B. TURNER.

THE first world labor conference was in session in Washington from October 29 to November 29, 1919. Called in accordance with the provisions of the labor convention in the Peace Treaty, and meeting in the Pan American Building, which is dedicated to the cause of Pan American peace and progress, the conference had a definite purpose—the adoption of measures looking toward the promotion of industrial peace, without which no national peace is really possible.

In welcoming the delegates Hon. William B. Wilson, United States Secretary of Labor, emphasized the fact that since the days of "Moses, as the spokesman, the angel, the walking delegate, of the brick makers of Israel, until the present time, the relationship that should exist between employers and employees, the best means of securing the acme of production while safeguarding those who toil, and the equitable distribution of that which has been produced, have been ever present questions." The proper solution of these problems, upon which the progress of the world depends, he continued, must include the spiritual nature of man as well as his material comfort, and can not be arrived at hastily. Universal justice and harmony are not to be achieved overnight. The slow process of experimentation must be followed, in which the bad must be rejected, the good retained, and all so adapted that nothing could occur that would "destroy the basis of the structure of modern civilization, the democratic institutions that exist in numerous nations of the world; for after all, of what avail the plow, the sail, or land or light or life, if freedom fail?"

¹ This article was prepared for insertion in the December issue of the MONTHLY LABOR REVIEW, but the conference had not adjourned when the December issue went to press, and it was thought advisable to hold the article for the present number. In the meantime a copy was given to the conference, which had it mimeographed for general circulation.

The full text of the draft conventions and recommendations adopted by the International Conference will be published in the February issue of the MONTHLY LABOR REVIEW.

Preliminary to the permanent organization of the conference the report of the international organizing committee was presented for adoption. This committee, appointed to assist the Government of the United States of America in making necessary arrangements for the International Labor Conference, consisted of seven members, appointed by the United States of America, Great Britain, France, Italy, Japan, Belgium, and Switzerland, as follows:

United States of America: Dr. J. T. Shotwell (provisionally), professor at Columbia University.

Great Britain: Sir Malcolm Delevingne, K. C. B., Assistant Under-Secretary of State, Home Office.

France: Mr. Arthur Fontaine, Councillor of State, Director of Labor.

Italy: Mr. di Palma Castiglione, Inspector of Emigration.

Japan: Dr. M. Oka, formerly Director of Commercial and Industrial Affairs at the Ministry of Agriculture and Commerce.

Belgium: Mr. E. Mahaim, professor at Liège University.

Switzerland: Mr. W. E. Rappard (provisionally), professor at Geneva University.

Mr. Arthur Fontaine, Director of the Labor Department of the French Ministry of Labor, had been elected chairman of the committee, and Mr. H. B. Butler, Assistant Secretary of the British Ministry of Labor, had been appointed secretary. The agenda for discussion and action by the conference, as set forth in the annex to the labor convention included in the Peace Treaty, embraced the following subjects:

1. Application of the principle of the 8-hour day or of the 48-hour week.
2. Question of preventing or providing against unemployment.
3. Women's employment:
 - (a) Before and after childbirth, including the question of maternity benefit.
 - (b) During the night.
 - (c) In unhealthy processes.
4. Employment of children:
 - (a) Minimum age of employment.
 - (b) During the night.
 - (c) In unhealthy processes.
5. Extension and application of the international convention adopted at Bern in 1906, on the prohibition of night work for women employed in industry, and the prohibition of the use of white phosphorus in the manufacture of matches.

The committee's report pointed out that the conference would also have to deal (1) with the appointment of the governing body of the International Labor Office, and (2) the approval of rules of procedure.

Through a questionnaire sent out to the different countries, information was secured regarding existing legislation and practice in respect to the various subjects enumerated in the agenda, together with proposals from the respective Governments as to how these

subjects should be dealt with in the conference. Upon the information thus obtained the organizing committee based the suggestions for draft conventions and recommendations which it submitted to the conference, in the form of four reports, as a basis of discussion.

The Make-Up of the Conference.

According to the terms of the labor convention in the Peace Treaty each State adhering to the convention is entitled to four delegates in the International Labor Conference, two of these delegates to be appointed by the Government, one by the employers' organizations, and one by the workers' organizations. "Each delegate may be accompanied by advisers, who shall not exceed two in number for each item on the agenda of the meeting. When questions specially affecting women are to be considered by the conference, one at least of the advisers should be a woman." The non-Government delegates and advisers are to be chosen from the most representative employers' and workers' organizations, if such exist, in their respective countries.

While all the delegations at the conference were not as complete as possible under the labor convention, a number of the countries had full representation, chief among which were Belgium, Canada, Czecho-Slovakia, Denmark, France, Great Britain, Italy, Japan, Netherlands, Norway, Poland, Spain, and Sweden. Fourteen of the 40 countries represented sent only Government delegates, for reasons temporary in their nature, as explained to the conference.

Through the failure of the United States Senate to ratify the Peace Treaty, the United States was not entitled to official representation in the labor conference except through the courtesy of the visiting delegates, and this courtesy was promptly extended. In a motion introduced by Baron Mayor des Planches, Government delegate from Italy, and unanimously adopted by the conference, the United States employers and workers were requested to send delegates. Mr. Samuel Gompers was appointed to represent labor. The employers did not send a representative. Delegates from the United States, however, did not have the privilege of voting.

On the question of the admission of the German and Austrian delegates the organizing committee recommended "that in anticipation of their admission to the League of Nations and in view of their expressed willingness to cooperate in the work of the labor organization, Germany and Austria are hereby admitted to membership in the international labor organization with the same rights and obligations possessed by the other members of the labor organization,

according to the terms of the treaties of peace signed at Versailles on the 28th day of June, 1919, and at St. Germain on the 10th day of September, 1919."

Opinions on such admission, unfavorable and favorable, were freely expressed. It was argued, on the one hand, that the war history of the countries in question precluded their joining with the Allied peoples on the same basis; while, on the other hand, it was pointed out that if legislation were adopted enforcing the 8-hour day or the 48-hour week, Germany and Austria could not possibly be expected to apply such legislation if they had not been invited to join in the proceedings. Again, it was suggested that if admitted to the labor organization there would also be lacking opportunity for these countries to injure industrial interests of other countries. Economic reasons eventually prevailed and the recommendation was adopted. Owing, however, to a delay in obtaining passage and the unexpected brevity of the conference the German and Austrian delegates did not come to the United States.

It is interesting to note that the delegate representing the French employers voted against the recommendation and the delegate representing Belgian employers abstained from voting, while the Government and labor delegates from those nations voted in favor of it.

Delegates were present from the following 40 countries: Argentina, Belgium, Bolivia, Brazil, Canada, Chile, China, Columbia, Cuba, Czecho-Slovakia, Denmark, Ecuador, Finland, France, Great Britain, Greece, Guatemala, Haiti, India, Italy, Japan, Netherlands, Nicaragua, Norway, Panama, Paraguay, Persia, Peru, Poland, Portugal, Roumania, Siam, Salvador, South Africa, Spain, Sweden, Switzerland, Uruguay, and Venezuela, and Serbs, Croats, and Slovenes. Among these delegates were 19 women, who represented their various countries in the capacity of advisers. On several occasions, as substitutes for regular delegates, they addressed the conference on subjects pertaining to the employment of women and children.

Organization of the Conference.

Permanent organization was not effected until October 31, 1919, when Hon. William B. Wilson, United States Secretary of Labor, was made president of the conference. Secretary Wilson voiced his appreciation of the honor conferred upon the American Government and the American people through this courtesy to him, and re-emphasized a thought to which he had given expression in his opening address, as follows:

Mankind has had two great economic problems to solve. The first of these problems was the problem of production, the means of producing suf-

ficient by which the material comfort of the people of the world might be secured. The inventive genius of man has solved that question to a very great extent. There is no longer any fear that the people of the world can not produce sufficient to provide for the material comfort of all that may be born into it, provided there is ample opportunity to work under proper safeguards, and that the things that are produced are equitably and justly distributed.

If we can solve the question of giving to all the people an opportunity for employment under proper safeguards and secure the equitable distribution of that which is produced we will have achieved the greatest material ideals that have been conceived in the human mind. To the solution of these problems you are bringing your wisdom and your experience, but the problems will not be solved as the result of the brilliant conceptions of any one mind. The problems of production and the other problems that man has solved have been solved by the process of adding one idea to another, building the structure one stone upon another until it is completed. That is the task now before the International Labor Conference—the task of finding the material and fitting it into its proper place in the structure.

Right Hon. G. N. Barnes, member of the British War Cabinet, for the Government representatives, Mr. Jules Carrier (Belgium), representing the employers' group, and Mr. Léon Jouhaux, secretary of the General Confederation of Labor, France, representing the workers' delegates, were elected vice presidents, while Mr. H. B. Butler was made secretary general. A committee of selection (or steering committee) was named from the three groups as follows:

Government Delegates.

Sir Malcolm Delevingne, Great Britain; Dr. Felipe Espil, Argentina; Mr. Arthur Fontaine, France; Mr. E. Mahaim, Belgium; Dr. S. Neumann, Denmark; Mr. M. Oka, Japan; Mr. di Palma Castiglione, Italy; Dr. Adolfo Posada, Spain; Hon. Gideon D. Robertson, Canada; Mr. Charles Spinka, Czecho-Slovakia; and Dr. Hans Sulzer, Switzerland.

Employers' Delegates.

Mr. Francis X. Hodacz, Czecho-Slovakia; Mr. Louis Guérin, France; Mr. D. S. Marjoribanks, Great Britain; Mr. Ferdinando Quartieri, Italy; Mr. Sanji Muto, Japan; and Mr. Alfonso Sala, Spain.

Workers' Delegates.

Mr. Corneille Mertens, Belgium; Mr. Léon Jouhaux, France; Mr. G. H. Stuart-Bunning, Great Britain; Mr. J. Oudegeest, Netherlands; Mr. Francisco L. Caballero, Spain; Mr. H. Lindqvist, Sweden.

Committees to confer and report on various parts of the agenda, a committee on standing orders, and one on admissions were nom-

inated by this committee and afterwards approved by the conference.

Program of the Conference.

The 8-Hour Day.

The question of the 8-hour day or 48-hour week, the first item of the agenda, was presented to the conference by the Hon. G. N. Barnes, Government representative from Great Britain, who moved "that the draft convention on the 48-hour week prepared by the organizing committee be adopted by the conference as the basis for discussion, but that the question of its application to the tropical and other countries referred to in the third paragraph of article 405 of the treaty be referred in the first instance for consideration by the special committee which shall report to the conference."

The organizing committee suggested the principle of the 48-hour week instead of the 8-hour day for two reasons:

1. Greater elasticity is possible in the arrangement of the hours of work and the adoption of a half holiday, or even a whole holiday, on Saturday or some other day of the week, by enabling a longer period than 8 hours to be worked on other days;

2. The weekly day of rest is possible through the 48-hour week, whereas the principle of the 8-hour day by itself would not necessarily help to secure this rest period.

In his argument for the 48-hour week Mr. Barnes emphasized the fact that while increased production must be had, it could be secured only through a better organization of industry, by humanizing the conditions of labor. Long hours of labor would not, in his opinion, contribute to that end. The basic 8-hour day would not give the leisure the workers desired and needed. The recommendations should be sufficiently elastic to meet the requirements of special industries and to provide for unusual emergencies such as might arise due to fire, flood, etc. To illustrate this point he said:

It is true that an 8-hour day, if spread evenly over a week, makes a 48-hour week. But there is no reason why it should be spread evenly over every day in the week if industries can be better served otherwise. For instance, there is laundry work, which as I know and all of you know has its busy spell in certain days of the week, and I should provide for it accordingly. Again, there are some countries in which Saturday afternoon work is unknown. I should make a provision for that by a longer working day in the days preceding Saturday; and therefore I put the proposition to you in the form of a 48-hour week instead of an 8-hour day. I am inclined to think if that be adopted, we shall, to some extent, avoid or prevent troubles arising from overtime.

The point was also made that it would be difficult to bring countries in which industry is not highly organized to the 8-hour level.

The employers objected to an immediate vote upon this subject and later through Messrs. D. S. Marjoribanks (Great Britain) and Jules Carlier (Belgium) presented a substitute plan, the draft of which was not signed by the Dutch, Italian, and Canadian employer representatives.

While accepting the principle of the 8-hour day or 48-hour week, they would subject the rule to certain modifications, including those relating to maintenance and increase of output, existing agreements, normal distribution, and reconstruction of industry in the devastated areas, and the following specific conditions:

Special conditions have to be considered in regard to intermittent work and with regard to workers engaged either in special occupations or in work which is done after working hours.

Special consideration must be given to work executed by order of an official authority, in the interests of national defense, to maintain public service, and in connection with urgent work the execution of which is imperative either to prevent or to repair accidents which might stop work.

The limit of 48 hours per week or 8 hours per day may be exceeded and extended to a maximum of an average week of 56 hours in those industries where continuous processes are carried out by successive shifts.

Industries subject to changes of weather or which are, because of unforeseen circumstances, subject to periods of enforced idleness will have special regulations enabling them to make good for the loss of time arising from such enforced idleness. And with suitable control this will apply also in cases of idleness arising from "force majeure."

Where the character or nature of the work demands, the legislations or agreements made between employers and workpeople may extend the duration of a working day beyond 8 hours, it being understood that the authorized maximum of additional hours per year should not exceed 300.

The bureau of international labor may, in exceptional cases, and pending the restoration of normal conditions of production, call for international agreements to make further exceptions in favor of certain industries whose products are indispensable for food supply and for transport by land and water. The duration of these exceptions must be strictly limited, and in no case will they exceed five years.

Energetic opposition to the employers' plan was voiced by the workers' delegates. Mr. Léon Jouhaux (France) insisted that the workers must have both the 8-hour day and the 48-hour week and that these should be the maximum working periods, and he introduced an amendment to Mr. Barnes' motion to that effect. Mr. Gompers (United States), on being given the privilege of the floor, pointed out that according to this plan the working week might be increased to 56 hours, and not only that, the authorized maximum of additional hours per year might reach 300 and still further exceptions be made in exceptional cases which might impose additional hours. The history of industry, he asserted, shows that "there is

more produced by the workers, everything else being equal, in an 8-hour day than in a 10 or 12 hour day."

In the lengthy general discussion of the motion which followed, the usual arguments for and against the application of the principle of the 8-hour day were made and several amendments offered. Those opposed to the application of this principle emphasized the fact that increased production is the greatest present necessity. War debts must be paid and foreign competition and immediate economic needs met. Shorter hours would mean less production, and the French employers' delegate said that the introduction of the 8-hour day in France had resulted in a 15 to 20 per cent reduction in production. If production should be cut down, the workers would be the first to suffer. It was further asserted that this limitation of working hours would not be practicable in seasonal industries such as agriculture and lumbering, in continuous industries, and others; that it would be the deathblow of small industries and would prevent starting new ones; and that in countries like Canada and the United States, where the labor question is a separate one in each Province and State, difficulties of agreement would result from the different interests of the different national political divisions.

In reply to these arguments it was maintained that the question of increase in production was not overlooked in the limitation of the length of the working time. Experience gained in the war and scientific investigation had demonstrated the fact that the longer the hours of work the less the production. As regards the application of shorter working hours in the continuous industries the difficulty of granting a weekly day of rest could be met by an increase of shifts, and these could be easily manned for the reason that in the electrical industries only a small number of workers are required for the necessary fourth shift and in the chemical and steel industries the labor required is largely unskilled labor which is readily obtained. A delegate from Czecho-Slovakia pointed out that the National Polish Assembly wished the same law applied to agriculture as governed in other industries, because the attraction of town life and shorter hours induced the laborers to leave the farms. A law of this character, he said, had been in force in Poland, a newly created State whose economic questions were hard to solve, for nearly a year and no serious objections to it had been made. The 8-hour day in some form is moreover an accomplished fact in many countries. To question its adoption, remarked the Government delegate from Netherlands, would be like trying to rediscover America. The social and ethical importance of the 8-hour day and the 48-hour week was especially emphasized. The worker must not only "be protected against

undue fatigue, but also must be insured reasonable leisure and opportunities for recreation and social life."

The motion, with all the amendments and suggested changes, was finally referred to a committee composed of 15 delegates, 5 from each section, for consideration. The final report upon the subject apart from its application in tropical countries was made by Mr. Arthur Fontaine, Director of the Labor Department of the French Ministry of Labor, in the form of a draft convention.

In general the convention provides an 8-hour day and a 48-hour week applicable in "all industrial undertakings public or private, and to all branches thereof of whatsoever kind, other than undertakings in which only members of the family are employed."

A recognition of the impossibility of a rigid application of this principle, however, resulted in the adoption of a number of important and far-reaching exceptions:

The provisions of the convention shall not apply to persons holding positions of supervision or management, or employed in a confidential capacity.

Where by law, custom, or agreement between employers' and workers' organizations (or where no such organizations exist, between the employers' and workers' representatives) the hours of work on one or more days of the week are less than eight, the limit of eight hours may be exceeded on the remaining days of the week by the sanction of the competent authority, or by agreement between such organizations or representatives: *Provided, however,* That in no case under the provisions of this paragraph shall the daily limit of eight hours be exceeded by more than one hour.

Where persons are employed in shifts it shall be permissible to employ persons in excess of 8 hours in any one day and 48 hours in any one week, if the average number of hours over a period of three weeks or less does not exceed 8 hours per day, and 48 per week.

The limit of the hours set by the convention may be exceeded "in the case of accident, actual or threatened, of urgent work to be done to machinery or plant, or of 'force majeure,' but only when necessary to avoid serious interference with the regular working of the undertaking." In continuous processes, also, where the work is done by a succession of shifts, the working hours may be extended, but not to exceed 56 in the week on the average. Limitation of hours shall not affect holidays. Agreements may be made in exceptional cases whereby the daily limit of work may be exceeded so long as the average weekly hours and the period covered by such arrangement do not exceed 48.

Commerce, agriculture, and shipping are not included in the 8-hour provision.

The rate of overtime is fixed at not less than time and a quarter. The convention is to be carried out by the posting of notices in the works or other suitable place, or "by such other method approved by

the Government," which state the conditions of employment fixed for the particular industry. It shall be an offense against the law not to observe the regulations posted. "The provisions of the convention may be suspended in any country by order of the Government, in the event of war or other emergency endangering the national safety." July 1, 1921, is the time set for carrying the terms of the convention into effect.

Mr. Crawford (workers' delegate from South Africa) made an earnest appeal for the deletion of the clause "other than undertakings in which only members of the family are employed, on the ground that such a change would tend to abolish 'sweating,'" but his motion was defeated.

The difficulties in the application of the 8-hour day and 48-hour week convention to countries in which "climatic conditions, the imperfect development of industrial organizations, or other special circumstances, make the industrial conditions substantially different," were set forth in the report of a subcommittee appointed to consider this particular phase of the subject, and headed by the Right Hon. G. N. Barnes (Great Britain).

The position of Japan presented the greatest problem. The report points out that only in the last few years has any rapid advance in the organization of industry in that country been made. Factory legislation applies only to women and children, and prescribes a working day of 13 hours as a maximum. In the case of male workers there is no regulation of hours. The restrictions of the factory act, moreover, apply only to factories employing more than 15 persons, and as much of the work is home work a large proportion of the operations are not subject to a limitation in hours. In the silk industry, for instance, which employs 900,000 workers, 53 per cent do not come under the scope of the law. Overtime to the extent of two or three hours a day is common. In the silk industry an additional hour of overtime is allowed on 120 days in the year.

In view of all these facts, the Japanese employer and Government delegates felt that Japan would be unable to adjust her industrial organization to meet the conditions of the 8-hour convention in the required time and requested modifications, at the same time signifying her intention "to accelerate the unqualified adoption of the rule in harmony with the general trend of the world."

Mr. Shichiro Muto, as substitute for the Japanese labor delegate, on the contrary urgently advised that Japan be treated precisely as the other adhering countries were treated, setting forth his views in a minority report. He protested in the name of Japanese labor and of public opinion in Japan that Japan is not a tropical country, but

climatically like the United States, Italy, and Spain; that Japanese industry has developed so wonderfully during the war that Japan is at least the industrial peer of Italy and Spain; that family industry is rapidly being transformed into the industry of modern factories. The 8-hour day, he maintained, is being adopted in an increasing number of factories, especially at Osaka, the Manchester of Japan. The opposition of Japanese employers to the introduction of the 8-hour day and the 48-hour week is due to their desire to retain their advantageous position, secured through exploitation of the workers, and the Government desires to protect the employers at the expense of the workers, who, because of limitations placed upon organizations, are unable to speak for themselves. In his opinion, the inefficiency charged against the Japanese worker is due to the prolonged hours of labor, which exhaust his energies.

The workers' delegates generally supported this position, urging that while Japan is taking her place in the world as a first-class power in every respect, she is gaining an advantage by pleading industrial inferiority, and an effort was made by Mr. Jouhaux (France) to reduce the time in which Japan might comply with the main convention to two years. Mr. Barnes maintained that if Japan were required to accept the full 8-hour convention she would be reducing her production 60 per cent; that she had not now the machinery to meet the modifications already agreed to and could not obtain it in less than three years. Mr. Jouhaux's motion was therefore defeated.

The committee recommended that Japan be given five years for applying the provisions of the main convention, and that in the meantime there be allowed certain modifications, which were enumerated in the text, and which in themselves will result in a considerable advance upon existing conditions. It suggested that coal mining be brought under the scope of the convention at once. The silk industry should have a 60-hour week, while all other industries "might be operated on a basis of a 9½-hour daily maximum, or a 57-hour week." The unit for the factory should be 10 persons instead of 15, as hitherto. The 48-hour week should also apply to minors under 15 years of age. A weekly rest period of 24 consecutive hours should be provided for, and overtime regulated in accordance with the provisions of the main convention.

As regards India the committee recommended a 60-hour week for those industries under the factory law, and urged that the Government modify its definition of a factory in such a way as to reduce the unit of 50 persons now recognized as constituting a factory. In view of the fact that China is still very largely an undeveloped country, that very little modern machinery is used, and that the

population is not industrialized, the Chinese delegate asked for an extension of time in the framing of any recommendation on the subject of Chinese industry. The committee therefore suggested that China adhere to the principle of factory legislation and submit for the consideration of the Chinese Government the possibility of adopting the 10-hour day or 60-hour week for adult workers, and an 8-hour day or 48-hour week for employed minors under 15 years of age. It also suggested that the weekly day of rest be granted, and that all factories employing more than 100 workers be included in the projected legislation.

The South African and tropical-American delegates stated that the main provisions of the convention as drafted would be applied in their countries. The only exceptions might be in the case of coal mining and sugar refining and a few other industries. Persia has no factories, and Siam little industry, so that no application of the 8-hour day need be made to them. Greece and Roumania have been so devastated by war that special consideration was necessary in their case, application of the convention being postponed to 1923 and 1924 in the case of certain Grecian industries, and to 1924 for industries in Roumania.

The draft convention on the 8-hour day was finally adopted by a substantial majority.

The following resolution on the 8-hour day passed by the International Congress of Working Women, which met in Washington just prior to the International Labor Conference, was submitted to the conference:

The first International Congress of Working Women requests the first International Congress of Labor of the League of Nations that an international convention establish:

- (1) For all workers a maximum 8-hour day and 44-hour week.
- (2) That the weekly rest period shall have an uninterrupted duration of at least one day and one-half.
- (3) That in continuous industries a minimum rest period of one half-hour shall be accorded in each 8-hour shift.

Unemployment.

The second question on the agenda of the conference, viz, that of preventing or providing against unemployment, was of such a complex nature that the committee of which Mr. Max Lazard (France) was chairman decided to divide the matters for investigation among three subcommittees. The conclusions reached by these subcommittees were finally adopted by the committee as a whole and presented to the conference in the form of: (1) A draft convention divided into three articles, dealing, respectively, with statistics, employment, and

reciprocity in the question of insurance against unemployment; (2) A draft recommendation consisting of four articles, two of which relate to the employment of workers, one to insurance against unemployment, and one to work undertaken by or on behalf of public authorities; (3) Four resolutions addressed to the governing body of the International Labor Office; (4) A draft convention on reciprocity in the treatment of foreign workers in all matters relating to the protection of labor.

The three articles of the draft convention provide, in general, that the States ratifying the convention shall communicate to the International Labor Office at intervals of not less than three months all available information and statistics regarding unemployment and the most successful measures taken to reduce unemployment. Furthermore, in States acceding to the convention, systems of free employment exchanges or agencies under a central management shall be established. Committees made up of employers and employees shall act in the capacity of advisers in carrying on the work of these exchanges, which is all to be coordinated by the International Labor Office in agreement with the States concerned.

The convention also directs that in the States ratifying it benefits from established unemployment insurance systems shall, upon terms agreed to by the States concerned, be extended to workers from other States employed in those States.

In connection with the convention it was recommended that the establishment of employment agencies charging fees be prohibited, that existing agencies of this character operate under State licenses, and that practical measures be taken to abolish them. The recommendations would also prohibit the recruiting of workers in one of the States ratifying the unemployment conventions with the view of their employment in another except as agreed upon by the countries concerned and after consultation with the employers and employees in the industries concerned. Effective systems of unemployment insurance should be established, managed either by the State or by State-aided associations, and furthermore the "International Labor Conference recommends that each State member of the permanent organization shall take measures with a view to coordinating the execution of work undertaken by or on behalf of the States and by public authorities with a view to reserving as far as practicable the work in question for periods of unemployment and for districts most affected by such unemployment."

The draft resolutions dealt with the best means of collecting and publishing information regarding unemployment, and information relative to agricultural workers, in connection with which it was

provided that the International Labor Office should arrange with the International Institute of Agriculture at Rome for the transmission of information collected by that body on the subject of agricultural employment. The question of the migration and protection of foreign workmen should be left to an international commission, which, while giving due regard to the sovereign rights of each State, should report upon measures for the protection of such workers.

A special draft convention relative to reciprocity of treatment of foreign workers provided that "the States ratifying this convention or acceding to it shall reciprocally admit to the benefit of the laws and regulations having regard to labor protection, as well as the right of lawful organization, the workers belonging to one of these States and employed in another, together with their families."

A minority report offered by Mr. Baldesi (Italy) set forth his opinion that a more equitable distribution of raw materials would be a means of preventing unemployment. He proposed that, "Considering that the question of unemployment is closely related to that of the distribution of raw materials and the means of maritime transport and freight rates, considering further that the question can only be effectively dealt with by the Council of the League of Nations, it is recommended that the Council should undertake to examine and solve the problem."

The labor delegates from France and Switzerland and the Polish Government delegate called attention to the condition of unemployment in the devastated countries now due to a dearth of raw materials and urged the adoption of Mr. Baldesi's motion. The employers' delegates generally opposed it on the ground that it was outside of the sphere of the International Labor Conference, which was trying only to regulate and improve labor conditions, to interfere with the rights of property. The question of ocean transport also entered into the discussion, and it was clear that an international control of freight rates, suggested in Mr. Baldesi's motion, would meet the disapproval of all mercantile seafaring nations. In fact, the employers' delegates from France and Switzerland, because of the complexities of the subject of unemployment and the general character of the recommendations, would have referred the committee report to the governing body, but this motion was lost, as was also Mr. Baldesi's.

The report as subsequently adopted contained two important amendments: (1) European States were limited to one-half the total membership of the international commission designed to study the regulation and protection of workers migrating from one country into another; (2) A substitute for the draft convention on the reci-

procuity of treatment of foreign workers was adopted, which, as finally drafted, reads:

The general conference recommends that each member of the international labor organization shall, on condition of reciprocity and upon terms to be agreed between the countries concerned, admit the foreign workers (together with their families) employed within its territory to the benefit of its laws and regulations for the protection of its own workers, as well as to the right of lawful organization as enjoyed by its own workers.

These amendments would give those nations to which workers would naturally migrate an equal voice on the commission, and at the same time leave to these nations the determination of the composition and of the civic rights of their population.

Employment of Women.

In reporting upon the employment of women, especially as regards night work, Miss Constance Smith (Great Britain), who made to the conference the only report presented by a woman, stated that the committee had in the main confined its work to the extension and application of the Convention of Bern, 1906, which prohibits night work for women in industry. While the principle embodied in that convention was, the chairman stated, unanimously supported by the committee, it was apparent that the great industrial changes which had developed since that time and the establishment of the League demanded a redrafting of the convention and the insertion of some new material, if it was to be an efficient international instrument.

According to the Bern Convention the limitations respecting night work apply only to undertakings employing more than 10 men or women. During the war it was necessary for several countries to suspend their factory laws and admit women to night work. This experience did not lessen the undesirability of night work for women, but rather strengthened that point of view, for the reason that while during that period it was found possible to supply certain safeguards in the large factories, in the small establishments where such safeguards are most needed they had with greatest difficulty been introduced. The proposal was made, therefore, that the limitation as to the numbers employed be removed, but that the original provision to the effect that the convention should in no case apply to "undertakings in which only the members of the family are employed" be retained.

In order to make the definition of industrial undertakings as nearly identical as possible in all the draft conventions presented to the conference, the following substitute was suggested for the original draft:

It is incumbent upon each contracting State to define the term "industrial undertaking." The definition shall in every case include—

(a) Mines and quarries and extractive industries of every kind.

(b) Industries in which articles are manufactured, altered, repaired, ornamented, finished, or adapted for sale, or broken up or demolished, or materials are transformed (including the generation, transformation, and transmission of motive power, electric, hydraulic, etc., shipbuilding, laundry work).

(c) Construction, reconstruction, repair, maintenance, alteration, or demolition of any building, railway, tramway, harbor, dock, pier, canal, inland navigation, road, tunnel, bridge, viaduct, sewer, drain, well, telegraphic, telephonic installation, electrical undertaking, gas work, waterwork, or other work or construction, and the preparation for and the laying foundation of any such work or building.

The laws of each individual country shall define the line of division which separates industry from agriculture and commerce.

The question of the adherence to the convention of certain countries hampered by climatic or backward industrial organization, of which India may serve as an example, was also one of the difficulties met by the committee. To facilitate this adherence a new article was introduced which provided that in countries covered by article 405, clause 3, of the Peace Treaty the application of the provisions of the convention might be suspended in "such industrial undertakings as may be defined in that respect by the Government of the country, provided that they should continue to be applicable to all establishments which are factories by the national law." The difference, for instance, in the definition of a factory in India and in Europe, and the divergence in the application of factory law, are such that the execution of the convention would be impossible in India unless exceptions were made.

Under the Bern Convention the prescribed rest period consists of 11 consecutive hours, including the time from 10 p. m. to 5 a. m., from which no exception is permissible. An effort was made by the Italian workers' delegate to extend the rest period to 6 a. m., making an absolute night rest of 8 hours. This proposed change injected into the discussion a consideration of the shift system, which had already been made the subject of a minority report by Mrs. Laura Casartelli Cabrini (Italy), in which she advocated an uninterrupted night rest of 8 hours' duration, thus leaving 16 hours to be divided into two 8-hour shifts.

It was contended that in industries in which the shift system is used this division of rest and working periods would be impossible, and the French employers' representative introduced a motion to the effect that the employment of women be authorized from 4 a. m. to 10 p. m. or 5 a. m. to 11 p. m., providing that the work of each shift be broken by one hour of rest. Both of these motions were defeated and the majority report adopted.

Perhaps the most advanced step taken by the conference was in the nature of the draft convention which was adopted concerning the

employment of women before and after childbirth. This convention, as finally approved, provides that (a) a woman wage earner shall not be employed during the six weeks immediately following confinement; (b) she shall have the right to leave her work six weeks before confinement, upon submitting a doctor's certificate stating that her confinement will probably take place in six weeks' time; and (c) she shall not be deprived of the benefits allowed, in case of mistake in estimating the probable time of confinement. In each case she is entitled to a maternity benefit paid either by the State or by means of a system of insurance. The amount of this benefit was left to the determination of the Government of each country, but it must be "sufficient for the full and healthy maintenance of the mother and the child." Free medical attendance is also granted. No woman may be dismissed during such absence until her absence has exceeded a "maximum period to be fixed by the competent authority in each country." Crèches are permitted. This convention, like the others, excepts undertakings in which only members of the same family are employed.

It should be noted also that it is not, like the other conventions, confined to industrial undertakings, but includes all women wage earners. As reported in by the committee it followed the form of the other conventions in this respect, but on motion of Mr. Jouhaux (France) its application was extended to commercial occupations. Mr. Jouhaux gave as his reason for this amendment the fact that about two-thirds of the women employed are in commercial undertakings. The adoption of a provision for maternity care and benefits which would affect only one-third of the women employed would, in his opinion, be "preposterous" and should not be adopted. It may be observed that while Mr. Jouhaux's statement is doubtless true, it is also probably true that there are relatively more single than married women in commercial work.

Among those who favored the majority report some apprehension was felt that the insertion of "commercial undertakings" might endanger the indorsement of the convention by the several Governments, and it was noticeable that several of the Government delegates abstained from voting on the proposition. Miss MacArthur (Great Britain) made an unsuccessful effort to abolish crèches. The Indian Government was requested to make a study of this phase of the employment of women and report to the next conference.

Employment of Children.

The report of the committee dealing with the minimum age of employment of children in industry was presented to the conference by Sir Malcolm Delevingne, chairman of the committee and Government

delegate from Great Britain, in the form of a draft convention. A unanimous decision had been reached fixing the age of admittance of children into industry at 14 years. In doing this the committee had, the chairman said, kept in view two objects: First, to obtain a real advance over existing conditions and, second, to make proposals which would be likely to meet with general acceptance. While the committee desired to fix a higher age than 14 years it had been felt that Government sanction could not be obtained, and that the age of 14 would be a real advance in many countries.

One of the difficulties met in reaching this decision was as to allowing exceptions through the transitional period in the case of countries where the age for leaving school under the educational law had not been fixed as high as 14 years. It was urged that it might be impossible for those countries to so order their educational systems as to fill in the gap between the school-leaving age and the age when the children could be given employment, but the committee decided by a majority vote that the time fixed—January, 1922—should stand.

A still greater difficulty presented itself in the matter of what modifications should be made in the case of countries with special industrial or climatic conditions. These countries, the chairman said, might be considered as constituting two groups: (1) Japan; (2) India, China, Persia, and Siam. An agreement was reached with Japan, whereby (*a*) the minimum age should be 14, but a child over 12 years of age might be permitted employment if he had finished the course in the elementary school; (*b*) the provision in the present law admitting children under 12 to certain light and easy employments should be repealed; (*c*) as regards children between 12 and 14 who have been employed the Government reserved the right to make transitional regulations.

In the case of India and other oriental countries the committee did not present a final recommendation on the ground that the questionnaire issued by the organizing committee did not reach India in time for consideration before the delegates left for America, and a proposal was made that the question of the minimum age of the employment of children as regards these countries be brought up at the International Labor Conference of 1920, when the Governments would have had opportunity to consider it.

A counter proposal was made by Miss Margaret Bondfield, speaking for the British workers' delegate, to the effect that "children under 12 should not be employed (*a*) in factories working with power, employing more than 10 persons; (*b*) in mines and quarries; (*c*) on railroads; (*d*) on docks."

In urging her amendment Miss Bondfield said that in drafting it care had been taken to select industries which were not small native

industries, but which in the main were those supervised by western people and should have western safeguards. While the educational system was doubtless insufficient at present to meet the situation, one of the best ways of securing quick governmental action in this matter was, she asserted, to prohibit child labor.

Mr. Chatterjee, Government delegate from India, opposed the amendment, insisting that time was needed to create public sentiment for such a radical departure, while Mr. Joshi, workers' delegate, earnestly supported it for the reason given by Miss Bondfield in proposing it. The report with the amendment in question was adopted.

Night work in industrial establishments was prohibited for minors under 18 years of age with the following exceptions:

ART. 3. The prohibition of night work shall not apply to young persons over the age of 16 who are employed in the following industries or work which is required by the nature of the process or to avoid the waste of fuel or material to be carried on continuously, day and night.

(a) Manufacture of iron and steel; processes in which reverberatory or regenerative furnaces are used; and galvanizing of sheet metal and wire (except the pickling process).

(b) Glassworks.

(c) Manufacture of paper.

(d) Manufacture of raw sugar.

[(e) Gold mining reduction works.]¹

ART. 4. The prohibition of night work for young persons over 16 years of age may be suspended.

(a) If [in case of serious emergency the] ¹ public interest requires it.

(b) When some emergency which the employer could not control or foresee, and which is not of a periodical character, occurs to interfere with the normal working of the undertaking.

ART. 5. The provisions of the present convention are applicable to girls of less than 18 years of age whenever these provisions involve greater restrictions on the period of employment than those provided by the Bern Convention on the Night Work of Women of the 26th day of September, 1906.

The period of night rest shall comprise 11 consecutive hours and shall include the period between 10 p. m. and 5 a. m., except in tropical countries where work is suspended in the middle of the day. Here the period of night rest may be less than 11 hours if compensatory rest is given during the day. In bakeries where night work is prohibited for all workers, the hours 9 p. m. to 4 a. m. may be substituted for the hours of rest fixed by the convention. Coal and lignite mines are also exceptions to this provision.

As in the case of hours of employment of women, the question of the shift system entered into the discussion. To meet the case of countries where the national law requires that a longer period of rest

¹ Amendment.

should be allowed during the course of the shift, the committee recommended that "in industries in which work is divided into two shifts the first shift may begin at 4 a. m. and the second may finish at 10 p. m., or the first shift may begin at 5 a. m. and the second may finish at 11 p. m." On the motion of Mr. Baldesi (Italy) this entire paragraph was deleted.

It was furthermore found necessary to modify the convention in its application to Japan and India. As to Japan, 15 years of age for the first three years after the convention becomes operative and after that time 16 years of age was substituted for 18 years as provided in the convention. As to India, the convention applies only to such persons as come under the factory act, and for boys, 14 years was substituted for 18 years. In the regions devastated by war the prohibition of night work for minors between 14 and 16 was referred to the International Labor Conference of 1921. The entire convention is to come into force not later than July 1, 1922.

The resolutions on child labor passed by the International Congress of Working Women and submitted to the conference are interesting in view of the action taken, as presenting standards toward which future international labor conferences may strive.

Employment of Children.

(a) *Minimum age.*—No child shall be employed or permitted to work in any gainful occupation unless he is 16 years of age, has completed the elementary school, and has been found by a school physician or other medical officer especially appointed for that purpose to be of normal development for a child of his age and physically fit for the work at which he is to be employed.

No young person under 18 years of age shall be employed in or about a mine or quarry.

The legal workday for young persons between 16 and 18 years of age shall be shorter than the legal workday for adults.

(b) *During the night.*—No minor shall be employed between the hours of 6 p. m. and 7 a. m.

(c) *In unhealthy processes.*—Prohibition of the employment of minors in dangerous or hazardous occupations or at any work which will retard their proper physical development.

Administration.

(1) *Work permits.*—A yearly medical inspection by medical officer appointed for that purpose by the authorities, records of which shall be kept.

(2) Lists of employed minors with their hours of work shall be posted in all workrooms in which they are employed.

(3) The number of inspectors, and especially women inspectors, employed by the factory or labor commission shall be sufficient to insure regular inspection of all establishments in which children are employed and such special inspections and investigations as are necessary to insure the protection of the children.

We further recommend compulsory continuation schools for minors until the age of 18.

Unhealthy Processes.

The report of the committee on unhealthy processes was made by Dr. Legge (Great Britain), chairman, in the form of recommendations and not as draft conventions. This was a disappointment to some of the groups who felt that the committee's suggestions on this important subject should have been presented in a more binding form.

The recommendations as to processes applied only to lead poisoning and to anthrax. In the case of lead poisoning the committee recommended that "in view of the danger involved to the function of maternity and to the physical development of children, women and young persons under the age of 18 years be excluded from employment in the following processes:

- (a) In furnace work in the reduction of zinc or lead ores.
- (b) In the manipulation, treatment, or reduction of ashes containing lead, and in the desilvering of lead.
- (c) In melting lead or old zinc on a large scale.
- (d) In the manufacture of solder or alloys containing more than 10 per cent of lead.
- (e) In the manufacture of litharge, massicot, red lead, white lead, orange lead, or sulphate, chromate or silicate (frit) of lead.
- (f) In mixing and pasting in the manufacture or repair of electric accumulators.
- (g) In the cleaning of workrooms where the above processes are carried on.

It was further recommended that the employment of women and young people in processes involving the use of lead compounds be permitted subject only to the following conditions:

- (a) Locally applied exhaust ventilation so as to remove dust and fumes at the point of origin.
- (b) Cleanliness of tools and workrooms.
- (c) Notification to Government authorities of all cases of lead poisoning, and compensation therefor.
- (d) Periodic medical examination of the persons employed in such processes.
- (e) Provision of sufficient and suitable cloakroom, washing, and messroom accommodation, and of special protective clothing.
- (f) Prohibition of bringing food or drink into workrooms.

Furthermore, in industries where soluble lead compounds can be replaced by nontoxic substances, use of soluble lead compounds should be strictly regulated.

For the purposes of this recommendation, a lead compound should be considered as soluble if it contains not more than 5 per cent of its weight (estimated as metallic lead) soluble in a quarter of 1 per cent solution of hydrochloric acid.

As regards anthrax the report recommended that "arrangements should be made for the disinfection of wool infected with anthrax

spores either in the country exporting such wool, or, if that is not practicable, at the port of entry in the country importing such wool."

Recommendation was also made for the establishment of an efficient factory inspection service in each country belonging to the international labor organization where it does not already exist, and also for the creation in each country of a Government service whose duty it shall be to safeguard the health of workers and to keep in touch with the International Labor Office.

All three of these recommendations were adopted.

White Phosphorus in Match Factories.

On a motion presented by Sir Malcolm Delevingne (Great Britain) the conference unanimously adopted a resolution recommending to "all members of the international labor organization which have not yet done so that they should adhere to the international convention adopted at Bern in 1906, on the prohibition of the use of white phosphorus in the manufacture of matches."

The Governing Body of the International Labor Office.

Steps were taken at the conference to effect a permanent organization of the International Labor Office through the creation of a governing body. This body is composed of 24 members, 12 representing the various Governments, 6 representing employers and 6 representing labor, elected by the different groups. The Government representatives will be nominated by the following countries: Belgium, France, Great Britain, Italy, Japan, Germany, Switzerland, Spain, Argentina, Canada, Poland, and, pending the appointment of the United States representative, Denmark.

The employers' representatives are: Sir Allan Smith, Great Britain; Mr. Louis Guérin, France; Mr. Pirelli, jr., Italy; Mr. Jules Carlier, Belgium; Mr. F. Hodacz, Czecho-Slovakia; and, pending the appointment of a representative of the United States employers, Mr. Schindler, of Switzerland.

The workers' representatives are: Mr. Léon Jouhaux, France; Mr. J. Oudegeest, Netherlands; Mr. Stuart-Bunning, Great Britain; Mr. H. Lindqvist, Sweden; and, pending the appointment of a representative of the United States, Mr. Draper, of Canada.

Reservation was made in each group for the United States representative and in the labor group for the German representative.

The Latin-American delegates entered a written protest against the fact that the 20 Latin-American nations had been assigned only 1 place out of a total of 24 places in the governing body. They contended that if the conference is to be an international and not a

European conference, a more equitable system of representation must be devised. In this remonstrance against what was considered an unfair discrimination against non-European nations, they were joined by the delegates from South Africa, on the part of whom Mr. Gemmill, employers' representative, introduced a resolution providing "that this conference expresses its disapproval of the composition of the governing body of the International Labor Office, inasmuch as no less than 20 of the 24 members of that body are representatives of European countries."

Mr. Fontaine (France), speaking for himself, explained that the delegates were selected in accordance with the act setting up the conference, and while the composition of the body was not perfect he called attention to two facts: (1) The governing body will sit at Geneva, and will meet every two months. It would therefore be more convenient for members from European countries to attend than those farther away. (2) Through a system of grouping, small countries having no industries might be able to decide important questions affecting countries having great industries or large mining operations. The resolution was, however, adopted by a vote of 44 to 39.

The governing body elected Mr. Albert Thomas (France) provisional director general of the International Labor Office under the League of Nations, and Mr. Arthur Fontaine (France) permanent chairman. The office will be located provisionally in London.¹ The next meeting of the governing body will be held in Paris, January 26, 1920.

Regulations, covering the composition, officers, order of procedure, etc., of the conferences, as well as the election of the members of the governing body of the International Labor Office, were adopted.

Admission of Other Countries.

The discussion of the question of the admission of other countries into membership in the International Labor Conference brought out a decided difference of opinion regarding the construction to be placed upon the article in the Peace Treaty relating to membership in the international labor organization.

A decision in the case of Luxemburg, of the Dominican Republic, and of Mexico was readily reached, for the reason that the organization is composed of Governments and that participation in the conference by the representatives of any nation must be preceded by an application for membership from the Government of the nation. There had been no official request for membership on the part of the

¹ Sunderland House, Curzon Street, W. I.

Governments of Luxemburg,¹ the Dominican Republic, and Mexico at the time of the discussion, and therefore the committee on applications reached the unanimous opinion that no recommendation could be made on an application presented by third parties.

As regards Finland the committee was unable to present a unanimous report. The majority report presented by Mr. Gino Baldesi (Italy) favored the admission of Finland. His reasons for such admission were that Germany and Austria had been admitted, and that the Supreme Council at Paris had, on October 2, received two requests for admission to the conference, one from Finland and one from Norway, neither of which Governments was at that time a member of the League of Nations. The Supreme Council decided that the question of the admission of Finland, Norway, and also the Netherlands should be left to the approaching conference at Washington. Hon. N. W. Rowell (Canada), in presenting the minority report, based his objections to the admission of Finland on the ground that the conference had no power to admit Finland to the international labor organization. The Supreme Council, he contended, had no right to interpret the treaty. Admission to the international labor organization must come through the League of Nations. He moved that for these reasons the conference recommend to the League of Nations the immediate admission of Finland, and that her delegates be welcomed to an informal participation in the conference. The admission of Germany and Austria was not a parallel case because Germany had asked before she signed the treaty that she be admitted to the League of Nations and also to the international labor organization.

Senator Halfred von Koch (Sweden) maintained that the Supreme Council had the power to interpret the treaty until the League of Nations came into existence, and urged the admission of Finland on the additional ground of her industrial organization and the assistance her former experience in such conferences would be. Delegates from both employers' and workers' organizations, he said, were in Washington ready to participate in the conference. Sir Malcolm Delevingne (Great Britain) supported Mr. Rowell's motion, while Mr. Stuart-Bunning, speaking for the British workers' delegation, defended the minority report. It may be said that the workers' representatives generally favored admitting Finland. Finally, the majority and minority agreed on the following:

The conference, without giving a ruling on the question of principle, welcomes the delegates nominated by Finland to attend the Washington meeting, and invites these delegates to take part in the conference on the same condi-

¹ Later on Luxemburg applied for admission into the conference and was admitted.

tions as obtain in the case of other countries which have not adhered to the covenant of the League of Nations.

Agenda for the Conference of 1920.

The agenda for the conference of 1920 was not determined. A large number of proposals were made in the bulletins from day to day, among which were a revision of the standing orders in regard to the composition of the governing body and the position of agricultural workers, but the conference decided to leave the final selection of subjects to the governing body, who, from the suggestions and resolutions sent in from the various sections would be in a position to know which subjects were of the greatest importance.

All questions relating to seamen were referred to the special conference on employment at sea.

Opinions Regarding the Conference.

Two very distinct attitudes toward the functions of such a conference as this prevailed. Some of the more radical members believed that it was the function of the conference to set maximum standards toward which the various States were to strive; the other group believed it advisable for the conference to set up immediately attainable maximums, to keep their feet upon the ground, as it were, within the region of practicalities.

Those who had hoped that the conference might be a more forward-looking body were disposed to be critical of the lack of action on many points. Those viewing the conference from the other angle expressed great satisfaction at what had been accomplished. It was, as one of the delegates remarked, the first time that representatives of Governments, employers, and workers had come together internationally to seek a solution of industrial problems and to recommend measures for the alleviation of working conditions. This fact in itself should establish a sound basis for further social legislation.

At first glance the changes recommended do not appear material. It is doubtless true that the action on the 8-hour day is simply a "marking of time" for many nations which were represented in the conference, and which have already adopted that or a better working schedule. It did, however, crystallize opinion upon the subject, and in the case of Japan and tropical countries the modifications agreed to, if carried out by those countries, effect an important reduction of hours. The general age of the admission of minors to industry was set at 14 years, while the limit for admission of minors into night work was advanced from 16 to 18 years. Substantial changes in this respect were recommended for Japan and India. If the convention

dealing with the employment of women, especially as regards maternity care and benefits, is indorsed by the various Governments, a marked advance over existing legislation will have been made and a very necessary protection afforded the future of the race.

Genuine regret was expressed at the absence of delegates from the United States from the conference, and the opinion voiced that their presence would undoubtedly have affected the results.

A greater unity of spirit prevailed than might have been expected from a gathering representing such conflicting interests. While the different groups naturally wished and tried to protect the interests of their own countries, and in some cases to gain advantages for them, there was a real effort, as evidenced by the concessions made in committees and in debate, to take such action as would not only secure the end for which the conference was called, but would from its practical nature commend it to the Governments to which it must be submitted for approval and indorsement.

Cost of Living in the United States—Furniture and House Furnishings.

IN connection with the cost-of-living-survey articles which have been appearing in the MONTHLY LABOR REVIEW for several months, the following table presents a summary of expenditures for furniture and house furnishings. In order to show enough cases to make the figures authoritative, data from a number of cities have been combined. The table has been divided into two sections. The following northern cities are included in the first group:

Boston, Mass.	Fall River, Mass.	Omaha, Nebr.
Bridgeport, Conn.	Fort Wayne, Ind.	Philadelphia, Pa.
Buffalo, N. Y.	Grand Rapids, Mich.	Pittsburgh, Pa.
Chicago, Ill.	Indianapolis, Ind.	Portland, Me.
Cincinnati, Ohio.	Kansas City, Kans.	Providence, R. I.
Cleveland, Ohio.	Kansas City, Mo.	St. Louis, Mo.
Columbus, Ohio.	Lawrence, Mass.	St. Paul, Minn.
Des Moines, Iowa.	Manchester, N. H.	Scranton, Pa.
Detroit, Mich.	Milwaukee, Wis.	Syracuse, N. Y.
Duluth, Minn.	Minneapolis, Minn.	Trenton, N. J.
East St. Louis, Ill.	Newark, N. J.	Wichita, Kans.
Evansville, Ind.	New York, N. Y.	Wilmington, Del.

The following southern cities are included in the second group:

Atlanta, Ga.	Houston, Tex.	Mobile, Ala.
Baltimore, Md.	Jacksonville, Fla.	New Orleans, La.
Birmingham, Ala.	Knoxville, Tenn.	Norfolk, Va.
Charleston, S. C.	Little Rock, Ark.	Oklahoma City, Okla.
Dallas, Tex.	Louisville, Ky.	Richmond, Va.
El Paso, Tex.	Memphis, Tenn.	Savannah, Ga.

Under each of these groups the data as to the average number of articles purchased per family in a year, with the average expenditure per family and per article, are shown by income groups and for all incomes. The total number of families represented in the northern group of cities is 6,180; in the southern group, 1,983.

In the case of a few items, such as "pictures, frames, and other ornaments," and "other laundry utensils," when the number of articles could not be ascertained, or if given would be meaningless, only the average cost per family has been given.

Under the several items, "expenditure" per family and per article is shown instead of "cost." This is due to the fact that a great deal of furniture is bought on installments and the payments often extend over a period of more than a year. In such cases the amount paid

during the year was reported rather than the total cost of the article. For this reason the figures in the table do not give any definite clue to the expensiveness of the articles purchased.

As the requirements of the survey limited the families scheduled to those having at least one child and having kept house in the locality a year, and as most families scheduled had been actually keeping house several years, the expenditures for furniture and house furnishings were largely devoted to upkeep. Few new outfits of furniture were reported, the articles purchased being bought to replace old ones that had outlived their usefulness, or, in some instances, to meet the requirements of a growing family or to supply the demands of a higher standard of living than the family had been accustomed to in the past.

AVERAGE EXPENDITURE PER FAMILY IN ONE YEAR FOR FURNITURE AND HOUSE FURNISHINGS, BY ITEMS OF EXPENDITURE AND INCOME GROUPS.

Northern Cities.

Item.	Average expenditure per family for items of furniture and house furnishings by families having an income of—							All incomes.
	Under \$900.	\$900 and under \$1,200.	\$1,200 and under \$1,500.	\$1,500 and under \$1,800.	\$1,800 and under \$2,100.	\$2,100 and under \$2,500.	\$2,500 and over.	
Number of families.....	163	1,322	2,155	1,329	720	316	175	6,180
Average persons per family.....	4.3	4.5	4.7	4.9	5.3	5.8	6.8	4.9
Carpets:								
Average yards per family.....	2.6	2.8	3.1	3.7	4.3	4.7	6.6	3.5
Average expenditure per family.....	\$2.12	\$3.14	\$4.07	\$5.99	\$7.06	\$8.81	\$11.99	\$5.05
Average expenditure per yard.....	\$0.83	\$1.11	\$1.33	\$1.63	\$1.63	\$1.89	\$1.80	\$1.46
Matting:								
Average square yards per family...	0.1	0.3	0.2	0.2	0.2	0.3	0.5	0.2
Average expenditure per family.....	\$0.05	\$0.08	\$0.12	\$0.20	\$0.15	\$0.23	\$0.09	\$0.14
Average expenditure per square yard.....	\$0.75	\$0.28	\$0.75	\$0.86	\$0.83	\$0.67	\$0.18	\$0.61
Linoleum and floor oilcloth:								
Average square yards per family...	1.3	1.5	1.7	1.9	2.2	2.8	3.4	1.8
Average expenditure per family.....	\$1.05	\$1.27	\$1.60	\$1.70	\$2.03	\$2.72	\$3.41	\$1.70
Average expenditure per square yard.....	\$0.80	\$0.84	\$0.96	\$0.89	\$0.94	\$0.98	\$0.99	\$0.92
Chairs and stools:								
Average number per family.....	0.5	0.7	0.6	0.7	0.7	0.9	1.0	0.7
Average expenditure per family.....	\$1.18	\$1.86	\$2.53	\$3.32	\$3.57	\$4.74	\$5.32	\$2.83
Average expenditure per article.....	\$2.31	\$2.71	\$4.32	\$4.81	\$5.43	\$5.53	\$5.11	\$4.28
Tables:								
Average number per family.....	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1
Average expenditure per family.....	\$0.42	\$1.30	\$1.70	\$1.95	\$1.77	\$2.76	\$2.46	\$1.72
Average expenditure per article.....	\$5.69	\$8.80	\$11.61	\$13.03	\$13.82	\$17.82	\$13.89	\$11.88
Couches, davenport, sofas, etc.:								
Average number per family.....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Average expenditure per family.....	\$0.88	\$1.50	\$1.87	\$2.28	\$2.46	\$3.16	\$4.39	\$2.06
Average expenditure per article.....	\$12.99	\$18.48	\$21.85	\$26.56	\$26.08	\$33.25	\$30.74	\$23.58
Bureaus, chiffoniers, dressing tables:								
Average number per family.....	0.04	0.1	0.1	0.1	0.1	0.1	0.2	0.1
Average expenditure per family.....	\$0.51	\$1.05	\$1.03	\$1.63	\$1.70	\$1.54	\$3.70	\$1.33
Average expenditure per article.....	\$11.95	\$10.46	\$13.64	\$16.77	\$18.79	\$18.71	\$20.23	\$14.80
Writing desks:								
Average number per family.....	0.01	0.01	0.01	0.02	0.01	0.02	0.02	0.01
Average expenditure per family.....	\$0.06	\$0.13	\$0.13	\$0.19	\$0.22	\$0.28	\$0.20	\$0.14
Average expenditure per article.....	\$5.75	\$10.10	\$12.02	\$12.02	\$15.85	\$12.57	\$11.67	\$10.82
Bookcases and magazine racks:								
Average number per family.....	0.02	0.02	0.01	0.01	0.02	0.03	0.02	0.01
Average expenditure per family.....	\$0.09	\$0.01	\$0.11	\$0.14	\$0.19	\$0.44	\$0.57	\$0.13
Average expenditure per article.....	\$5.00	\$7.50	\$9.97	\$13.29	\$11.20	\$15.61	\$33.00	\$12.41

COST OF LIVING—FURNITURE AND HOUSE FURNISHINGS. 29

AVERAGE EXPENDITURE PER FAMILY IN ONE YEAR FOR FURNITURE AND HOUSE FURNISHINGS, BY ITEMS OF EXPENDITURE AND INCOME GROUPS—Continued.

Northern Cities—Continued.

Item.	Average expenditure per family for items of furniture and house furnishings by families having an income of—							All incomes.
	Under \$900.	\$900 and under \$1,200.	\$1,200 and under \$1,500.	\$1,500 and under \$1,800.	\$1,800 and under \$2,100.	\$2,100 and under \$2,500.	\$2,500 and over.	
Clocks:								
Average number per family.....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Average expenditure per family.....	\$0.12	\$0.19	\$0.25	\$0.36	\$0.30	\$0.60	\$0.62	\$0.29
Average expenditure per article....	\$1.90	\$2.44	\$2.66	\$3.41	\$3.16	\$4.66	\$5.67	\$3.09
Mirrors:								
Average number per family.....	0.02	0.02	0.02	0.02	0.03	0.03	0.01	0.02
Average expenditure per family.....	\$0.05	\$0.04	\$0.05	\$0.08	\$0.08	\$0.15	\$0.07	\$0.06
Average expenditure per article....	\$2.52	\$2.56	\$2.60	\$4.02	\$4.64	\$12.50		\$3.02
Pictures, frames, and other ornaments:								
Average expenditure per family....	\$0.09	\$0.32	\$0.38	\$0.48	\$0.62	\$1.02	\$0.82	\$0.45
Hat racks, costumers, and hall trees:								
Average expenditure per family....	\$0.02	\$0.01	\$0.02	\$0.04	\$0.10	\$0.08	\$0.02	\$0.03
Sideboards, buffets, china closets:								
Average number per family.....	0.03	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Average expenditure per family.....	\$0.71	\$0.91	\$1.16	\$1.81	\$1.74	\$3.57	\$3.24	\$1.48
Average expenditure per article....	\$23.20	\$16.67	\$20.75	\$27.37	\$26.73	\$33.14	\$33.38	\$23.93
Bedsteads:								
Average number per family.....	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.2
Average expenditure per family.....	\$1.02	\$1.74	\$1.72	\$2.64	\$2.92	\$3.52	\$4.39	\$2.21
Average expenditure per article....	\$7.54	\$9.21	\$10.39	\$13.29	\$13.58	\$14.63	\$16.33	\$11.68
Bed springs:								
Average number per family.....	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.1
Average expenditure per family.....	\$0.50	\$0.76	\$0.78	\$1.17	\$1.38	\$1.61	\$2.10	\$1.00
Average expenditure per article....	\$4.82	\$5.58	\$6.23	\$7.31	\$7.82	\$7.39	\$7.66	\$6.70
Mattresses:								
Average number per family.....	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.2
Average expenditure per family.....	\$0.95	\$1.38	\$1.62	\$2.17	\$2.52	\$2.57	\$4.07	\$1.89
Average expenditure per article....	\$5.36	\$6.66	\$7.82	\$8.68	\$9.59	\$9.77	\$9.37	\$8.18
Pillows:								
Average number per family.....	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1
Average expenditure per family.....	\$0.13	\$0.16	\$0.19	\$0.21	\$0.28	\$0.28	\$0.42	\$0.21
Average expenditure per article....	\$1.47	\$1.39	\$1.64	\$1.78	\$1.75	\$1.45	\$2.05	\$1.64
Blankets:								
Average number per family.....	0.4	0.4	0.5	0.6	0.6	0.7	0.8	0.5
Average expenditure per family.....	\$1.09	\$1.19	\$1.63	\$2.12	\$2.17	\$2.57	\$2.92	\$1.78
Average expenditure per article....	\$2.90	\$3.00	\$3.33	\$3.54	\$3.51	\$3.78	\$3.76	\$3.39
Quilts and comforts:								
Average number per family.....	0.1	0.1	0.2	0.2	0.2	0.2	0.4	0.2
Average expenditure per family.....	\$0.52	\$0.49	\$0.66	\$0.85	\$0.90	\$0.92	\$1.56	\$0.73
Average expenditure per article....	\$4.05	\$3.40	\$3.69	\$3.61	\$3.87	\$4.85	\$3.50	\$3.70
Sheets:								
Average number per family.....	0.4	0.9	1.1	1.5	0.2	2.1	2.5	1.3
Average expenditure per family.....	\$0.47	\$1.05	\$1.41	\$1.92	\$2.16	\$2.98	\$3.55	\$1.65
Average expenditure per article....	\$1.25	\$1.24	\$1.28	\$1.31	\$1.36	\$1.40	\$1.45	\$1.31
Pillow cases:								
Average number per family.....	0.7	1.5	1.8	2.0	2.1	3.0	3.5	1.9
Average expenditure per family.....	\$0.25	\$0.55	\$0.70	\$0.85	\$0.90	\$1.31	\$1.48	\$0.77
Average expenditure per article....	\$0.35	\$0.38	\$0.40	\$0.42	\$0.43	\$0.44	\$0.42	\$0.41
Spreads:								
Average number per family.....	0.05	0.1	0.1	0.2	0.2	0.2	0.3	0.1
Average expenditure per family.....	\$0.12	\$0.29	\$0.40	\$0.48	\$0.58	\$0.85	\$1.05	\$0.45
Average expenditure per article....	\$2.37	\$2.86	\$3.02	\$3.01	\$3.31	\$3.63	\$3.35	\$3.10
Pitchers, wash bowls, etc.:								
Average expenditure per family....	\$0.01	\$0.03	\$0.02	\$0.02	\$0.03	\$0.04	\$0.01	\$0.02
Dishes and glassware:								
Average expenditure per family....	\$0.54	\$0.87	\$1.35	\$1.86	\$2.76	\$2.20	\$2.93	\$1.59
Knives, forks, spoons, etc.:								
Average expenditure per family....	\$0.10	\$0.21	\$0.27	\$0.38	\$0.49	\$0.72	\$1.04	\$0.35
Stoves, ranges, and heaters:								
Average number per family.....	0.3	0.2	0.3	0.2	0.2	0.3	0.3	0.3
Average expenditure per family.....	\$4.80	\$3.99	\$4.81	\$5.69	\$4.99	\$7.11	\$7.96	\$5.05
Average expenditure per article....	\$15.97	\$16.34	\$18.46	\$22.98	\$20.18	\$25.25	\$29.00	\$19.79
Kitchen cabinets:								
Average number per family.....	0.04	0.02	0.02	0.02	0.01	0.02	0.04	0.02
Average expenditure per family.....	\$0.61	\$0.33	\$0.33	\$0.43	\$0.26	\$0.19	\$0.93	\$0.36
Average expenditure per article....	\$16.68	\$13.73	\$18.11	\$19.05	\$21.13	\$11.90	\$23.34	\$17.43
Kitchen utensils (pots, pans, etc.):								
Average expenditure per family....	\$0.52	\$0.71	\$0.98	\$1.15	\$1.46	\$1.76	\$1.87	\$1.07

AVERAGE EXPENDITURE PER FAMILY IN ONE YEAR FOR FURNITURE AND HOUSE FURNISHINGS, BY ITEMS OF EXPENDITURE AND INCOME GROUPS—Continued.

Northern Cities—Continued.

Item.	Average expenditure per family for items of furniture and house furnishings by families having an income of—							All incomes.
	Under \$900.	\$900 and under \$1,200.	\$1,200 and under \$1,500.	\$1,500 and under \$1,800.	\$1,800 and under \$2,100.	\$2,100 and under \$2,500.	\$2,500 and over.	
Refrigerators:								
Average number per family.....	0.1	0.05	0.05	0.1	0.1	0.1	0.1	0.1
Average expenditure per family.....	\$0.66	\$0.60	\$0.71	\$0.97	\$0.91	\$1.33	\$1.17	\$0.81
Average expenditure per article.....	\$11.93	\$12.38	\$14.74	\$16.57	\$16.77	\$16.78	\$18.68	\$15.16
Brooms and brushes:								
Average expenditure per family.....	\$1.02	\$1.31	\$1.50	\$1.61	\$1.71	\$1.73	\$2.04	\$1.52
Carpet sweepers and vacuum cleaners:								
Average number per family.....	0.02	0.03	0.05	0.1	0.1	0.1	0.1	0.1
Average expenditure per family.....	\$0.08	\$0.14	\$0.33	\$0.60	\$1.48	\$1.36	\$0.92	\$0.54
Average expenditure per article.....	\$4.30	\$4.56	\$7.16	\$9.73	\$14.16	\$12.65	\$13.44	\$9.73
Mops:								
Average number per family.....	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.3
Average expenditure per family.....	\$0.13	\$0.11	\$0.13	\$0.16	\$0.18	\$0.22	\$0.21	\$0.14
Average expenditure per article.....	\$0.38	\$0.42	\$0.40	\$0.46	\$0.56	\$0.53	\$0.49	\$0.45
Tablecloths, cotton:								
Average number per family.....	0.1	0.2	0.2	0.4	0.4	0.5	0.6	0.3
Average expenditure per family.....	\$0.15	\$0.26	\$0.39	\$0.57	\$0.66	\$0.81	\$1.06	\$0.47
Average expenditure per article.....	\$1.21	\$1.44	\$1.57	\$1.63	\$1.63	\$1.79	\$1.81	\$1.60
Tablecloths, linen:								
Average number per family.....	0.01	0.01	0.02	0.05	0.1	0.1	0.1	0.04
Average expenditure per family.....	\$0.02	\$0.04	\$0.11	\$0.17	\$0.32	\$0.44	\$0.22	\$0.15
Average expenditure per article.....	\$3.00	\$4.04	\$4.62	\$3.68	\$4.12	\$4.43	\$3.01	\$4.08
Napkins, cotton:								
Average number per family.....		0.2	0.2	0.3	0.4	0.8	1.0	0.3
Average expenditure per family.....		\$0.03	\$0.04	\$0.06	\$0.07	\$0.15	\$0.24	\$0.06
Average expenditure per article.....		\$0.17	\$0.19	\$0.22	\$0.19	\$0.19	\$0.25	\$0.20
Napkins, linen:								
Average number per family.....		0.01	0.05	0.04	0.1	0.3	0.3	0.1
Average expenditure per family.....		\$0.01	\$0.03	\$0.02	\$0.07	\$0.11	\$0.07	\$0.03
Average expenditure per article.....		\$0.75	\$0.51	\$0.45	\$0.51	\$0.38	\$0.24	\$0.45
Towels, cotton:								
Average number per family.....	1.4	1.9	2.5	3.0	3.6	4.5	5.4	2.7
Average expenditure per family.....	\$0.33	\$0.44	\$0.65	\$0.87	\$1.00	\$1.46	\$1.55	\$0.76
Average expenditure per article.....	\$0.24	\$0.24	\$0.26	\$0.29	\$0.28	\$0.32	\$0.31	\$0.28
Towels, linen:								
Average number per family.....	0.04	0.04	0.1	0.2	0.2	0.2	0.5	0.1
Average expenditure per family.....	\$0.02	\$0.01	\$0.05	\$0.08	\$0.10	\$0.11	\$0.26	\$0.06
Average expenditure per article.....	\$0.37	\$0.39	\$0.45	\$0.51	\$0.50	\$0.54	\$0.47	\$0.48
Table oilcloth:								
Average square yards per family.....	0.5	0.9	0.9	1.0	1.0	1.2	1.4	0.9
Average expenditure per family.....	\$0.15	\$0.29	\$0.32	\$0.36	\$0.34	\$0.44	\$0.49	\$0.33
Average expenditure per square yard.....	\$0.31	\$0.34	\$0.35	\$0.36	\$0.34	\$0.38	\$0.35	\$0.35
Lamps, lamp chimneys, gas mantles, and electric bulbs:								
Average expenditure per family.....	\$0.70	\$0.99	\$1.22	\$1.39	\$1.65	\$1.86	\$2.60	\$1.32
Pianos and players:								
Average number per family.....	0.01	0.03	0.05	0.1	0.1	0.1	0.1	0.1
Average expenditure per family.....	\$0.25	\$1.94	\$3.52	\$8.11	\$9.42	\$13.85	\$8.19	\$5.43
Average expenditure per article.....	\$40.00	\$64.23	\$72.29	\$96.20	\$107.60	\$101.79	\$79.61	\$87.86
Talking machines:								
Average number per family.....	0.04	0.05	0.07	0.1	0.1	0.1	0.1	0.1
Average expenditure per family.....	\$1.23	\$1.70	\$2.92	\$4.00	\$5.91	\$5.71	\$8.61	\$3.50
Average expenditure per article.....	\$33.33	\$37.54	\$39.34	\$49.19	\$59.11	\$64.46	\$65.53	\$47.32
Other musical instruments:								
Average number per family.....		0.01	0.01	0.01	0.03	0.04	0.02	0.01
Average expenditure per family.....		\$0.17	\$0.33	\$0.20	\$0.63	\$1.13	\$0.12	\$0.33
Average expenditure per article.....		\$32.32	\$25.26	\$19.14	\$25.39	\$27.56	\$6.73	\$24.54
Records, rolls, etc.:								
Average expenditure per family.....	\$0.18	\$0.52	\$1.00	\$1.55	\$2.57	\$3.10	\$4.24	\$1.38
Window shades:								
Average number per family.....	0.4	0.8	0.6	0.9	0.8	1.3	1.0	0.8
Average expenditure per family.....	\$0.31	\$0.54	\$0.49	\$0.73	\$0.62	\$0.95	\$0.87	\$0.60
Average expenditure per article.....	\$0.74	\$0.71	\$0.80	\$0.83	\$0.78	\$0.76	\$0.88	\$0.78
Screens, window and door:								
Average number per family.....	0.3	0.4	0.6	0.7	0.7	0.8	0.9	0.6
Average expenditure per family.....	\$0.16	\$0.26	\$0.42	\$0.56	\$0.54	\$0.59	\$0.74	\$0.44
Average expenditure per article.....	\$0.61	\$0.68	\$0.74	\$0.84	\$0.79	\$0.79	\$0.79	\$0.77

AVERAGE EXPENDITURE PER FAMILY IN ONE YEAR FOR FURNITURE AND HOUSE FURNISHINGS, BY ITEMS OF EXPENDITURE AND INCOME GROUPS—Continued.

Northern Cities—Concluded.

Item.	Average expenditure per family for items of furniture and house furnishings by families having an income of—							All incomes.
	Under \$900.	\$900 and under \$1,200.	\$1,200 and under \$1,500.	\$1,500 and under \$1,900.	\$1,800 and under \$2,100.	\$2,100 and under \$2,500.	\$2,500 and over.	
Curtains, draperies, portières, sofa pillows:								
Average expenditure per family....	\$0.63	\$1.08	\$1.54	\$2.06	\$2.44	\$2.93	\$3.44	\$1.76
Tubs:								
Average number per family.....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Average expenditure per family.....	\$0.10	\$0.11	\$0.14	\$0.13	\$0.13	\$0.20	\$0.17	\$0.13
Average expenditure per article.....	\$1.21	\$1.24	\$1.43	\$1.50	\$1.50	\$1.47	\$1.42	\$1.43
Wash boilers:								
Average number per family.....	0.04	0.1	0.1	0.1	0.1	0.2	0.1	0.1
Average expenditure per family.....	\$0.07	\$0.25	\$0.24	\$0.30	\$0.34	\$0.37	\$0.37	\$0.27
Average expenditure per article.....	\$1.79	\$2.56	\$2.44	\$2.43	\$2.70	\$2.34	\$2.98	\$2.50
Washboards:								
Average number per family.....	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.2
Average expenditure per family.....	\$0.11	\$0.12	\$0.14	\$0.15	\$0.15	\$0.15	\$0.19	\$0.14
Average expenditure per article.....	\$0.54	\$0.56	\$0.59	\$0.60	\$0.60	\$0.64	\$0.61	\$0.59
Wringers:								
Average number per family.....	0.03	0.1	0.04	0.04	0.04	0.04	0.02	0.04
Average expenditure per family.....	\$0.17	\$0.30	\$0.26	\$0.23	\$0.17	\$0.15	\$0.10	\$0.24
Average expenditure per article.....	\$5.70	\$5.73	\$5.82	\$5.27	\$4.06	\$3.84	\$4.50	\$5.38
Irons:								
Average number per family.....	0.02	0.1	0.1	0.1	0.1	0.1	0.2	0.1
Average expenditure per family.....	\$0.11	\$0.14	\$0.22	\$0.32	\$0.42	\$0.37	\$0.36	\$0.25
Average expenditure per article.....	\$5.83	\$2.09	\$2.57	\$2.71	\$3.17	\$3.27	\$2.08	\$2.67
Washing machines:								
Average number per family.....	0.01	0.02	0.03	0.04	0.1	0.03	0.04	0.03
Average expenditure per family.....	\$0.09	\$0.28	\$0.71	\$1.45	\$2.06	\$0.96	\$1.60	\$0.96
Average expenditure per article.....	\$14.50	\$12.42	\$20.98	\$35.57	\$41.12	\$30.26	\$40.04	\$27.98
Other laundry utensils:								
Average expenditure per family....	\$0.03	\$0.08	\$0.12	\$0.12	\$0.13	\$0.23	\$0.11	\$0.11
Toys, sleds, carts, etc.:								
Average expenditure per family....	\$2.20	\$2.98	\$4.28	\$5.05	\$5.55	\$5.40	\$4.56	\$4.32
Baby carriages and go-carts:								
Average number per family.....	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2
Average expenditure per family.....	\$1.93	\$2.87	\$2.20	\$3.01	\$2.36	\$2.14	\$0.70	\$2.51
Average expenditure per article.....	\$11.21	\$14.98	\$15.24	\$16.32	\$17.32	\$19.29	\$10.27	\$15.61
Sewing machines:								
Average number per family.....	0.1	0.1	0.1	0.1	0.1	0.1	0.04	0.1
Average expenditure per family.....	\$0.70	\$1.65	\$1.61	\$1.77	\$2.01	\$1.88	\$1.02	\$1.67
Average expenditure per article.....	\$10.36	\$19.80	\$21.12	\$25.86	\$28.40	\$23.76	\$25.57	\$22.51
Other furniture and furnishings:								
Average expenditure per family....	\$0.27	\$0.82	\$1.08	\$1.45	\$1.86	\$2.46	\$2.28	\$1.28
Total average expenditure per family.....	\$30.66	\$45.60	\$58.70	\$80.26	\$91.65	\$111.37	\$121.78	\$68.12

Southern Cities.

Number of families.....	63	406	562	456	302	136	58	1,983
Average persons per family.....	4.5	4.7	4.8	5.1	5.3	5.7	6.3	5.0
Carpets:								
Average yards per family.....	1.3	2.3	3.4	4.9	4.5	4.6	6.7	3.8
Average expenditure per family....	\$1.48	\$2.42	\$4.17	\$6.28	\$7.51	\$8.76	\$9.38	\$5.19
Average expenditure per yard.....	\$1.17	\$1.05	\$1.24	\$1.28	\$1.68	\$1.91	\$1.40	\$1.37
Matting:								
Average square yard per family....	0.8	1.3	1.3	0.8	1.2	1.0	2.1	1.2
Average expenditure per family....	\$0.48	\$0.73	\$0.71	\$0.56	\$1.20	\$0.86	\$1.76	\$0.79
Average expenditure per square yard.....	\$0.61	\$0.55	\$0.55	\$0.68	\$0.96	\$0.87	\$0.85	\$0.67
Linoleum and floor oil cloth:								
Average square yard per family....	1.4	1.1	1.3	1.2	1.4	2.0	0.6	1.3
Average expenditure per family....	\$0.86	\$0.79	\$1.18	\$1.23	\$1.47	\$2.03	\$0.67	\$1.19
Average expenditure per square yard.....	\$0.62	\$0.73	\$0.93	\$1.03	\$1.02	\$1.02	\$1.14	\$0.91

AVERAGE EXPENDITURE PER FAMILY IN ONE YEAR FOR FURNITURE AND HOUSE FURNISHINGS, BY ITEMS OF EXPENDITURE AND INCOME GROUPS—Continued.

Southern Cities—Continued.

Item.	Average expenditure per family for items of furniture and house furnishings by families having an income of—							All incomes.
	Under \$900.	\$900 and under \$1,200.	\$1,200 and under \$1,500.	\$1,500 and under \$1,800.	\$1,800 and under \$2,100.	\$2,100 and under \$2,500.	\$2,500 and over.	
Chairs and stools:								
Average number per family.....	1.0	0.8	1.0	1.0	0.9	1.1	0.9	1.0
Average expenditure per family.....	\$1.54	\$2.26	\$3.24	\$3.68	\$3.90	\$5.13	\$4.38	\$3.35
Average expenditure per article.....	\$1.62	\$2.76	\$3.27	\$3.55	\$4.41	\$4.72	\$4.88	\$3.52
Tables:								
Average number per family.....	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2
Average expenditure per family.....	\$1.35	\$1.41	\$2.30	\$3.22	\$2.40	\$3.17	\$5.25	\$2.46
Average expenditure per article.....	\$7.08	\$9.69	\$11.16	\$14.52	\$14.24	\$16.57	\$21.75	\$12.88
Couches, davenport, sofas, etc.:								
Average number per family.....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Average expenditure per family.....	\$0.94	\$1.42	\$1.84	\$1.89	\$3.66	\$2.27	\$3.02	\$2.08
Average expenditure per article.....	\$14.81	\$21.31	\$20.70	\$21.55	\$28.35	\$30.93	\$35.00	\$23.55
Bureaus, chiffoniers, dressing tables:								
Average number per family.....	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.1
Average expenditure per family.....	\$1.17	\$1.17	\$1.90	\$2.88	\$2.84	\$3.99	\$3.14	\$2.28
Average expenditure per article.....	\$8.22	\$11.32	\$14.25	\$17.98	\$24.51	\$24.66	\$18.20	\$16.97
Writing desks:								
Average number per family.....	0.01	0.02	0.02	0.01	0.04	0.04	0.04	0.02
Average expenditure per family.....	\$0.07	\$0.12	\$0.19	\$0.13	\$0.77	\$0.54	\$0.54	\$0.18
Average expenditure per article.....	\$9.17	\$7.61	\$11.03	\$12.58	\$17.42	\$10.50	\$11.19	\$11.19
Bookcases and magazine racks:								
Average number per family.....	0.01	0.01	0.01	0.01	0.01	0.03	0.03	0.01
Average expenditure per family.....	\$0.09	\$0.13	\$0.04	\$0.11	.....	\$0.52	\$0.10	\$0.10
Average expenditure per article.....	\$18.50	\$9.13	\$5.13	\$8.38	.....	\$15.00	\$9.70	\$9.70
Clocks:								
Average number per family.....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Average expenditure per family.....	\$0.15	\$0.16	\$0.27	\$0.19	\$0.24	\$0.29	\$0.17	\$0.22
Average expenditure per article.....	\$1.85	\$1.91	\$2.79	\$2.85	\$2.58	\$4.01	\$2.53	\$2.63
Mirrors:								
Average number per family.....	0.02	0.01	0.02	.....	0.01	0.01	0.02	0.01
Average expenditure per family.....	\$0.002	\$0.01	\$0.06	.....	\$0.02	\$0.03	\$0.03	\$0.03
Average expenditure per article.....	\$0.10	\$3.03	\$3.31	.....	\$3.00	\$4.00	\$1.50	\$2.99
Pictures, frames, and other ornaments:								
Average expenditure per family.....	\$0.40	\$0.23	\$0.35	\$0.26	\$0.31	\$0.30	\$0.82	\$0.31
Hatracks, costumers, and hall trees:								
Average expenditure per family.....	.....	\$0.02	\$0.11	\$0.08	\$0.14	\$0.06	.....	\$0.08
Side boards, buffets, china closets:								
Average number per family.....	0.1	0.04	0.1	0.1	0.1	0.1	0.1	0.1
Average expenditure per family.....	\$0.97	\$0.83	\$1.86	\$1.91	\$1.93	\$3.77	\$4.24	\$1.84
Average expenditure per article.....	\$12.20	\$21.03	\$22.76	\$23.59	\$26.43	\$36.64	\$35.14	\$24.88
Bedsteads:								
Average number per family.....	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2
Average expenditure per family.....	\$1.22	\$2.05	\$2.99	\$3.02	\$2.32	\$3.43	\$2.34	\$2.66
Average expenditure per article.....	\$7.00	\$10.02	\$11.05	\$12.17	\$12.28	\$15.05	\$12.32	\$11.50
Bed springs:								
Average number per family.....	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Average expenditure per family.....	\$0.40	\$0.88	\$1.06	\$1.11	\$1.19	\$1.57	\$1.09	\$1.07
Average expenditure per article.....	\$4.17	\$4.84	\$5.42	\$5.62	\$7.35	\$9.73	\$5.29	\$5.85
Mattresses:								
Average number per family.....	0.2	0.2	0.3	0.2	0.3	0.2	0.3	0.2
Average expenditure per family.....	\$1.45	\$1.82	\$2.14	\$1.67	\$2.71	\$2.89	\$3.30	\$2.11
Average expenditure per article.....	\$6.54	\$7.44	\$8.01	\$7.85	\$9.86	\$12.66	\$10.63	\$8.52
Pillows:								
Average number per family.....	0.03	0.1	0.1	0.1	0.1	0.1	.....	0.1
Average expenditure per family.....	\$0.03	\$0.16	\$0.20	\$0.18	\$0.17	\$0.15	.....	\$0.17
Average expenditure per article.....	\$1.00	\$1.35	\$1.59	\$1.82	\$1.54	\$1.86	.....	\$1.59
Blankets:								
Average number per family.....	0.2	0.4	0.4	0.5	0.6	0.6	0.5	0.5
Average expenditure per family.....	\$0.60	\$1.18	\$1.73	\$2.01	\$2.40	\$3.03	\$3.08	\$1.88
Average expenditure per article.....	\$2.52	\$3.36	\$4.02	\$4.38	\$4.31	\$4.74	\$5.77	\$4.16
Quilts and comforts:								
Average number per family.....	0.1	0.1	0.2	0.2	0.3	0.2	0.2	0.2
Average expenditure per family.....	\$0.37	\$0.43	\$0.60	\$0.66	\$0.92	\$0.91	\$1.09	\$0.65
Average expenditure per article.....	\$2.91	\$3.48	\$3.81	\$3.57	\$3.53	\$4.41	\$5.29	\$3.72
Sheets:								
Average number per family.....	0.7	1.1	1.3	1.6	2.0	2.4	2.6	1.5
Average expenditure per family.....	\$0.97	\$1.48	\$1.80	\$2.47	\$3.06	\$3.75	\$3.62	\$2.24
Average expenditure per article.....	\$1.29	\$1.33	\$1.39	\$1.51	\$1.55	\$1.55	\$1.41	\$1.46

AVERAGE EXPENDITURE PER FAMILY IN ONE YEAR FOR FURNITURE AND HOUSE FURNISHINGS, BY ITEMS OF EXPENDITURE AND INCOME GROUPS—Continued.

Southern Cities—Continued.

Item.	Average expenditure per family for items of furniture and house furnishings by families having an income of—							All-incomes.
	Under \$900.	\$900 and under \$1,200.	\$1,200 and under \$1,500.	\$1,500 and under \$1,800.	\$1,800 and under \$2,100.	\$2,100 and under \$2,500.	\$2,500 and over.	
Pillow cases:								
Average number per family.....	1.4	1.4	1.8	2.0	2.4	2.7	3.1	1.9
Average expenditure per family....	\$0.53	\$0.55	\$0.75	\$0.84	\$1.01	\$1.30	\$1.29	\$0.82
Average expenditure per article....	\$0.38	\$0.40	\$0.43	\$0.41	\$0.42	\$0.48	\$0.42	\$0.42
Spreads:								
Average number per family.....	0.1	0.1	0.1	0.2	0.2	0.4	0.2	0.2
Average expenditure per family....	\$0.34	\$0.34	\$0.42	\$0.51	\$0.69	\$1.21	\$0.60	\$0.52
Average expenditure per article....	\$5.38	\$3.30	\$3.42	\$3.08	\$3.87	\$3.35	\$2.92	\$3.39
Pitchers, washbowls, etc.:								
Average expenditure per family....		\$0.03	\$0.07	\$0.06	\$0.06	\$0.07	\$0.02	\$0.06
Dishes and glassware:								
Average expenditure per family....	\$1.26	\$0.78	\$1.22	\$1.44	\$2.46	\$2.68	\$2.06	\$1.49
Knives, forks, spoons, etc.:								
Average expenditure per family....	\$0.14	\$0.15	\$0.54	\$0.21	\$0.54	\$1.24	\$0.19	\$0.41
Stoves, ranges, and heaters:								
Average number per family.....	0.2	0.3	0.3	0.3	0.4	0.4	0.5	0.3
Average expenditure per family....	\$1.87	\$4.86	\$4.17	\$6.16	\$7.09	\$8.65	\$10.70	\$5.64
Average expenditure per article....	\$9.83	\$16.72	\$14.55	\$19.10	\$19.12	\$23.01	\$22.99	\$17.80
Kitchen cabinets:								
Average number per family.....	0.1	0.1	0.1	0.1	0.1	0.1	0.03	0.1
Average expenditure per family....	\$1.48	\$0.89	\$1.40	\$1.14	\$1.42	\$2.11	\$1.50	\$1.30
Average expenditure per article....	\$13.36	\$14.53	\$21.30	\$24.86	\$22.61	\$28.70	\$43.50	\$21.24
Kitchen utensils (pots, pans, etc.):								
Average expenditure per family....	\$0.61	\$0.69	\$0.94	\$1.42	\$1.50	\$1.43	\$1.67	\$1.14
Refrigerators:								
Average number per family.....	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1
Average expenditure per family....	\$0.57	\$1.29	\$1.61	\$1.94	\$1.95	\$2.86	\$3.28	\$1.78
Average expenditure per article....	\$7.20	\$14.99	\$15.92	\$17.66	\$19.05	\$22.87	\$21.17	\$17.26
Brooms and brushes:								
Average expenditure per family....	\$1.63	\$1.84	\$2.00	\$2.30	\$2.33	\$2.51	\$2.64	\$2.13
Carpet sweepers and vacuum cleaners:								
Average number per family.....	0.02	0.01	0.02	0.02	0.05	0.01	0.03	0.02
Average expenditure per family....	\$0.06	\$0.01	\$0.07	\$0.30	\$0.77	\$0.04	\$0.10	\$0.2
Average expenditure per article....	\$3.50	\$1.91	\$3.92	\$17.24	\$16.66	\$2.75	\$2.88	\$10.77
Mops:								
Average number per family.....	0.2	0.3	0.5	0.5	0.5	0.5	0.5	0.4
Average expenditure per family....	\$0.10	\$0.14	\$0.25	\$0.23	\$0.28	\$0.28	\$0.26	\$0.23
Average expenditure per article....	\$0.43	\$0.48	\$0.52	\$0.50	\$0.60	\$0.55	\$0.49	\$0.52
Tablecloths, cotton:								
Average number per family.....	0.03	0.1	0.3	0.4	0.4	0.4	0.7	0.3
Average expenditure per family....	\$0.05	\$0.19	\$0.43	\$0.71	\$0.76	\$0.79	\$1.65	\$0.54
Average expenditure per article....	\$1.50	\$1.49	\$1.59	\$1.87	\$1.88	\$2.16	\$2.23	\$1.82
Tablecloths, linen:								
Average number per family.....		0.01	0.02	0.02	0.03	0.1	0.1	0.03
Average expenditure per family....		\$0.02	\$0.08	\$0.08	\$0.16	\$0.43	\$0.35	\$0.11
Average expenditure per article....		\$2.50	\$3.62	\$4.38	\$4.78	\$5.35	\$2.86	\$4.16
Napkins, cotton:								
Average number per family.....		0.1	0.2	0.4	0.6	0.7	1.0	0.3
Average expenditure per family....		\$0.01	\$0.04	\$0.08	\$0.12	\$0.14	\$0.24	\$0.07
Napkins, linen:								
Average number per family.....			0.01	0.04	0.1	0.3		0.04
Average expenditure per family....			\$0.01	\$0.02	\$0.05	\$0.12		\$0.02
Average expenditure per article....			\$0.67	\$0.39	\$0.58	\$0.42		\$0.48
Towels, cotton:								
Average number per family.....	1.0	2.1	2.5	3.2	3.7	4.3	5.0	2.9
Average expenditure per family....	\$0.26	\$0.47	\$0.67	\$0.86	\$1.03	\$1.23	\$1.56	\$0.78
Average expenditure per article....	\$0.28	\$0.23	\$0.27	\$0.27	\$0.28	\$0.28	\$0.31	\$0.27
Towels, linen:								
Average number per family.....		0.03	0.01	0.03	0.05	0.1	0.1	0.03
Average expenditure per family....		\$0.01	\$0.02	\$0.02	\$0.04	\$0.03	\$0.04	\$0.02
Average expenditure per article....		\$0.39	\$1.27	\$0.67	\$0.79	\$0.50	\$0.42	\$0.66
Table oilcloth:								
Average square yards per family....	0.8	0.8	0.9	0.8	0.8	0.7	0.8	0.3
Average expenditure per family....	\$0.25	\$0.30	\$0.33	\$0.29	\$0.34	\$0.29	\$0.29	\$0.18
Average expenditure per square yard.....	\$0.32	\$0.36	\$0.38	\$0.37	\$0.40	\$0.39	\$0.37	\$0.37
Lamps, lamp chimneys, gas mantles, and electric bulbs:								
Average expenditure per family....	\$0.53	\$0.65	\$1.02	\$1.08	\$1.41	\$1.78	\$1.47	\$1.07

AVERAGE EXPENDITURE PER FAMILY IN ONE YEAR FOR FURNITURE AND HOUSE FURNISHINGS, BY ITEMS OF EXPENDITURE AND INCOME GROUPS—Concluded.

Southern Cities—Concluded.

Item.	Average expenditure per family for items of furniture and house furnishings by families having an income of—							All-incomes.
	Under \$900.	\$900 and under \$1,200.	\$1,200 and under \$1,500.	\$1,500 and under \$1,800.	\$1,800 and under \$2,100.	\$2,100 and under \$2,500.	\$2,500 and over.	
Pianos and players:								
Average number per family.....	0.02	0.03	0.04	0.1	0.1	0.1	0.1	0.1
Average expenditure per family....	\$0.04	\$2.05	\$2.44	\$6.91	\$8.60	\$10.08	\$22.31	\$5.36
Average expenditure per article....	\$2.50	\$64.00	\$59.72	\$108.71	\$96.21	\$97.91	\$161.72	\$92.37
Talking machines:								
Average number per family.....	0.02	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Average expenditure per family....	\$0.48	\$1.51	\$2.52	\$3.29	\$5.81	\$8.63	\$3.02	\$3.36
Average expenditure per article....	\$30.00	\$27.80	\$33.78	\$49.93	\$53.21	\$61.74	\$43.75	\$44.12
Other musical instruments:								
Average number per family.....		0.01	0.01	0.01	0.01	0.01	0.03	0.01
Average expenditure per family....		\$0.11	\$0.12	\$0.22	\$0.08	\$0.04	\$0.41	\$0.14
Average expenditure per article....		\$22.50	\$21.50	\$25.38	\$12.00	\$5.00	\$12.00	\$19.03
Records, rolls, etc.:								
Average expenditure per family....	\$0.28	\$0.70	\$0.96	\$1.05	\$2.20	\$3.85	\$2.32	\$1.33
Window shades:								
Average number per family.....	0.6	0.8	0.9	1.0	0.9	1.2	0.9	0.9
Average expenditure per family....	\$0.45	\$0.59	\$0.77	\$0.94	\$1.16	\$1.18	\$0.98	\$0.86
Average expenditure per article....	\$0.81	\$0.77	\$0.89	\$0.93	\$1.33	\$1.02	\$1.11	\$0.96
Screens, window and door:								
Average number per family.....	0.2	0.3	0.3	0.5	0.4	0.9	1.1	0.4
Average expenditure per family....	\$0.18	\$0.26	\$0.28	\$0.45	\$0.44	\$1.05	\$1.03	\$0.41
Average expenditure per article....	\$1.02	\$0.79	\$0.83	\$0.96	\$0.98	\$1.17	\$0.98	\$0.94
Curtains, draperies, portières, sofa pillows:								
Average expenditure per family....	\$0.55	\$0.78	\$0.86	\$1.39	\$1.90	\$1.40	\$1.93	\$1.18
Tubs:								
Average number per family.....	0.1	0.2	0.3	0.3	0.2	0.3	0.2	0.2
Average expenditure per family....	\$0.17	\$0.27	\$0.38	\$0.35	\$0.32	\$0.37	\$0.30	\$0.33
Average expenditure per article....	\$1.38	\$1.32	\$1.33	\$1.36	\$1.35	\$1.43	\$1.25	\$1.35
Wash boilers:								
Average number per family.....	0.02	0.1	0.1	0.1	0.05	0.1	0.1	0.1
Average expenditure per family....	\$0.01	\$0.08	\$0.10	\$0.09	\$0.09	\$0.10	\$0.10	\$0.09
Average expenditure per article....	\$0.50	\$1.23	\$1.39	\$1.45	\$1.72	\$1.65	\$1.96	\$1.44
Wash boards:								
Average number per family.....	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.2
Average expenditure per family....	\$0.10	\$0.13	\$0.12	\$0.15	\$0.13	\$0.12	\$0.15	\$0.13
Average expenditure per article....	\$0.54	\$0.54	\$0.53	\$0.56	\$0.57	\$0.59	\$0.54	\$0.55
Wringers:								
Average number per family.....	0.02	0.01	0.02	0.01	0.01	0.03	.....	0.01
Average expenditure per family....	\$0.02	\$0.03	\$0.10	\$0.03	\$0.06	\$0.13	.....	\$0.06
Average expenditure per article....	\$1.50	\$4.67	\$5.08	\$7.75	\$5.78	\$4.50	.....	\$5.09
Irons:								
Average number per family.....	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1
Average expenditure per family....	\$0.04	\$0.14	\$0.35	\$0.26	\$0.47	\$0.25	\$0.54	\$0.29
Average expenditure per article....	\$0.48	\$2.14	\$2.61	\$3.97	\$2.89	\$4.95	\$3.95	\$2.90
Washing machines:								
Average number per family.....	.....	0.01	.....	0.01	0.01	0.03	.....	0.01
Average expenditure per family....	.....	\$0.09	.....	\$0.12	\$0.14	\$0.65	.....	\$0.11
Average expenditure per article....	.....	\$11.67	.....	\$17.60	\$14.00	\$22.19	.....	\$16.81
Other laundry utensils:								
Average expenditure per family....	\$0.06	\$0.05	\$0.07	\$0.07	\$0.10	\$0.06	\$0.06	\$0.07
Toys, sleds, carts, etc.:								
Average expenditure per family....	\$2.20	\$4.15	\$5.13	\$6.59	\$7.87	\$8.24	\$9.36	\$5.93
Baby carriages and go-carts:								
Average number per family.....	0.1	0.1	0.1	0.1	0.1	0.1	0.02	0.1
Average expenditure per family....	\$1.77	\$1.38	\$1.87	\$1.68	\$1.46	\$1.99	\$0.76	\$1.64
Average expenditure per article....	\$12.38	\$11.01	\$12.67	\$12.15	\$12.24	\$16.89	\$44.00	\$12.53
Sewing machines:								
Average number per family.....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Average expenditure per family....	\$0.84	\$1.54	\$3.00	\$2.24	\$2.31	\$2.77	\$2.38	\$2.32
Average expenditure per article....	\$8.83	\$15.59	\$29.11	\$31.91	\$34.90	\$31.42	\$34.50	\$26.74
Other furniture and furnishings:								
Average expenditure per family....	\$0.55	\$0.73	\$1.36	\$1.48	\$2.02	\$2.47	\$1.64	\$1.42
Total average expenditure per family.....	\$31.82	\$47.45	\$65.34	\$80.68	\$97.83	\$119.83	\$125.91	\$74.59

Quantity-Cost Budget Necessary to Maintain Single Man or Woman in Washington, D. C.¹

HERE are presented here tentative quantity and cost budgets necessary for the maintenance of a single man and a single woman in the clerical service of the Government in Washington, D. C., at a level of health and decency, the cost of the items included being based on prices prevailing in the National Capital in August and September, 1919.

It should be stated that on November 1 car fares were advanced to 6½ cents, thus increasing the expense for this item to \$46.50, and bringing the total budget, including savings, to \$1,067.78 in the case of a single man and to \$1,151.15 in the case of a single woman. The other items in the budget have changed but little, if at all.

Summary of Annual Budget.

	Single man.	Single woman.
1. Room (2 in a room) \$15 per month per person-----	\$180.00	\$180.00
2. Board:		
Regular table board, two meals on week days, three on Sunday, \$6 per week-----	312.00	312.00
Lunch, 25 cents per day, 313 days-----	78.25	78.25
Other food, fruit, confectionery, etc., 25 cents per week-----	13.00	13.00
3. Clothing-----	158.36	240.15
4. Laundry-----	52.00	65.00
5. Toilet supplies, etc.-----	15.00	10.00
6. Health—medical charges, dentist, oculist-----	32.00	43.00
7. Religious organizations—10 cents per week-----	5.20	5.20
8. Labor organizations-----	5.00	5.00
9. Newspapers-----	8.40	8.40
10. Books and magazines (no special allowance—see text)-----		
11. Car fare-----	37.20	37.20
12. Amusements, recreation, etc-----	39.00	20.00
13. Vacation (no special allowance—see text)-----		
14. Educational purposes (no special allowance—see text)-----		
15. Other incidentals-----	26.00	20.00
Total (not including savings)-----	961.41	1,037.20
16. Savings—10 per cent of total expenses-----	96.14	103.72
Total (including savings)-----	1,057.55	1,140.92

¹ For summary report of this Bureau's study to determine the cost of maintaining the family of a Government employee in Washington at a level of health and decency and the cost involved in reaching such determination, see MONTHLY LABOR REVIEW for December, 1919, pp. 22 to 29.

Itemized Details of Budget—Rent.

Room, \$15 per month----- \$180.00 per year.

An investigation covering 50 houses in different sections of the city, including commercial boarding houses and private houses, developed that the approximate minimum cost of a clean and fairly comfortable room in a house with bath facilities was \$15 per month per person for two in a room.

A very few rooms sufficiently good to be livable were found at a slightly lower monthly rental, but these were very few in number and usually in private families where spare rooms were rented without much regard to or understanding of prevailing rates. At present, the prevailing rate seems to be \$17.50 per month for two in a room, but a sufficient number were found at \$15 per person to suggest that this sum may be taken as a minimum. This is the prevailing price per person at the Y. M. C. A. for two in a room.

The investigation covered all sections of the city. In general, very slight variations in price were found between sections for similar accommodations.

The allowance of \$15 a month is considerably lower than the rate for rooms at the Government dormitories for women, where \$20 per month per person is charged. Single rooms are rented for \$20 or double rooms for \$40.

Food.

Table board (2 meals on week days and 3 on Sundays), \$6 per week-----	\$312.00 per year.
Lunches (313 days at 25 cents per day)-----	78.25 per year.
Other food, fruit, confectionery, sodas, etc., 25 cents per week-----	13.00 per year.
Total-----	403.25 per year.

The prevailing rate for table board—2 meals on week days and 3 meals on Sundays—is \$6 per week, in good, and moderately good places. The lowest seems to be \$22 per month, and the places found at this rate were unprepossessing. On the other hand, \$30 per month is now quite frequent for board at regular boarding houses.

Board at the prices just cited includes, almost invariably, only two meals on week days, leaving the midday lunch as an extra expense. Probably the lowest priced lunch available is that known as the "box lunch" served from wagons in the streets and costing 20 cents. The box lunch usually consists of two sandwiches, a piece of pastry and a piece of fruit. It is possibly sufficiently nutritious for the midday lunch of an office worker but in very many cases will be

supplemented by such items as coffee, milk, a banana, an apple, at an additional expense of 5 or 10 cents.

An additional allowance of 25 cents per week is made in this budget for fruit, sweets, and other minor food items. These are not absolutely necessary, but most persons living in boarding houses find some supplementary expenditure, especially for fruit, highly desirable.

The rate for board at the Government dormitories for women is \$25 a month for two meals a day—but board in the dormitories is available only to women who occupy dormitory rooms. Thus the total cost for board, 2 meals a day, and lodging at the Government dormitories is \$45 per month—somewhat higher than the minimum allowance in this budget.

Clothing.

Clothing, man (including repairing and cleaning)-----	\$158.36 per year.
Clothing, woman-----	240.15 per year.

The clothing articles, listed below, as the minimum necessary for a single man are, with two exceptions, identical with that worked out for the husband in the family budget recently prepared. As in both cases the man is presumed to be a Government employee, it would seem that the minimum clothing requirements should be about the same. The two exceptions are cleaning and pressing and miscellaneous, both of which are considerably increased for the single man's budget, for the reason that the man living alone is usually unable to do the mending and repair work which a wife usually does, and thus the life of many garments is considerably shortened. Rather than attempt, however, to increase the number of garments on this account (for which no good information exists) it has seemed better to allow a more liberal sum for miscellaneous and for cleaning, pressing, and repairing. Therefore, the miscellaneous item is increased from \$3 to \$15 per year, which allows an additional \$1 per month for replacement, etc., and the item for cleaning, pressing, and repairing is increased from \$6 to \$31.20 per year. Information on this latter point was derived from inquiries made at the local Y. M. C. A., which indicates that the average sum spent by low-salaried residents at that place was: For pressing, 1 suit 4 times a month at 40 cents each; cleaning and pressing 4 times a year, at \$1.50 each time; and about 50 cents per month for repairs. These items would total \$31.20 per year.

On account of the difference in occupation, the clothing of the single woman will vary considerably from that of the Government worker's wife. While the housewife will wear her "better" clothing

two or three times a week, and usually only when the weather is favorable, the working woman must appear every day in the week, in all varieties of weather, dressed in clothes of good quality kept neat and clean. In order to withstand this more strenuous wear, a greater quantity and perhaps a better quality of clothing must be provided for the Government worker than for the housewife.

In preparing the clothing budget for the single woman, the quantities allowed in the study of wage-earning women made by the Bureau of Labor Statistics for the calendar year 1916 have been followed rather than the quantity budget recently prepared for the Government worker's wife. In a few instances even the quantities approved in the wage-earning women study have been decreased in order to bring this budget to a bare minimum.

The cost of the wage earners' budget in the 1916 study was approximately \$125. Since that time clothing prices in Washington have undoubtedly increased not less than 100 per cent. In the light of such an increase, the total of the following budget, \$240.15, appears sufficiently niggardly.

The following are the clothing budgets for a single man and a single woman in the Government service:

UNIT PRICE, REPLACEMENT PER YEAR, AND ANNUAL COST OF CLOTHING FOR SINGLE MAN AND SINGLE WOMAN IN GOVERNMENT SERVICE IN WASHINGTON, D. C.

Article.	Unit price.	Annual replacement.	Yearly cost.
<i>Single man.</i>			
Hats, felt.....	\$4.00	$\frac{1}{2}$	\$2.00
Hats, straw.....	2.00	1	2.00
Suits, winter (wool).....	40.00	$\frac{1}{2}$	20.00
Suits, summer (wool).....	40.00	$\frac{1}{2}$	20.00
Overcoat.....	40.00	$\frac{1}{2}$	10.00
Raincoat.....	15.00	$\frac{1}{2}$	2.50
Shirts, cotton.....	2.00	5	10.00
Union suits, summer.....	1.50	3	4.50
Union suits, winter (part wool).....	3.50	1	3.50
Pajamas.....	2.50	1	2.50
Socks, cotton.....	.50	12	6.00
Shoes, high.....	7.50	1	7.50
Shoes, low.....	7.50	$\frac{1}{2}$	3.75
Repairing, whole soles.....	3.50	1	3.50
Repairing, half soles, including heel.....	2.50	1	2.50
Rubbers.....	1.25	$\frac{1}{2}$	.63
Gloves, kid.....	3.00	$\frac{1}{2}$	1.50
Collars.....	.25	12	3.00
Ties.....	.50	3	1.50
Handkerchiefs.....	.25	8	2.00
Garters.....	.35	2	.70
Belts.....	1.50	$\frac{1}{2}$	.50
Suspenders.....	.75	1	.75
Umbrella.....	4.00	$\frac{1}{2}$	1.33
Cleaning, pressing, and repairing.....			31.20
Miscellaneous.....			15.00
Total.....			158.36
<i>Single woman.</i>			
Suit.....	75.00	$\frac{1}{2}$	37.50
Coat.....	75.00	$\frac{1}{2}$	25.00
Shirt waists, white.....	2.50	5	12.50
Waist, dress.....	10.00	1	10.00

UNIT PRICE, REPLACEMENT PER YEAR, AND ANNUAL COST OF CLOTHING FOR SINGLE MAN AND SINGLE WOMAN IN GOVERNMENT SERVICE IN WASHINGTON, D. C.—Concluded.

Article.	Unit price.	Annual replacement.	Yearly cost.
<i>Single woman—Concluded.</i>			
Dress, one-piece, wool serge.....	\$25.00	$\frac{1}{2}$	\$12.50
Skirts, white, wash.....	5.00	2	10.00
Dress, afternoon or party.....	40.00	$\frac{1}{2}$	20.00
Hats.....	10.00	2	20.00
Shoes:			
Low.....	9.50	1	9.50
High.....	12.00	1	12.00
Repairs.....	3.00	1	3.00
Heels.....	.40	4	1.60
Gloves.....	2.50	1	2.50
Stockings (cotton).....	.85	8	6.80
Stockings (silk).....	2.25	1	2.25
Corset.....	6.00	1	6.00
Nightgowns.....	1.50	2	3.00
Petticoats, white muslin.....	2.00	1	2.00
Corset covers.....	1.00	$\frac{4}{2}$	4.00
Union suits, year-round wear.....	1.00	5	5.00
Silk petticoat.....	7.00	1	7.00
Handkerchiefs.....	.25	10	2.50
Kimono.....	6.00	$\frac{1}{2}$	1.50
Umbrella.....	3.00	$\frac{1}{2}$	1.50
Rubbers.....	1.50	1	1.50
Cleaning and pressing.....	3.00	2	6.00
Miscellaneous expenses, to include hairpins, hair nets, combs, collars and cuffs, purse, veils, dress shields, sanitary supplies, watch repairs, etc.....			15.00
Total.....			240.15

Laundry.

Laundry, man, \$1 per week..... \$52 per year.
 Laundry, woman, \$1.25 per week..... 65 per year.

Assuming only sufficient changing of clothing to insure ordinary cleanliness, a man's laundry, done at a steam laundry, costs at prevailing prices approximately \$1.67 per week.

Inquiries made at a large local laundry showed the average bill for 200 laundry bundles left by young men to be 78 cents. This relatively small average was attributed by the manager to the fact that the bundles often include only collars and shirts, indicating that the soft laundry is done either by washerwomen or by the men themselves. At the Y. M. C. A., an average of 385 laundry bills in September was \$1.10. Some of these clearly included more than a week's laundry, and the opinion there was that the low-salaried man averaged about 80 cents per week, many of these men washing small articles, such as handkerchiefs and socks, in their rooms.

In view of these indications, it would seem that an average of \$1 per week is about the lowest sum for which a man can have sufficient laundry work done to maintain reasonable cleanliness, and in allowing this sum, moreover, it was assumed either that soft work is done by washerwomen at a lower cost than that of the steam laundries or that the man does some of his laundry work.

Inquiries among woman workers indicate that \$1.25 per week is the lowest average amount which could be allowed for laundry. In the summer when a considerable amount of white clothing is being worn, the laundry expense would doubtless be higher than \$1.25 a week, but in the winter season many woman workers secure their laundry for only \$1 a week, so that an average of \$1.25 seems within reason. It is assumed, of course, that the work will be done by a washer-woman rather than by a steam laundry.

Toilet Supplies.

Toilet supplies and services, man-----	\$15 per year.
Toilet supplies, woman-----	10 per year.

This group includes for men a long list of items—tooth paste, tooth brush, hand soap, shaving soap and brush, razor, hair brush, comb, shoe polish, and hair cutting. The prevailing price for hair cutting is 50 cents. An average of one hair cut every three weeks would thus amount to \$8.50 per year. For the other items listed, no precise data exist regarding the number of units needed per year. But assuming that a man shaves himself and polishes his own shoes, it would seem that the minimum yearly expense for these items would be at least \$6.50.

For women the item includes expenditures for toothbrushes, toothpaste, toilet soap, shampoo soap, hairbrush, comb, shoe polish, talcum powder, face powder, toilet water, etc.

Health.

Health, man-----	\$32 per year.
Health, woman-----	43 per year.

This item includes expenditures for medical attention in case of sickness, medicines, dentist, and oculist. No information exists regarding the necessary expenses for these purposes by a single man in Government employment or in occupations of analogous character. The investigation of wage-earning women in Washington, made by the Bureau of Labor Statistics in 1916, showed that the average expenditure for these purposes by the group of self-supporting women covered by the investigation was \$22.54 per year. For women with incomes of \$800 or over, however, the average expenditure was approximately \$32 per year; and this sum may be taken as a more accurate measure of the necessary expenditure by wage-earning women at that time, as the maintenance of health is rarely a subject of extravagance, the expenditures tending to rise constantly with increasing income.

The allowance for health for the single woman is \$43. In the absence of data regarding the health expenditures of single men, it

may be assumed as probable that the average man has a smaller expenditure on this item than the average woman. Therefore, the allowance here made for the single man, \$32, the same amount as was spent by single women in 1916, would seem reasonable, as the increase in the cost of all medical service between 1916 and 1919 has probably been at least 33½ per cent. Allowing this rate of increase for women, the necessary cost of maintaining good health is placed at \$43.

Religious Organizations.

Religious organizations----- \$5.20 per year.

Attendance at almost all churches or religious associations involves a practical obligation to make some contribution. The sum of 10 cents per week for this purpose seems a fair minimum in the case of both men and women.

Labor Organizations.

Labor organizations----- \$5 per year.

Membership in labor organization is now so frequent among all classes of workers, including the clerical staff of the Government, that expenditures for this purpose must be recognized. The clerical workers' organization is known as the Federal Employees' Union, the dues being 50 cents a month or \$5 per year in advance. Employees in the mechanical divisions, however, such as machinists, carpenters, printers, etc., affiliate usually with the regular craft unions, where dues are as a rule considerably higher than in the Federal Employees' Union.

Newspapers, Books, and Magazines.

Newspapers----- \$8.40 per year.

Books and magazines----- Nothing.

The reading of a daily newspaper is so customary and so desirable as an incident to intelligent citizenship that an expenditure for this purpose may be regarded as a necessity. The Washington daily papers are not uniform in their subscription rates, the two most expensive costing \$8.40 per year. This sum is here allowed, as the individual should be free to choose the paper he prefers and in any case the difference is not large.

No special provision is here made for the purchase of magazines, books, and other reading matter. It is assumed that the free public libraries can be availed of by those who are seeking to live with close economy. Any special expenses along this line, due to individual tastes, would, under this budget, have to be charged to the amusement and recreation allowance.

Car Fare.

Car fare (744 rides) ----- \$37.20 per year.

Although a few single men and women may be fortunate enough to secure a comfortable room sufficiently near their office to render car fare unnecessary, the larger portion of them are obliged to ride to and from their work. In view of this it seems reasonable to allow two car rides per day for each working day, or 600 rides in total.

Some additional car riding, such as that incident to visiting friends and attending lectures, concerts, or movies occasionally is almost inevitable. Therefore a minimum of six round-trip rides per month is allowed for this purpose.

Amusements, Recreation, Etc.

Amusements, recreation, etc., man ----- \$39 per year.

Amusements, recreation, etc., woman ----- 20 per year.

The average single man, particularly a young man, living in a boarding house, will inevitably feel it necessary to make some expenditures for amusements. Membership in the Young Men's Christian Association probably offers the greatest return of wholesome amusement for the least money. This will cost \$15 per year. In addition, there will be at least occasional outside amusements, such as the moving pictures, excursions, and games. In the case of the normal young man, moreover, there will be the expenses of courtship, which, as a matter of custom and pride, will be paid at the sacrifice of almost anything else.

No data are available for this class of expenditures for men. For women the investigation of the Bureau of Labor Statistics in 1916 developed that the average expenditures for amusements by the wage-earning women covered by that investigation was only \$7.44 per year. This average was unduly low, because the study included a number of women at such very low earnings that they had absolutely no expenditures on amusements of any kind. If these had been eliminated, the average would have been between \$10 and \$12 per year. For the reasons above cited, and particularly because when young men and young women have their amusements together custom prescribes that the man bears the expense, it seems reasonable to assume that the minimum expenditure for amusements should be considerably higher for single men than for single women. In view of this, and in view of the increased costs of most amusements, an allowance of 75 cents a week for this item seems very moderate.

Single women, as a rule, living in boarding houses will feel the necessity for a reasonable amount of amusements. Assuming that some of these expenses will be met by young men, the amount allowed

in this budget need not be very large. However, it seems reasonable that the average young woman will spend at least \$20 a year for amusements and recreation. This figure will provide simple amusement for only about one night a week.

Vacation.

Vacation..... Nothing.

No special provision is here made for vacations. Under the regulations of most Government departments in Washington a reasonable amount of annual leave with pay is granted. This permits a vacation without loss of pay. It is not felt that special provision for the expenses of out-of-town vacations should be regarded as absolutely necessary in a minimum budget of health and decency.

Education.

Educational purposes..... Nothing.

In the case of younger men particularly, it is highly desirable that additional school attendance, such as the law school, business college, and art school should be encouraged. This practice, moreover, is quite common among Government employees. No special allowance for this item, however, is made in the budget on the grounds (1) that such expenditure is normally limited to a rather short period, and (2) that the ambitious man attending school in the evenings almost always effects considerable reduction in the amount of money spent for amusement and vacation.

Incidentals.

Other incidentals, man..... \$26 per year.
 Other incidentals, woman..... 20 per year.

This group includes a large number of items which, for the most part, are either inexpensive or of only occasional occurrence; such items, for instance, as stationery, stamps, notebook, pocketbook, occasional use of telephone and telegraph, and tobacco. The only pertinent information on the cost of the miscellaneous items is the study made by the United States Bureau of Labor Statistics of wage-earning women in Washington in 1916. This study showed an average expenditure on other incidentals of about \$15 per year by the wage-earning women with incomes of \$600 or more covered by that investigation. Using this as a guide and allowing for increases in the cost of most articles it would seem reasonable to allow 50 cents a week for this miscellaneous group as a necessary minimum for a single man, and \$20 a year for a single woman.

Savings.

Savings, man	\$96.14 per year.
Savings, woman	103.72 per year.

In the budget proper no provision is made for savings (i. e., bank account, insurance, etc.), it being felt that savings should be regarded rather in the nature of profits than as an item of expense. The importance of savings, whether in the form of a bank deposit, insurance, or property investment, is universally recognized. The only point of dispute is as to the amount that should be considered as essential. An amount equivalent to 10 per cent of living expenses would seem to be very reasonable.

The British National Health Insurance System, 1911-1919.

By HENRY J. HARRIS.

BY THE act of December 16, 1911, which came into operation on July 15, 1912, a system of compulsory health and invalidity insurance was introduced into Great Britain. The following pages summarize the provisions of this act as amended by the legislation of 1913, 1918, and 1919. The Bureau of Labor Statistics purposes in the near future to publish a more complete account of this system, in bulletin form.

Industries and Occupations Included.

The general rule is that the insurance includes all persons, men and women, 16 years of age or over, under any contract of service for which remuneration is paid. The most important limitation on this general rule relates to nonmanual employments. Persons employed at other than manual labor whose annual remuneration exceeds £250¹ are not included. Prior to July 1, 1919, this limitation was £160. Under the present law those whose earnings from employment fall between £160 and £250 may be exempted if they make application before January 1, 1920.

The official Handbook of Approved Societies (1915) sums up the groups required to be insured as follows:

1. Persons in employment by way of manual labor.
2. Persons in any employment at a rate of remuneration not exceeding in value £160 [now £250].
3. Persons engaged in some regular occupation and wholly or mainly dependent for their livelihood on the earnings derived from that occupation and whose total income, including earnings, does not exceed £160 [now £250] per year.
4. One who has been an insured person for five years or upward.
5. One who has been an employed contributor and being of the age of 60 or upward, who shows to the satisfaction of the insurance commissioners (now the Ministry of Health), that he or she has ceased to be insurable as an employed contributor.

¹ Owing to the fluctuation in value of the British pound sterling conversions are not made in this article. Normally the value of the pound sterling is \$4.8665; the shilling, 24.33 cents; the penny, 2.03 cents.

It will be noted that there is now practically no age limit, though pecuniary benefits are not paid after the age of 70 is reached. The employments include agriculture, industry, commerce, transportation, and public service.

The persons exempt from the insurance are those who have rights to sickness and other benefits from certain specified sources, such as railway employees, school-teachers, etc., who are entitled to such benefits from existing funds. Casual employments are exempt unless the employment is in the regular line of the employer's trade or business.

If the person employed within the general terms of the law can prove that (1) he is in receipt of any pension or income of the annual value of £26 or more and not dependent on his personal exertions, or (2) that he is ordinarily and mainly dependent on some other person for his livelihood, or (3) that he is dependent for his livelihood on earnings derived from an occupation which is not employment as already defined, then he may be granted exemption by the authorities.

Voluntary insurance is permissible to persons who are not engaged in any employment which will make them employed persons within the meaning of the law, provided they are engaged in some regular occupation and are wholly or mainly dependent for their livelihood on their earnings from this occupation; such earnings may, however, not exceed £250 annually.

Disability Provided For.

The insurance is intended to provide for inability to work due to some specific disease, or bodily or mental disablement; the pecuniary relief commences with the fourth day of such incapacity, while the medical relief is available from the beginning of sickness. There are two types of disability recognized by the law; first, that usually known as temporary disability; second, that usually termed invalidity. The first is expected to include cases lasting less than six months in a year, and the second, cases of longer duration or even permanent total disability. The system is therefore a combined sickness and invalidity insurance system. The presence of the invalidity feature is responsible for the complicated financial arrangements of the system. Accidental injuries which receive benefits under the Workmen's Compensation Act are not usually included, but disability due to other accidents not covered by the compensation act does entitle to benefits, unless by some legal process compensation or damages equal to or in excess of the regular benefits is secured.

The carriers of the insurance may themselves take steps to secure such compensation or damages.

For the women included in the insurance, provision is made for inability to work on account of childbirth. The uninsured wife of an insured man also receives this benefit.

The Benefits.

The benefits provided by the insurance are divided into two groups—those administered by the insurance committees and those by the “approved societies.”

The insurance committees have charge of: 1. Medical benefit; 2. Sanatorium benefit. The approved societies have charge of cash benefits, as follows: 3. Sickness benefit; 4. Disablement benefit; 5. Maternity benefit; 6. Additional benefits. It will be noted that there is no funeral benefit.

(1) *Medical benefit.*—This consists of such medical treatment as can consistently with the best interests of the patient be properly undertaken by a general practitioner of the usual professional skill. It also includes the provision of medicines and of such medical and surgical appliances as are approved by the regulations issued by the insurance commissioners—that is, by the Ministry of Health. As soon as a person is accepted as a member by an approved society this benefit becomes available without any waiting period. The benefit must be provided immediately on the beginning of the disability.

Voluntary contributors are entitled to medical benefit in the same manner as the regular contributors, but if their annual income exceeds a certain amount, no right to this benefit exists. Their dues, however, are reduced 1 penny weekly.

In the rare cases where the insurance authorities are satisfied that the insured persons in any area are not receiving adequate medical service, they may make special arrangements to provide such service, or they may allow the beneficiaries to provide themselves with service and pay them for the cost of it.

(2) *Sanatorium benefit.*—This consists of treatment in a sanatorium or in a similar institution, or at home, to insured persons suffering from tuberculosis or such other diseases as may be designated by the Ministry of Health (formerly by the Local Government Board). At the present time this benefit is practically a tuberculosis benefit.

(3) *Sickness benefit.*—This consists of a periodical payment to insured persons rendered incapable of work by some specific disease or by bodily or mental disablement of which notice has been given,

commencing on the fourth day of such incapacity and continuing for a period not exceeding 26 weeks. If the disability continues longer than 26 weeks, the disablement benefit (described below) begins. These two benefits cease when the age of 70 is reached, as the old-age pension begins at that age. Sickness benefit is not paid in maternity cases. As some supervision of the beneficiary is required, the sickness benefit is not paid while the patient resides outside of the United Kingdom.

If this benefit is drawn for a period of 26 weeks, application for benefit for another case of sickness will be approved only when at least 12 months have elapsed from the date of last receipt of benefit.

The societies are authorized to refuse or suspend the benefit, if the sickness was caused by misconduct or if recovery is delayed by failure to observe the rules.

The "ordinary" rate of sickness benefit is 10 shillings per week for men and 7 shillings 6 pence per week for women. These rates apply to persons who took out insurance on or before October 13, 1913; those entering after this date are termed "late entrants" and receive lower benefits as described below.

The sickness benefit is payable only after the contributor has been insured 26 weeks and has paid 26 contributions. If a person ceases to be insured and then later again becomes an employed contributor, a waiting period is again required; as the law expresses it "he shall be treated as if he had not previously been an insured person."

The class of insured persons known as "late entrants," i. e., those who became insured after October 13, 1913, are temporarily entitled to reduced benefits only. Until a late entrant has been insured for 104 weeks and has paid that number of weekly contributions, the rates of benefit are: For men, 6 shillings per week; for women, 5 shillings per week.

(4) *Disablement benefit.*—This consists of a periodical payment in case of a disease or disablement which has exhausted the sickness benefit. The rate is 5 shillings per week for men and women alike and continues for the duration of the disablement. A waiting period of 104 weeks, for which a like number of contributions has been paid, is required. The benefit begins on the day after sickness benefit has been exhausted.

(5) *The maternity benefit.*—This consists of a sum of money, payable after contributors have been insured 42 weeks (formerly 26 weeks). An insured man is entitled, on the confinement of his wife, to receive from his society the sum of 30 shillings, the benefit being the wife's property. If the wife is also insured, she is entitled to receive from her society a further sum of 30 shillings, making in all

60 shillings. In order not to place in an unfavorable position the insured woman whose husband is not insured, the double benefit of 60 shillings is paid to her also, in this case the whole amount coming from her society. An unmarried woman is entitled, on confinement, to a benefit of 30 shillings.

The maternity benefit does not carry with it the right to any medical attendance or medicines, nor may the insured woman receive any sickness benefit for four weeks after the date of confinement, unless there is some disease or disablement not connected directly or indirectly with the confinement. However, the model rules issued by the commissioners state "a woman in respect of whom this benefit is payable must be attended in her confinement by a duly qualified medical practitioner or by a midwife possessing the prescribed qualifications."

The 30 shillings benefit paid in respect of a wife's insurance, carries with it the obligation to abstain from remunerative employment for four weeks after the confinement.

In order to make sure that the maternity benefit reaches the widest possible group of insured women, it is payable even though the woman has already exhausted her 26 weeks of sickness benefit or even if she has been suspended from sickness benefit on account of arrears. Similarly, even if the husband is in arrears or is otherwise disqualified, the wife's society must pay the 60 shillings benefit.

An additional aid in maternity cases is provided by section 10 (4) b of the act of 1911, under which no regard is to be taken of arrears of contributions during the two weeks before and four weeks after confinement in the case of an insured married woman. This is equivalent to exemption from contributions for these six weeks.

(6) *Additional benefits.*—Section 37 of the 1911 act provides that where the actuarial valuation of an approved society shows that there is a surplus over liabilities, the society may provide, for its members and their dependents, certain additional benefits. The fourth schedule appended to the 1911 act gives a list of the permissible extensions of benefits. These may be summed up as consisting of increases in the ordinary benefits, especially in cases where a member has dependents, an addition to the old-age pension provided by the act of 1908, grants to members in distress, etc. But no part of such a surplus may be used to pay a funeral benefit.

As the annual reports of the insurance commissioners make no mention of the societies taking any steps in this direction, it may be inferred that none have been instituted. The original act contemplated that such additional benefits could be generally provided after about 18 years of operation of the system, but the changes introduced by the act of 1918 postponed the date of such increases to about 35 years.

Sources of Income.

The funds of the insurance system are derived from three sources: (1) The contributions of the insured person; (2) the contributions of the employer; (3) grants from the national treasury.

Contributions.—The so-called “employed rate” is as follows: The contributions for men are 7 pence weekly, for women 6 pence weekly. This is divided as follows: The man pays 4 pence, the employer 3 pence; the woman pays 3 pence, the employer 3 pence. These rates, it will be noted, are “flat” rates, being uniform for the whole class of “employed contributors.”

“Employed contributors” form the great majority of the insured persons, but there are special groups of so-called “low-wage earners” for whom special provision is made. The rates for insured persons in this category (who must be 21 years of age or over and whose wages must not include board or lodging) are as follows:

RATES OF WEEKLY CONTRIBUTIONS FOR LOW-WAGE EARNERS.¹

Rate of pay per working day.	Amount contributed by—			
	Employer for—		Em- ployee.	Parlia- ment.
	Men.	Women.		
Not more than 1s. 6d.	<i>Pence.</i> 6	<i>Pence.</i> 5	<i>Pence.</i> Nothing.	<i>Pence.</i> 1
Over 1s. 6d. but not more than 2s.	5	4	1	1
Over 2s. but not more than 2s. 6d.	4	3	3	Nothing.

¹ Great Britain. The statutes relating to National Health Insurance. London, June, 1918. p. 69.

Arrears.—The provisions as to arrears are liberal, but are not easy to describe in brief. Arrears due to sickness or disablement and, in the case of woman members, due to maternity, are disregarded in making up the accounts. The general principle is that any loss which a society suffers by the nonpayment of a member's dues in one year shall be made good to the society by the reduction of his benefits in the following year. The arrears of one year are canceled in the next year, even if no benefit is claimed, so that the member in arrears makes, as it were, a fresh start each year. To avoid any reduction of benefits, a member may, at the end of a contribution year, pay off his arrears, but must do so not later than 13 weeks after the end of a contribution year. By the act of 1913, a member who wishes to pay off any arrears which arose during unemployment can do so by paying only that portion of his contribution which fell to his share and not that part which the employer would have paid.

Low-wage earners who are contributors must, in case of arrears, pay the State's contribution of 1 penny per week.

Financial Administration.

The finances of the system are based on a plan of level premiums; that is, the contributions are uniform for all ages regardless of the higher sickness and disablement rates in the older age groups. As this plan provides both sickness and invalidity insurance, the accumulation of a reserve is necessary. This combination makes the plan extremely involved and very difficult to present in brief form.

The weekly dues of 4 pence for men and 3 pence for women are paid by deductions from wages; the employer adds 3 pence to each of these amounts and affixes special stamps of the proper value to the card of the employee on the dates when wages are paid. The stamps are purchased from the post office, which deposits the receipts in the national health insurance fund. From this fund the money is drawn for the payment of benefits and for expenses of administration.

The portion of the expense defrayed by the National Government was, at the start, two-ninths of the cost of benefits and of administration for the men, and one-fourth of these expenditures for the women.

The cost of administration in the societies may not exceed 41 pence per member annually. If there is a deficiency in the administration account, an assessment must be levied on the members.

The rates of dues and the schedule of benefits of the system were computed on the basis of being self-sustaining for a person who entered the insurance at the age of 16; but for a person who entered at a later age the contributions were not considered to be sufficient to provide the benefits. The system thus began with a liability which was estimated as being £87,000,000. To cover this amount each person entering the insurance has credited to him a theoretical credit—called a "reserve value." At the start this amount was to be made up by setting aside as a sinking fund a portion of the weekly dues of each contributor, as follows: For the men, one and five-ninths pence; for the women, one and one-half pence. By the act of 1918 the deduction in the case of women was made one and one-sixth pence. It was originally estimated that these deductions would cancel the "reserve values" at the end of a period of about 18 years; it is now believed that this period will be somewhat longer than that.

A special committee appointed in 1916 to make a study of the finances of the system reported that the funds available for women's benefits were inadequate, and recommended that part of the deductions just described should be devoted to current expenses. The

1918 law provided (sec. 1) that part of the sums should be applied to the accumulation of two special funds—the central fund and the contingencies fund; the central fund is to receive one-eighth and the contingencies fund seven-eighths “of a sum representing, in the case of men, four-ninths and in the case of women three-ninths pence for each weekly contribution paid in respect of a member of a society.”

The central fund is intended to meet any deficit arising out of an abnormal rate of sickness. It receives in addition to the above-mentioned sum, and the interest which has accumulated on it, a sum of £150,000 annually from Parliament.

In general it may be said that the purpose of the contingencies fund is to meet any deficit which appears when an actuarial valuation is made; however, the amounts apportioned to any one society belong to the credit of that society and may not be used to meet a deficit in any other society.

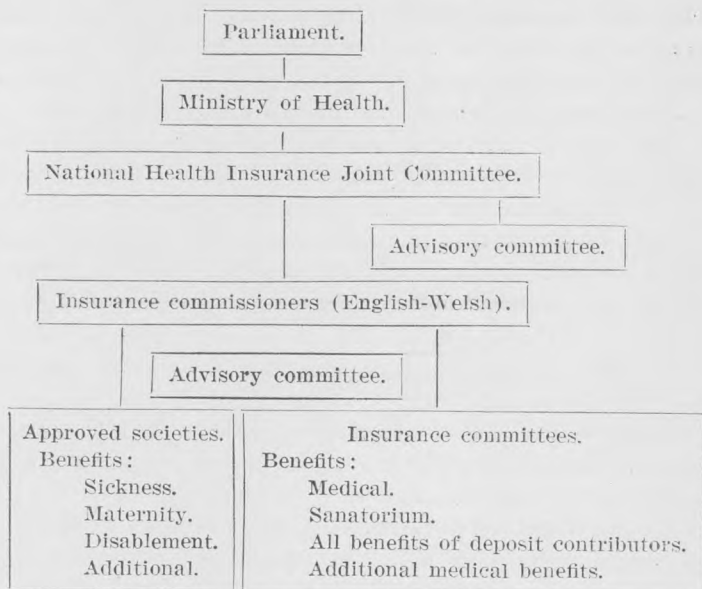
Besides these two funds, the 1918 act also creates a women's equalization fund, to be used in assisting societies in meeting their liabilities arising out of the sickness claims of women. It is distributed to the societies pro rata on the basis of the number of married woman members. It is understood that Parliament will grant each year in addition to its weekly contribution of 2 pence for each insured woman, the sum of £250,000 for this purpose. In general, it may be said that this fund is to meet the disabilities due to child-bearing.

General Administration.

The Ministry of Health Act of June 3, 1919, made a number of important changes in the administration of the insurance system. This act, as far as it applies to health insurance, is now in force and other powers are being added to it from time to time. The powers and duties of the new ministry include the supervision and administration of the entire insurance system.¹

The general organization of the health insurance system for England and Wales is shown in the following outline. A similar organization obtains for Scotland and for Ireland, where the Scottish insurance commissioners and the Irish insurance commissioners take the place of the insurance commissioners for England and Wales (now a subdivision of the Ministry of Health).

¹ A summary of the act is given in the MONTHLY LABOR REVIEW for August, 1919, pp. 227, 228. The text of the act is given in Public Health Reports, Oct. 10, 1919, pp. 2233-2241.



National Health Insurance Joint Committee.

Prior to June, 1919, the system was in the charge of four bodies known as insurance commissioners, there being one each for England, Scotland, Wales, and Ireland. Over these four boards was an organization composed of representatives of each, called the National Health Insurance Joint Committee, a federated body whose principal function was to take charge of all matters common to the four boards, especially the actuarial problems.

By the terms of the Ministry of Health Act, the joint committee will in the future be composed of the Minister of Health as chairman, the Secretary for Scotland, the Chief Secretary for Ireland, and one other person appointed by the minister to represent the Welsh insurance system. Except for this change of personnel, the previous constitution of the joint committee and its rights and duties are unchanged. All of the powers and duties formerly belonging to two of these bodies, the insurance commissioners for England and the insurance commissioners for Wales, are henceforth to be exercised by the Ministry of Health, and all their employees are transferred to the new ministry. The act specifically provides that it does not affect the powers and duties of the Irish insurance commissioners. The Scottish insurance commissioners also are not affected to any material extent.

The most important work carried on by the joint committee is that relating to the actuarial features of the insurance; this includes, for

instance, the calculation of the rates of contributions, reserve values, etc. An actuarial advisory committee has aided the joint committee since the commencement of the act.

Until the passage of the Ministry of Health Act, there was attached to the joint committee a special committee on medical research, to make special investigations on matters relating to any disease to which the insured persons are subject. The expense of these investigations is provided for by special appropriations by Parliament, the amount of 1 penny per insured person being granted. In the future this research committee is to be entirely independent of the insurance system.

Insurance Commissioners.

In the future, the administration will be divided into three parts, one for England and Wales, and one each for Scotland and Ireland.

The insurance commissioners (now a subdivision of the Ministry of Health), as the board for England has always been entitled, may be used as typical in describing the scope and organization of these bodies. The commissioners may appoint such officers, inspectors, and other employees as they see fit, subject to certain supervision of the higher authorities; they may sue and be sued and hold property. They have authority to issue regulations authorized by the insurance laws; they approve the statutes and supervise the administration of the approved societies.

The commissioners have an advisory committee to give advice and assistance in making regulations for the administration of the laws; this committee consists of representatives of the employers, of the approved societies, of the medical profession, and of such other persons as the commissioners may appoint, of whom at least two must be women. The advisory committee has a membership of about 150 persons, and a large proportion of the membership of the English committee consists of persons who are also members of the advisory committee of the National Health Insurance Joint Committee.

Approved Societies.

When the plans for the health insurance system were formulated, the United Kingdom was covered by a network of friendly societies, trade-unions, commercial insurance companies, sick clubs, establishment funds, and similar voluntary organizations which provided a variety of benefits for sickness, accidental injury, superannuation, etc. Many of these organizations had a long history of usefulness in providing relief for distress from these causes, and it was decided to use the societies as the carriers of the pecuniary benefits. The in-

insurance laws therefore provide that the insured persons shall group themselves into self-governing bodies—the organizations just named—which shall be responsible for the administration to their members of the pecuniary benefits provided by the system. These societies, if they meet the requirements of the law, are recognized by the insurance commissioners as “approved societies.” The general requirements are that the society shall be self-governing, not conducted for profit, and generally be in a position to carry out the provisions of the law. In order to permit any organization to continue such activities as are not covered by the law, the societies may have a special section for administering the provisions of the insurance acts, whose accounts must be kept separate from other activities. Special arrangements are made for federating societies whose membership is not large enough to provide an adequate basis to carry the risks of an influenza epidemic or similar tax on their resources. These societies were required to enact by-laws which were submitted to the commissioners for approval and which complied with the general scheme of administration. They could accept such members as they saw fit, except that they could not reject an applicant solely on account of age.

A person may not be a member of more than one society for the purpose of State insurance.

The principal functions of the approved societies are the payment of cash benefits, the keeping of records of the members, and the supervision of beneficiaries.

The distribution of the insured persons among the various types of approved societies is shown in the following table, which gives the membership in England in April, 1913, the latest date for which this information has been reported:

MEMBERSHIP OF APPROVED SOCIETIES OF SPECIFIED TYPE IN ENGLAND, FOR THE QUARTER ENDING APR. 13, 1913.¹

Sex.	Total number of members. ²	Number of members of societies formed by—					
		Friendly societies with branches.	Other friendly societies.	Trade-unions.	Collecting societies.	Industrial assurance companies.	Employers' provident funds.
Men.....	7,279,368	1,877,051	1,816,266	948,885	396,105	2,162,396	78,665
Women.....	3,253,852	510,888	652,379	205,599	267,554	1,597,600	20,432
Total.....	10,533,220	2,387,939	2,468,645	1,154,484	663,659	3,759,996	99,097

¹ Great Britain. National Health Insurance Joint Committee. Report for 1913-14 on the administration of the National Insurance Act (Cd. 7496), p. 498.

² The total number of members is the number of members whose contribution cards had been forwarded to the commission in time for use in making up its report.

Insurance Committees.

For each county and county borough of the United Kingdom there is a body called an insurance committee, which has charge of the medical and sanatorium benefits. The members of these committees in England and Wales are appointed by the Ministry of Health. The committees must be composed of not less than 40 nor more than 80 members, consisting of representatives of the insured persons, of the county government, of the medical profession, and other persons appointed by the Ministry of Health.

Each committee must make such arrangements with duly qualified medical practitioners in the county as will assure to the insured persons adequate medical attendance and treatment. The committee prepares a list of doctors who are willing to attend insured persons and this list, called the "panel," must be duly published. Usually it is displayed in each post office as well as distributed among the insured persons. Each of the latter may select from the panel the doctor whom he desires for his physician.

The committee must also prepare and publish lists of persons or firms who are willing to supply drugs, medicines, and appliances to insured persons in accordance with regulations made by the authorities. The committee must make in advance an agreement with the druggists ("chemists") as to the schedule of prices for drugs, etc., subject to the approval of the authorities.

The administration of the sanatorium benefit was originally in the hands of the committees entirely; later, special grants were made by Parliament to various local organizations engaged in combating tuberculosis, but since the enactment of the Ministry of Health law, all this work has been placed in charge of the ministry. Under the insurance law of 1911, the insurance committees are allowed 1 shilling 3 pence annually per insured person in their areas for the purposes of the sanatorium benefit. It is understood that Parliament will make special grants from time to time to promote the construction of sanatoriums for the use of the whole population. In 1911 the finance act provided for this purpose £1,500,000, which was distributed among the four countries on the basis of population. The local government authorities and the National Treasury each defray one-half of the deficit arising from the extension of this benefit to dependents of insured persons. This part of the original plan was modified by having the National Government's grant made directly to the local authorities in a given area, instead of to the insurance committee.

Under the present arrangement, therefore, the Ministry of Health has the per capita allowance from the national health insurance fund

in addition to grants from local government bodies and from the National Treasury for this purpose. Up to the end of 1917, in 32 of the 49 counties of England and in 55 of the 78 county boroughs of England, comprehensive agreements were in force between insurance committees and the local authorities, under which treatment in approved sanatoriums (for indoor patients) and the services of a tuberculosis dispensary organization for nonresident patients (including dispensary treatment and the services of a tuberculosis health officer for examining applicants for sanatorium benefit, advising as to the treatment, etc.) were provided for the insurance committee by the local authorities. In addition to the services just mentioned, most of the agreements provide for visiting and nursing services.

Under the plans above mentioned there has been a marked increase in the facilities available for tuberculosis treatment by the insurance committees. In June, 1914, the number of approved tuberculosis dispensaries was 255 and the number of beds in approved residential institutions was 9,200; in August, 1917, the dispensaries numbered 370 and the number of beds had increased to 11,700. This increase was made in spite of the many difficulties caused by the war.

Deposit Contributors' Fund.

As the societies could reject an applicant for any reason except age, it was expected that there would be a number of persons who, on account of ill health or other reason, could not obtain membership. For this group a special organization, "the deposit contributors' fund" (originally called the post-office fund), was created. It was expected that this fund would have close to a million members, but at the close of the year 1916, the number was only about 270,000.

The deposit contributors are entitled to such benefits as the sum to their credit will provide. They may, for instance, draw sickness benefit only until they have exhausted the amount standing to their credit. Such contributors are in a distinctly less favorable position than the regular contributors.

Operations of the System.

Three reports on the operations of the system have been published; one for the year 1912-13, one for 1913-14, and one for 1914-1917. This last report was printed in 1918, while the war was still in progress, and for reasons of public policy gave no data as to membership. The data in these reports are given separately for each of the four countries and not always in the same form for all countries. The

following table shows the total receipts and expenditures of the English national health insurance fund, 1912 to 1916:

RECEIPTS AND EXPENDITURES OF THE NATIONAL HEALTH INSURANCE FUND OF ENGLAND, 1912 TO 1916.¹

Period.	Receipts.			Expenditures.		
	£	s.	d.	£	s.	d.
July 15, 1912, to Jan. 11, 1914.....	26,661,618	15	7	14,360,746	11	5
Jan. 12 to Dec. 31, 1914.....	18,305,962	11	1½	18,071,611	16	2
1915.....	20,438,129	7	3½	20,159,712	4	10
1916.....	19,016,790	0	6½	18,881,840	19	1½

¹ Great Britain. National Health Insurance Joint Committee. Report for 1913-14 on the administration of national health insurance (Cd. 7496), p. 503. National Health Insurance Fund Accounts for period Jan. 12 to Dec. 31, 1914. H. of C. Paper 38 of 1917, p. 2. National Health Insurance Joint Committee Report on the administration of national health insurance during the years 1914-1917 (Cd. 8890), p. 256.

The following table shows the membership, the total expenditure for benefits by the approved societies, and the expenditure per member for pecuniary benefits in the four countries:

NUMBER OF MEN AND WOMEN INSURED IN APPROVED SOCIETIES IN THE UNITED KINGDOM AND AMOUNTS PAID FOR SICKNESS, MATERNITY, AND DISABLEMENT BENEFITS, 1913-1916.¹

Year.	Number of members.	Amount paid for—				Average amount paid per member per week for—			
		Sickness benefits.	Maternity benefits.	Disablement benefits. ²	All benefits.	Sickness benefits.	Maternity benefits.	Disablement benefits. ²	All benefits.
1913.									
Men.....	£ 9,394,961	£ 4,388,112	£ 1,222,647	£ (+)	£ 5,610,759	Pence. 2.16	Pence. 0.60	Pence. (-)	Pence. 2.76
Women.....	4,053,108	2,166,575	42,909	(-)	2,209,484	2.46	.05	(-)	2.51
1914.									
Men.....	9,625,562	5,083,736	1,259,339	146,418	6,489,493	2.43	.60	0.07	3.10
Women.....	4,131,825	2,126,736	210,913	45,762	2,383,411	2.37	.23	.05	2.65
1915.									
Men.....	(³)	4,647,769	1,136,395	589,922	6,374,086	2.22	.54	.28	3.04
Women.....	(³)	1,656,173	182,503	251,727	2,090,403	1.84	.20	.28	2.32
1916.									
Men.....	(³)	4,366,189	1,089,138	770,022	6,225,349	2.06	.51	.36	2.93
Women.....	(³)	1,426,542	171,130	375,967	1,973,639	1.56	.19	.41	2.16

¹ Great Britain. National Health Insurance Joint Committee Report on the administration of national health insurance during the years 1914-1917 (Cd. 8890), pp. 11 and 238.

² Disablement benefit payments began in July, 1914.

³ Not reported.

The general appropriations out of the National Treasury to the insurance system are made to the National Health Insurance Joint Committee. These have been as follows:

APPROPRIATIONS TO THE NATIONAL HEALTH INSURANCE JOINT COMMITTEE
FOR THE FISCAL YEARS 1912-13 TO 1919-20.¹

Year.	Amounts appropriated.	Year.	Amounts appropriated.
1912-13.....	£37,570	1916-17.....	£208,700
1913-14.....	207,227	1917-18.....	269,746
1914-15.....	1,218,964	1918-19.....	636,798
1915-16.....	618,275	1919-20 ²	1,064,605

¹ Great Britain. Treasury. Estimates for civil services, 1914-1920.² Estimates for 1920.

INDUSTRIAL RELATIONS.

Preliminary Statement of President's Industrial Conference.

ON November 20 the President announced the appointment of a group of seventeen to sit as an Industrial Conference, beginning December 1. This call was in accordance with the suggestion of the public group in the recent industrial conference summoned by the President in October.¹

The President's letter of appointment reads as follows:

In accordance with the suggestion given me by the public group of the recent industrial conference I am calling a new body together to carry on this vitally important work, and I trust you will give me the pleasure of naming you as one of its members.

Guided by the experience of the last conference, I have thought it advisable that in this new body there should be no recognition of distinctive groups, but that all of the new representatives should have concern that our industries may be conducted with such regard for justice and fair dealing that the workman will feel himself induced to put forth his best efforts, that the employer will have an encouraging profit, and that the public will not suffer at the hands of either class. It is my hope that this conference may lay the foundation for the development of standards and machinery within our industries by which these results may be attained.

It is not expected that you will deal directly with any conditions which exist to-day, but that you may be fortunate enough to find such ways as will avoid the repetition of these deplorable conditions.

The conference will meet at a place to be hereafter designated in this city on December 1 next.

The new Conference has been meeting in secret session. Its membership consists mainly of citizens prominent in public life, many of whom are well known in political circles. Hon. Wm. B. Wilson, Secretary of Labor, was made chairman, and Herbert Hoover, former Food Administrator, was elected vice chairman. The other members are Thomas W. Gregory, former Attorney General under President Wilson; George W. Wickersham, Attorney General in the Taft administration; Oscar S. Straus, Secretary of Commerce and Labor in the Roosevelt administration; Henry M. Robinson, former member of the Shipping Board and recently appointed a member of the Bituminous Coal Wage Commission; Prof. Frank W. Taussig, former chairman of the Tariff Commission; ex-Govs.

¹ For an account of this conference see MONTHLY LABOR REVIEW for November, 1919, pp. 40-49.

Samuel W. McCall (of Massachusetts), Martin H. Glynn (of New York), and Henry Carter Stuart (of Virginia); William O. Thompson, president of Ohio State University; George T. Slade, railway official of St. Paul, Minn.; Julius Rosenwald, president of Sears, Roebuck & Co., Chicago, Ill.; Owen D. Young, lawyer, vice president of the General Electric Co.; Henry J. Waters, president of the Kansas State Agricultural College; Stanley King, lawyer, secretary of the W. H. McElwain Co. (shoe manufacturers) and former assistant to the Secretary of War in handling industrial relations for that department; and Richard Hooker, of the Springfield (Mass.) Republican.

The preliminary statement of the Conference, which was issued on December 29, 1919, consists principally of an outline or proposal of a system of Federal administrative machinery for the adjustment of industrial relations. It omits any extended statement of industrial principles and theories, and its proposed machinery of adjustment does not displace or interfere with any existing machinery. Briefly the suggestions of the Conference provide for the establishment of a national industrial tribunal and regional boards of investigation and adjustment. If either or both sides to a controversy refuse to designate representatives, the tribunal may function as a board of inquiry under the chairman and four members of the panels set up. The tribunals and boards proposed function along geographical lines and not along lines of industry. The proposals of the Conference do not affect in any way industrial relations in the shop or the establishment, except in so far as appeal is made from the latter for the services of adjustment of the tribunal or regional boards.

The appointment of the members of the proposed tribunal and boards is concentrated in the hands of the President and the Senate.

"The plan which follows," the Conference states, "does not propose to do away with the ultimate right to strike, to discharge, or to maintain the closed or the open shop."

A part of the preliminary report of the Conference is a statement of its views as to the relation of public utility and Government employees to the proposed scheme of adjustment of industrial relations. In public utilities the Conference holds it essential that there should be "some merging of responsibility for regulation of rates and services and the settlement of wages and conditions of labor." It would deny to Government employees engaged in the administration of justice or the maintenance of public safety or order "to join or retain membership in any organization which authorizes the use of the strike or which is affiliated with any organization which authorizes the strike."

The report of the Conference is reproduced in full:

Preliminary Statement of Industrial Conference.

I. Introduction.

The Industrial Conference, convened by the President in Washington on December 1, issues this statement in the desire that certain tentative proposals be given considerate study by interested individuals and organizations throughout the country. It will reassemble on January 12 and will then carefully consider any constructive criticisms that may be submitted to it.

The Conference does not deem it useful at this time to enter upon a discussion of the causes of industrial unrest. It believes rather that its most important immediate contribution is the suggestion of practical measures which will serve to avert or postpone industrial conflicts.

In confining itself to the proposal of machinery for the adjustment of disputes, the Conference is far from wishing to exaggerate the importance of the mechanical as contrasted with the human elements in the situation. Our modern industrial organization, if it is not to become a failure, must yield to the individual a larger satisfaction with life. It makes possible a greater production of material things. But we have grown so accustomed to its complexity that we are in danger of forgetting that men are to-day more dependent on each other than ever before. The spirit of human fellowship and responsibility was easier to maintain when two or three worked side by side and saw the completed product pass from their hands. Yet their cooperation was actually less necessary because each by himself was more nearly capable, if circumstances demanded, to meet the needs of life. To-day we have a complex interweaving of vital interests. But we have as yet failed to adjust our human relations to the facts of our economic interdependence. The process toward adjustment, though slow, nevertheless goes on. The right relationship between employer and employee in large industries can only be promoted by the deliberate organization of that relationship. Not only must the theory that labor is a commodity be abandoned, but the concept of leadership must be substituted for that of mastership. New machinery of democratic representation may be erected to suit the conditions of present industry and restore a measure of personal contact and a sense of responsibility between employer and employee. The more recent development of such machinery with the cooperation of organized labor is a hopeful sign. But back of any machinery must be the power which moves it. Human fellowship in industry may be either an empty phrase or a living fact. There is no magic formula. It can be a fact only if there is continuous and sincere effort for mutual understanding and an unflinching recognition that there is a community of interest between employer and employee.

Pending the growth of better relationships between employers and employees, the practical approach to the problem is to devise a method of preventing or retarding conflicts by providing machinery for the adjustment of differences. The Conference believes that it is possible to set up a more effective series of tribunals for the adjustment of disputes than at present exists. To be successful, such tribunals must be so organized as to operate promptly as well as impartially. There must be full participation by employers and employees. There must be representation of the public to safeguard the public interest. The machinery should not be used to promote unfairly the interests

of organizations, either of labor or of capital. The plain fact is that the public has long been uneasy about the power of great employers; it is becoming uneasy about the power of great labor organizations. The community must be assured against domination by either. On the other hand, there must be equal assurance that such machinery will not be used to discriminate against organizations of employees or of employers. Both should be protected. The right of association on either side should not be affected or denied as a result of the erection of such tribunals.

The plan which follows does not propose to do away with the ultimate right to strike, to discharge, or to maintain the closed or the open shop. It is designed to bring about a frank meeting of the interested parties and cool and calm consideration of the questions involved, in association with other persons familiar with the industry.

The plan is national in scope and operation, yet it is decentralized. It is different from anything in operation elsewhere. It is based upon American experience and is designed to meet American conditions. To facilitate discussion, the plan submitted, while entirely tentative, is expressed in positive form and made definite as to most details.

II. Plan for boards of inquiry and adjustment.

1. *National tribunal and regional boards.*—There shall be established a National Industrial Tribunal, and Regional Boards of Inquiry and Adjustment.

2. *National Industrial Tribunal.*—The National Industrial Tribunal shall have its headquarters in Washington, and shall be composed of nine members chosen by the President and confirmed by the Senate. Three shall represent the employers of the country and shall be appointed upon nomination of the Secretary of Commerce. Three shall represent employees and shall be appointed upon nomination of the Secretary of Labor. Three shall be representatives of the public interest. Not more than five of the members shall be of the same political party.

The tribunal shall be, in general, a board of appeal. Its determinations on disputes coming to it upon an appeal shall be by unanimous vote. In case it is unable to reach a determination, it shall make and publish majority and minority reports which shall be matters of public record.

3. *Industrial regions.*—The United States shall be divided into a specified number of industrial regions. The Conference suggests 12 regions with boundaries similar to those established under the Federal Reserve system, with such modifications as the industrial situation may make desirable.

4. *Regional chairmen and vice chairmen.*—In each region the President shall appoint a regional chairman. He shall be a representative of the public interest, shall be appointed for a term of three years and be eligible for re-appointment.

Whenever in any industrial region, because of the multiplicity of disputes, prompt action by the Regional Board is impossible, or where the situation makes it desirable, the National Industrial Tribunal may in its discretion choose one or more vice chairmen and provide for the establishment under their chairmanship of additional regional boards.

5. *Panels of employers and employees for regional boards.*—Panels of employers and employees for each region shall be prepared by the Secretary of Commerce and the Secretary of Labor, respectively, after conference with the

employers and employees, respectively, of the regions. The panels shall be approved by the President.

At least 20 days before their submission to the President provisional lists for the panels in each region shall be published in such region.

The panels of employers shall be classified by industries; the panels of employees shall be classified by industries and subclassified by crafts. The names of employers and employees selected shall be at first entered on their respective panels in an order determined by lot.

The selection from the panels for service upon the Regional Boards shall be made in rotation by the regional chairman; after service the name of the one so chosen shall be transferred to the foot of his panel.

6. Regional Boards of Adjustment.—Whenever a dispute arises in a plant or group of plants which is not settled by agreement of the parties or by existing machinery, the chairman may on his motion, unless disapproved by the National Industrial Tribunal, and shall at the request of the Secretary of Commerce or the Secretary of Labor or the National Industrial Tribunal, request each side concerned in such dispute to submit it for adjustment to a Regional Board of Adjustment. To this end each side shall, if willing to make such submission, select within not less than two nor more than seven days, at the discretion of the chairman, a representative. Such selection shall be made in accordance with the rules and regulations to be laid down by the National Industrial Tribunal for the purpose of insuring free and prompt choice of the representatives.

When both sides shall have selected their representatives the chairman shall take from the top of the panels for the industry concerned, or in the case of employees for the craft or crafts concerned, names of employers and employees, respectively. The representatives selected by the two sides shall be entitled to a specified number of peremptory challenges of the names so taken from their respective panels. When two unchallenged names of employers and employees shall have been selected in this manner, they, with the chairman and the representatives selected by the two sides, shall constitute a Regional Board of Adjustment.

The appointment of representatives of both sides shall constitute an agreement to submit the issue for adjustment and further shall constitute an agreement by both sides that they will continue, or reestablish and continue, the status that existed at the time the dispute arose.

The Board of Adjustment so constituted shall proceed at once to hear the two sides for the purpose of reaching a determination. Such determination must be by unanimous vote. In case the board is unable to reach a determination the question shall, unless referred to an umpire as provided in section 9, pass upon appeal to the National Industrial Tribunal.

7. Regional boards of inquiry.—If either side to the dispute fails, within the period fixed by the chairman, to select its representative, the chairman shall proceed to organize a Regional Board of Inquiry. Such Regional Board of Inquiry shall consist of the regional chairman, two employers selected in the manner specified from the employers' panel, and two employees selected in like manner from the employees' panel and of the representative of either side that may have selected a representative and agreed to submit the dispute to the board. If neither side shall select a representative within the time fixed by the chairman, the Board of Inquiry shall consist of the chairman and the four panel members only.

Upon the selection of a representative, within the specified time, the side concerned shall be entitled to the specified number of peremptory challenges as

provided above. The representative shall have the right to sit on the Board of Inquiry and to take full part as a member of such board in the proceedings thereof.

The Board of Inquiry as so constituted shall proceed to investigate the dispute and make and publish a report, or majority and minority reports, of the conclusions reached, within 5 days after the close of its hearings, and within not more than 30 days from the date of issue of the original request by the chairman to the two sides to the dispute, unless extended on unanimous request of the board or the National Industrial Tribunal. It shall transmit copies of this report or reports to the Secretaries of Commerce and of Labor, respectively, and to the National Industrial Tribunal, where they shall be matters of public record.

8. *Transformation of the regional boards of inquiry into regional boards of adjustment.*—At any time during the progress of the inquiry at which both sides shall have selected representatives and agreed to submit the dispute for adjustment, the Board of Inquiry shall become a Board of Adjustment by the admission to membership on the board of such representatives. The side or sides which appoint representatives after the date fixed in the original request of the chairman shall, because of its delay, suffer a reduction in the number of peremptory challenges to which it otherwise would have been entitled.

The Board of Adjustment so constituted shall proceed to the determination of the dispute as though it had been organized within the period originally fixed by the chairman.

9. *Umpire.*—When a Regional Board of Adjustment is unable to reach a unanimous determination it may by unanimous vote select an umpire and refer the dispute to him with the provision that his determination shall be final and shall have the same force and effect as a unanimous determination of such Regional Board.

10. *Combination of regions.*—Whenever the questions involved in a dispute extend beyond the boundaries of a single region, the regions to which the dispute extends shall, for the purpose of such dispute, be combined by order of the National Industrial Tribunal, which shall designate the chairman of one of the regions concerned to act as chairman in connection with the dispute in question.

Two employer members and two employee members shall be chosen from the combined panels of the regions involved in the dispute, under rules and regulations to be established by the National Industrial Tribunal. The members representing the two sides to the dispute shall be chosen as in the case of a dispute in a single region.

A Regional Board of Inquiry or of Adjustment constituted for a dispute extending beyond the boundaries of a single region shall have the same rights and powers conferred upon a Regional Board for a single region.

11. *Effect of decision.*—Whenever an agreement is reached by the parties to a dispute or a determination is announced by a Regional Board of Adjustment, or by an Umpire, or by the National Industrial Tribunal, the agreement or determination shall have the full force and effect of a trade agreement, which the parties to the dispute are bound to carry out.

12. *General provisions.*—In connection with their task of inquiry and adjustment, the Regional Boards and the National Tribunal shall have the right to subpoena witnesses, to examine them under oath, to require the production of books and papers pertinent to the inquiry, and their assistance in all proper ways to enable the boards to ascertain the facts in reference to the

causes of the dispute and the basis of a fair adjustment. Provision shall be made by law for the protection of witnesses and to prevent the misuse of any information so obtained.

All members of the tribunal and boards heretofore described, including the chairman and vice chairman, shall be entitled to vote.

The President shall have the power of removal of the members of the tribunal and boards.

In the presentation of evidence to the tribunal and the boards each side shall have the right to present its position through representatives of its own choosing.

The Secretary of Commerce and the Secretary of Labor in making nominations for the National Industrial Tribunal and in preparing and revising the regional panels of employers and employees shall from time to time develop suitable systems to insure their selections being truly representative.

The National Industrial Tribunal, the Regional Boards of Adjustment, and the Umpires shall in each of their determinations specify the minimum period during which such determinations shall be effective and binding. In case of emergency a Regional Adjustment Board or the National Industrial Tribunal may, after hearing both sides, alter its determination by abridging or extending the period specified.

13. Special provisions.—The terms of office of members of the National Industrial Board shall be six years; at the outset three members, including one from each group, shall be appointed for a term of two years, three members for a term of four years, and three members for a term of six years; thereafter three members, one from each group, shall retire at the end of each period of two years. Members shall be eligible for reappointment.

The regional panels provided for in section 5 shall be revised annually by the Secretaries of Commerce and of Labor, respectively, in conference with the employers and employees, respectively, of each region.

14. Relation of boards to existing machinery for conciliation and adjustment.—The establishment of the National Industrial Tribunal and the Regional Boards described shall not affect existing machinery of conciliation, adjustment, and arbitration established under the Federal Government, under the governments of the several States and Territories or subdivisions thereof, or under mutual agreements of employers and employees.

Any industrial agreement made between employers and employees may, by consent of the parties, be filed with the National Industrial Tribunal. Such filing shall constitute agreement by the parties that in the event of a dispute they will maintain the status existing at the time the dispute originated until a final determination, and that any dispute not adjusted by means of the machinery provided through the agreement shall pass on appeal to the National Industrial Tribunal for determination, as in the case of a dispute submitted on appeal from a Regional Board.

III. Objects of plan.

The main objects of the above plan are to secure national coordination and to stimulate the formation of bodies for local adjustment. The requirement of unanimity of agreement has by experience in the United States proved remarkably successful and should assure such confidence that neither side can rightfully refuse to submit to adjustment. A precedent condition of such submission is that the interruption of production shall be delayed. The frank

meeting of the parties in controversy together with other men skilled in questions at issue always gives promise of settlement. On the other hand, refusal to submit to the board not only inaugurates a legal inquiry but also prejudices the obstinate party or parties in public opinion. Moreover, the fact that membership on the board of inquiry is available to either party or to the conflict singly would tend further to weaken the position of the other. When both parties join, the board at once becomes a Board of Adjustment, and conflict ceases by agreement until a determination is reached.

IV. Statement as to public utility industries.

The plan here proposed presents greater difficulties in application to certain public utilities than to competitive industry. The continuous operation of public utilities is vital to public welfare. As the capital invested is employed in public use, so is the labor engaged in public service; and the withdrawal of either with the result of suspending service makes the people the real victim. While continuous operation of all utilities is conducive to the general convenience of the people, that of some of them is essential to their very existence. Of the latter class the railways are a conspicuous example and bear the same relation to the body politic as do the arteries to the human body. Suspension produces practical social and economic anarchy and may impose hardship even to the point of starvation upon large sections of the community. The interruption in such essential public utilities is intolerable.

The Conference believes that a plan of tribunals or Boards of Adjustment and Inquiry should be applied to public utilities, but in the adaptation of the plan two problems present themselves. First, governmental regulation of public utilities is now usually confined to rates and services. The Conference considers that there must be some merging of responsibility for regulation of rates and services and the settlement of wages and conditions of labor. Such coordination would give greater security to the public, to employee, and to employer. Second, is the problem whether some method can be arrived at that will avert all danger of interruption to service. These matters require further consideration before concrete proposals are put forward.

V. Statement as to Government employees.

The Government is established in the interests of all the people. It can be conducted effectively only by those who give to its service an undivided allegiance. The terms and conditions of employment in the Government service are prescribed by law. Therefore no interference by any group of Government employees, or others, with the continuous operation of Government functions through concerted cessation of work or threats thereof can be permitted.

The right of Government employees to associate for mutual protection, the advancement of their interests, or the presentation of grievances can not be denied, but no such employees who are connected with the administration of justice or the maintenance of public safety or public order should be permitted to join or retain membership in any organization which authorizes the use of the strike or which is affiliated with any organization which authorizes the strike.

The Conference is not now expressing an opinion upon the propriety of the affiliation of other classes of Government employees with organizations which authorize the use of the strike.

The principles above stated are not to be construed as inconsistent with the right of employees individually to leave the public service. It is, further, an essential part of the application of these principles that tribunals shall be established for prompt hearing of requests and prompt remedy of grievances. The legislation of the Nation, the States, and the municipalities should be improved in such a way as to prevent delay in hearings and to enable speedy action when there are grievances.

VI. Further work of the Conference.

On reconvening the Conference will continue its consideration of tribunals for the furtherance of industrial peace in general industry in the light of whatever criticisms and suggestions the publication of its tentative plan may call forth. It will receive reports of investigations that are being made for it. On the basis of such reports and of further study of these and the other subjects within its field, the Conference hopes that it may be able to contribute something more toward the better industrial relations described in the words addressed to it by the President when he called it into being—relations in which “the workman will feel himself induced to put forth his best efforts, the employer will have an encouraging profit, and the public will not suffer at the hands of either class.” To this end it invites the cooperation of all citizens who have at heart the realization of this ideal of a better industrial civilization.

THE PRESIDENT'S INDUSTRIAL CONFERENCE.

PRICES AND COST OF LIVING.

Retail Prices of Food in the United States.

THE retail prices of 22 articles¹ of food combined showed an increase of 2 per cent in the United States on November 15, 1919, as compared with October 15, 1919. The increase in November as compared with the average for the year 1913 was 92 per cent, the same percentage of increase that was shown in August. These two months represent the greatest increase shown during the 6-year period.

Of the 44 articles for which comparison can be made during the month period, 22 increased in price. The articles which increased during the month from October to November were: Strictly fresh eggs, 13 per cent; onions and sugar, 10 per cent each; raisins, 9 per cent; butter, 6 per cent; storage eggs and prunes, 4 per cent each; canned salmon, fresh milk, and potatoes, 3 per cent each; rice and bananas, 2 per cent each; evaporated milk, oleomargarine, cheese, lard, Crisco, bread, flour, and macaroni, 1 per cent each; tea and coffee, less than five-tenths of 1 per cent.

Nut margarine, corn meal, rolled oats, corn flakes, Cream of Wheat, cabbage, canned peas, and canned tomatoes remained at the same price as in October.

The following articles decreased in price: Pork chops, 5 per cent; ham, 4 per cent; bacon, 3 per cent; round steak, plate beef, hens, navy beans, and oranges, 2 per cent each; sirloin steak, rib roast, chuck roast, lamb, baked beans, and canned corn, 1 per cent each.

The 22 articles combined showed an increase of 5 per cent for November, 1919, as compared with November, 1918.

The articles which increased during the year period, November, 1918, to November, 1919, were: Onions, 73 per cent; prunes, 64 per cent; coffee, 55 per cent; raisins, 44 per cent; rice, 26 per cent; potatoes, 18 per cent; sugar, 16 per cent; canned salmon and storage eggs, 14 per cent each; butter, 13 per cent; flour, 10 per cent; strictly fresh eggs, 9 per cent; fresh milk, cheese, and lard, 6 per cent each; tea, 5 per cent; bread, 4 per cent; and corn meal, 2 per cent. The articles which decreased were: Navy beans, 24 per cent; plate beef, 18 per cent; bacon, 13 per cent; chuck roast, 12 per cent; round steak and rib roast, 6 per cent each; lamb, 5 per cent; ham, 4 per cent; sirloin steak and pork chops, 3 per cent each; and hens less than five-tenths of 1 per cent.

¹ Sirloin steak, round steak, rib roast, chuck roast, plate beef, pork chops, bacon, ham, lard, hens, flour, corn meal, eggs, butter, milk, bread, potatoes, sugar, cheese, rice, coffee, tea.

AVERAGE RETAIL PRICE AND PER CENT OF INCREASE OR DECREASE NOV. 15, 1919,
COMPARED WITH NOV. 15, 1918, AND OCT. 15, 1919.

Article.	Unit.	Average retail price.			Per cent of increase (+) or decrease (-) Nov. 15, 1919, compared with—	
		Nov. 15, 1918.	Oct. 15, 1919.	Nov. 15, 1919.	Nov. 15, 1918.	Oct. 15, 1919.
		<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>		
Sirloin steak.....	Pound.....	40.5	39.8	39.3	- 3	- 1
Round steak.....	do.....	38.5	36.9	36.2	- 6	- 2
Rib roast.....	do.....	32.0	30.6	30.2	- 6	- 1
Chuck roast.....	do.....	27.5	24.5	24.2	-12	- 1
Plate beef.....	do.....	21.2	17.6	17.3	-18	- 2
Pork chops.....	do.....	43.3	44.3	42.1	- 3	- 5
Bacon.....	do.....	58.3	52.8	51.0	-13	- 3
Ham.....	do.....	52.4	52.4	50.5	- 4	- 4
Lamb.....	do.....	35.1	33.9	33.4	- 5	- 1
Hens.....	do.....	39.3	40.2	39.2	(1)	- 2
Salmon, canned.....	do.....	31.3	34.8	35.7	+14	+ 3
Milk, fresh.....	Quart.....	15.4	16.0	16.4	+ 6	+ 3
Milk, evaporated (unsweetened).....	15-16 oz. can.....		16.6	16.8		+ 1
Butter.....	Pound.....	66.8	71.1	75.4	+13	+ 6
Oleomargarine.....	do.....		42.6	43.0		+ 1
Nut margarine.....	do.....		35.8	35.8		(2)
Cheese.....	do.....	40.6	42.4	43.0	+ 6	+ 1
Lard.....	do.....	34.2	36.1	36.4	+ 6	+ 1
Crisco.....	do.....		37.5	37.8		+ 1
Eggs, strictly fresh.....	Dozen.....	74.1	72.0	81.0	+ 9	+13
Eggs, storage.....	do.....	54.1	59.2	61.8	+14	+ 4
Bread.....	Pound.....	9.8	10.1	10.2	+ 4	+ 1
Flour.....	Pound.....	6.7	7.3	7.4	+10	+ 1
Corn meal.....	do.....	6.5	6.6	6.6	+ 2	(3)
Rolled oats.....	do.....		9.2	9.2		(2)
Corn flakes.....	8-oz. pkg.....		14.1	14.1		(2)
Cream of Wheat.....	28-oz. pkg.....		25.2	25.2		(2)
Macaroni.....	Pound.....		19.5	19.7		+ 1
Rice.....	do.....	14.0	17.3	17.6	+26	+ 2
Beans, navy.....	do.....	16.1	12.5	12.3	-24	- 2
Potatoes.....	do.....	3.3	3.8	3.9	+18	+ 3
Onions.....	do.....	4.0	6.3	6.9	+73	+10
Cabbage.....	do.....		4.5	4.5		(2)
Beans, baked.....	No. 2 can.....		17.1	17.0		- 1
Corn, canned.....	do.....		19.1	18.9		- 1
Peas, canned.....	do.....		19.1	19.1		(2)
Tomatoes, canned.....	do.....		16.1	16.1		(2)
Sugar, granulated.....	Pound.....	10.8	11.4	12.5	+16	+10
Tea.....	do.....	67.9	71.0	71.2	+ 5	(4)
Coffee.....	do.....	30.8	47.6	47.8	+55	(4)
Prunes.....	do.....	18.4	29.0	30.2	+64	+ 4
Raisins.....	do.....	15.8	20.9	22.7	+44	+ 9
Bananas.....	Dozen.....		39.3	39.9		+ 2
Oranges.....	do.....		55.3	54.2		- 2
22 weighted articles combined.....					+ 5	+ 2

¹ Decrease of less than five-tenths of 1 per cent.² No change in price.³ Baked weight.⁴ Increase of less than five-tenths of 1 per cent.

For the 6-year period—November, 1913, to November, 1919—the increase in the prices of the 22 articles of food combined was 84 per cent. Articles which increased more than 100 per cent were: Rice, 102 per cent; bread, 104 per cent; potatoes, 105 per cent; corn meal, 113 per cent; flour, 124 per cent; lard, 129 per cent; and sugar, 131 per cent.

AVERAGE RETAIL PRICE AND PER CENT OF INCREASE OR DECREASE NOV. 15 OF EACH SPECIFIED YEAR COMPARED WITH NOV. 15, 1913.

Article.	Unit.	Average retail price Nov. 15—							Per cent of increase (+) or decrease (-) Nov. 15 of each specified year compared with Nov. 15, 1913.					
		1913	1914	1915	1916	1917	1918	1919	1914	1915	1916	1917	1918	1919
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.						
Sirloin steak.....	Pound..	25.4	25.4	25.7	27.0	31.7	40.5	39.3	(1)	+ 1	+ 6	+ 25	+ 59	+ 55
Round steak.....	do	22.8	23.5	22.8	24.3	29.6	38.5	36.2	+ 3	(1)	+ 7	+ 30	+ 69	+ 59
Rib roast.....	do	19.7	20.4	19.9	21.0	25.0	32.0	30.2	+ 4	+ 1	+ 7	+ 27	+ 62	+ 53
Chuck roast.....	do	16.3	16.7	16.2	17.0	21.2	27.5	24.2	+ 2	- 1	+ 4	+ 30	+ 69	+ 48
Plate beef.....	do	12.4	12.7	12.0	12.0	16.3	21.2	17.3	+ 2	- 3	+ 3	+ 31	+ 71	+ 40
Pork chops.....	do	21.6	21.8	20.9	23.4	34.5	43.3	42.1	+ 1	- 3	+ 8	+ 60	+ 100	+ 95
Bacon.....	do	27.3	28.1	27.3	29.8	48.2	58.3	51.0	+ 3	(1)	+ 9	+ 77	+ 114	+ 87
Ham.....	do	27.0	27.3	26.8	33.2	42.6	52.4	50.5	+ 1	- 1	+ 23	+ 58	+ 94	+ 87
Lamb.....	do	18.5	19.2	19.8	22.2	30.1	35.1	33.4	+ 4	+ 7	+ 20	+ 63	+ 90	+ 81
Hens.....	do	20.5	20.5	20.3	23.8	29.5	39.3	39.2	(1)	- 1	+ 16	+ 44	+ 92	+ 91
Salmon, canned.....	do	.....	.....	19.8	20.8	28.7	31.3	35.7	.....	.....	.....	.....	.....	.....
Milk, fresh.....	Quart..	9.1	9.0	8.9	9.6	12.8	15.4	16.4	- 1	- 2	+ 6	+ 41	+ 69	+ 80
Milk, evaporated (unsweetened). can.	15-16 oz.	.....	.....	.....	.....	.....	.....	16.8	.....	.....	.....	.....	.....	.....
Butter.....	Pound..	38.6	39.4	36.6	43.7	52.8	66.8	75.4	+ 2	- 5	+ 13	+ 37	+ 7	+ 95
Oleomargarine.....	do	.....	.....	.....	.....	.....	.....	43.0	.....	.....	.....	.....	.....	.....
Nut margarine.....	do	.....	.....	.....	.....	.....	.....	35.8	.....	.....	.....	.....	.....	.....
Cheese.....	do	22.5	23.0	23.2	29.2	34.6	40.6	43.0	+ 2	+ 3	+ 30	+ 54	+ 80	+ 91
Lard.....	do	15.9	15.6	14.5	25.6	32.6	34.2	36.4	- 2	- 8	+ 61	+ 105	+ 115	+ 129
Crisco.....	do	.....	.....	.....	.....	.....	.....	37.8	.....	.....	.....	.....	.....	.....
Eggs, strictly fresh....	Dozen..	49.5	45.0	45.8	51.4	58.1	74.1	81.0	- 9	- 8	+ 4	+ 17	+ 50	+ 64
Eggs, storage.....	do	.....	.....	.....	.....	.....	54.1	61.8	.....	.....	.....	.....	.....	.....
Bread.....	Pound ² .	5.0	6.4	7.0	8.4	9.9	9.8	10.2	+ 28	+ 40	+ 68	+ 98	+ 96	+ 104
Flour.....	Pound..	3.3	3.7	3.7	5.7	6.8	6.7	7.4	+ 12	+ 12	+ 73	+ 106	+ 103	+ 124
Corn meal.....	do	3.1	3.3	3.2	3.8	7.1	6.5	6.6	+ 7	+ 3	+ 23	+ 129	+ 110	+ 113
Rolled oats.....	do	.....	.....	.....	.....	.....	.....	9.2	.....	.....	.....	.....	.....	.....
Corn flakes.....	8-oz. pkg	.....	.....	.....	.....	.....	.....	14.1	.....	.....	.....	.....	.....	.....
Cream of Wheat.....	28-oz. pkg	.....	.....	.....	.....	.....	.....	25.2	.....	.....	.....	.....	.....	.....
Macaroni.....	Pound..	.....	.....	.....	.....	.....	.....	19.7	.....	.....	.....	.....	.....	.....
Rice.....	do	8.7	8.8	9.0	9.1	11.4	14.0	17.6	+ 1	+ 3	+ 5	+ 31	+ 61	+ 102
Beans, navy.....	do	.....	.....	8.5	13.6	18.9	16.1	12.3	.....	.....	.....	.....	.....	.....
Potatoes.....	do	1.9	1.5	1.7	3.5	3.2	3.3	3.9	- 21	- 11	+ 84	+ 68	+ 74	+ 105
Onions.....	do	.....	.....	3.3	5.1	5.8	4.0	6.9	.....	.....	.....	.....	.....	.....
Cabbage.....	do	.....	.....	.....	.....	.....	.....	4.5	.....	.....	.....	.....	.....	.....
Beans, baked.....	No. 2 can	.....	.....	.....	.....	.....	.....	17.0	.....	.....	.....	.....	.....	.....
Corn, canned.....	do	.....	.....	.....	.....	.....	.....	18.9	.....	.....	.....	.....	.....	.....
Peas, canned.....	do	.....	.....	.....	.....	.....	.....	19.1	.....	.....	.....	.....	.....	.....
Tomatoes, canned.....	do	.....	.....	.....	.....	.....	.....	16.1	.....	.....	.....	.....	.....	.....
Sugar, granulated.....	Pound..	5.4	6.2	6.5	8.6	9.5	10.8	12.5	+ 15	+ 20	+ 59	+ 76	+ 100	+ 131
Tea.....	do	54.5	54.7	54.6	54.6	61.7	67.9	71.2	(3)	(2)	(3)	+ 13	+ 25	+ 31
Coffee.....	do	29.8	29.6	29.9	29.9	30.2	30.8	47.8	- 1	(3)	(3)	+ 1	+ 3	+ 60
Prunes.....	do	.....	.....	13.3	13.8	16.6	18.4	30.2	.....	.....	.....	.....	.....	.....
Raisins.....	do	.....	.....	12.5	13.7	14.8	15.8	22.7	.....	.....	.....	.....	.....	.....
Bananas.....	Dozen..	.....	.....	.....	.....	.....	.....	39.9	.....	.....	.....	.....	.....	.....
Oranges.....	do	.....	.....	.....	.....	.....	.....	54.2	.....	.....	.....	.....	.....	.....
22 weighted articles combined.....	.....	.....	.....	.....	.....	.....	.....	.....	+ 1	(4)	+ 21	+ 48	+ 76	+ 84

¹ No change in price.
² Baked weight.

³ Increase of less than five-tenths of 1 per cent.
⁴ Decrease of less than five-tenths of 1 per cent.

RELATIVE RETAIL PRICES OF FOOD IN THE UNITED STATES ON OCT. 15 AND NOV. 15, 1919, AND NOV. 15, 1913, 1914, 1915, 1916, 1917, AND 1918.

[The relative price is the per cent that the average price on the 15th of each month is of the average price for the year 1913.]

Article.	Unit.	1919		Nov. 15—					
		Oct. 15.	Nov. 15.	1913	1914	1915	1916	1917	1918
Sirloin steak.....	Pound..	157	155	100	100	101	106	124	159
Round steak.....	..do..	165	162	102	105	102	108	133	173
Rib roast.....	..do..	155	153	100	103	101	106	127	162
Chuck roast.....	..do..	153	151	102	104	99	107	132	172
Plate beef.....	..do..	145	143	102	105	98	106	134	175
Pork chops.....	..do..	211	200	102	104	99	111	165	206
Bacon.....	..do..	196	189	101	104	101	111	179	216
Ham.....	..do..	195	188	100	102	100	114	159	195
Hens.....	..do..	189	184	97	97	95	112	138	185
Milk.....	Quart.	180	184	102	101	100	109	144	173
Butter.....	Pound.	186	197	101	103	95	114	138	174
Cheese.....	..do..	192	195	102	104	105	132	156	184
Lard.....	..do..	228	230	101	99	92	135	207	216
Eggs, strictly fresh.....	Dozen.	209	235	144	131	133	149	168	215
Bread.....	Pound ¹ .	177	179	100	114	122	150	176	172
Flour.....	Pound.	221	224	99	112	113	174	208	203
Corn meal.....	..do..	220	220	104	109	107	126	235	217
Rice.....	..do..	199	202	100	101	104	105	131	161
Potatoes.....	..do..	224	229	107	83	97	198	183	194
Sugar, granulated.....	..do..	207	227	99	113	119	157	174	196
Tea.....	..do..	131	131	100	101	100	100	114	125
Coffee.....	..do..	159	160	100	99	100	100	102	103
22 weighted articles combined.....	..do..	188	192	105	105	104	126	155	183

¹ Baked weight.

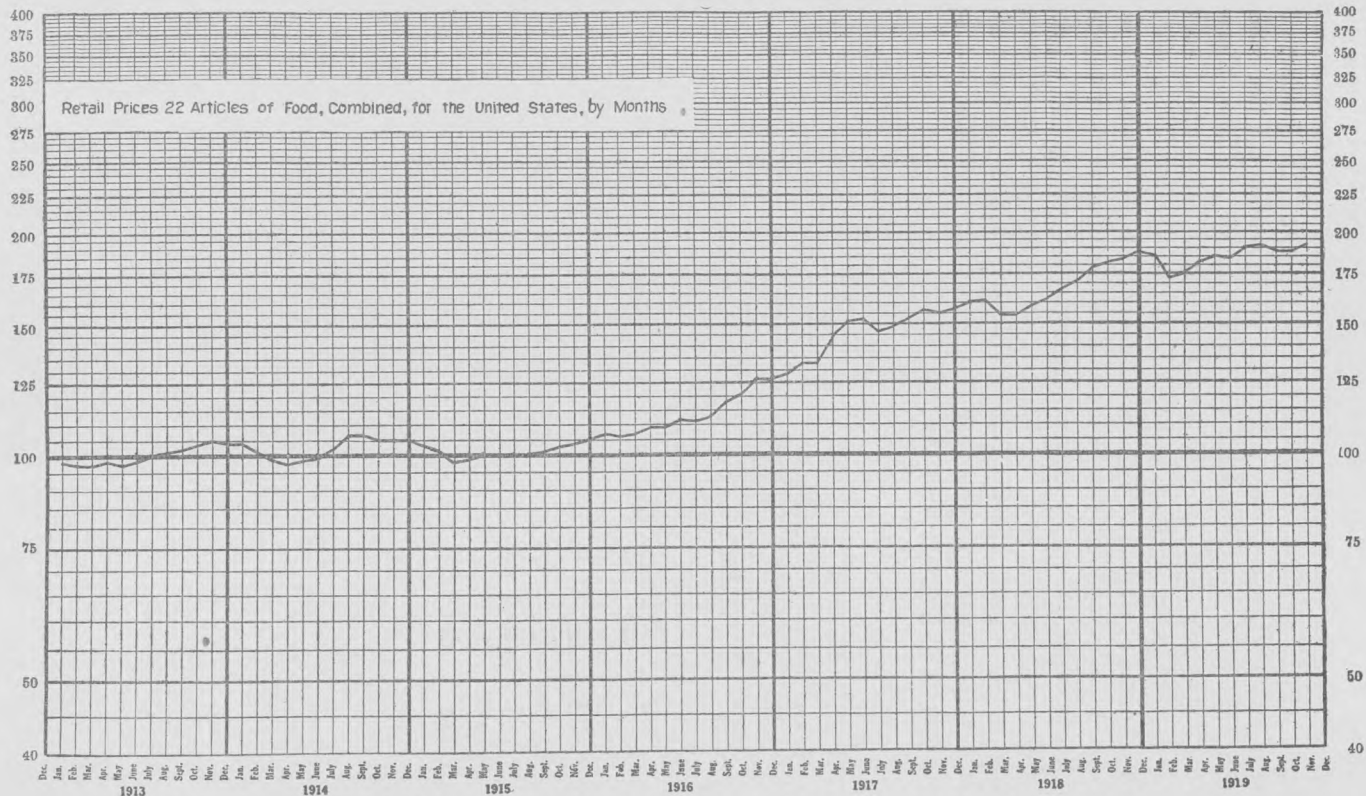
Trend in Retail Prices of 22 Food Articles, Combined, by Months.

THE chart on the opposite page shows the curve in the retail cost of 22 of the most essential foods¹ for the United States for each month from January, 1913, to and including November, 1919. The logarithmic chart is used because the percentages of increase or decrease are more clearly seen than on an arithmetic chart.² The chart is the result of an aggregate of actual prices so weighted that each commodity may have an influence equal only to its relative importance. The price of each commodity to be included in the aggregate for each month has been multiplied by a number representing the importance of that commodity in the average family consumption. These weighted products of the several commodities to be combined are added, and computed as percentages of the aggregate, similarly computed, for the year 1913. The resulting index numbers show the trend in the retail cost of the several articles combined.

¹ See note on page 69.² For a discussion of the logarithmic chart, see article on Comparison of arithmetic and ratio charts, by Lucian W. Chaney, MONTHLY LABOR REVIEW for March, 1919, pp. 20-34. Also, The "ratio" chart, by Prof. Irving Fisher, reprinted from Quarterly Publications of the American Statistical Association, June, 1917, 24 pp.

TREND IN RETAIL PRICES OF 22 FOOD ARTICLES, COMBINED, FOR THE UNITED STATES, BY MONTHS, JANUARY, 1913, TO NOVEMBER, 1919. [AVERAGE FOR 1913=100.]

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PRICES AND COST OF LIVING.

Since September, 1915, there has been a steady increase in the cost of these 22 articles of food. In December, 1918, the cost of these foods was 87 per cent above the 1913 average. In January, 1919, there was a slight decline. February prices declined 7 per cent, but from that date until June the prices advanced. In June there was a decline of less than five-tenths of 1 per cent. July prices increased 3 per cent. August prices showed a further increase of 1 per cent, which month became the high-water mark. In September, there was a decrease of 2 per cent; in October, a further decrease of two-tenths of 1 per cent; but in November, there was an increase of 2 per cent which brought the cost up to the previous high-water mark in August. Using the average cost in the year 1913 as the base, or 100, the relative figure representing the November cost was 192, or an increase of 92 per cent over the year 1913.

Retail Prices of Food in 50 Cities on Specified Dates.

Effort is made by the Bureau to secure quotations on similar grades of commodities in all cities. There are, however, some local customs which must be taken into consideration when any comparison is made of the prices in the different cities. The method of cutting sirloin steak in Boston, Mass.; Manchester, N. H.; Philadelphia, Pa.; Providence, R. I.; and Portland, Me., differs from that in other cities. The cut known as "sirloin" in these five cities would be in other cities known as "porterhouse." There is in these cities, owing to the methods of dividing the round from the loin, no cut that corresponds to that of "sirloin" in other cities. There is also a greater amount of trimming demanded by the retail trade in these cities than in others. This is particularly true of Providence, R. I. These, together with the fact that almost all the beef sold in these cities is of better grade, are the main reasons why the retail prices of beef in these cities are higher than in others.

AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD FOR NOV. 15

[The prices shown in the tables following are computed from imports sent monthly to the Bureau by retail

Article.	Unit.	Atlanta, Ga.						Baltimore, Md.					
		Nov. 15—				Oct.	Nov.	Nov. 15—				Oct.	Nov.
		1913	1914	1917	1918	15,	15,	1913	1914	1917	1918	15,	15,
						1919.	1919.					1919.	1919.
Sirloin steak	Lb.	Cts. 24.2	Cts. 24.1	Cts. 30.9	Cts. 38.7	Cts. 37.8	Cts. 38.3	Cts. 22.8	Cts. 22.4	Cts. 31.1	Cts. 44.7	Cts. 39.8	Cts. 39.4
Round steak	Lb.	21.3	22.2	28.0	35.6	34.4	35.3	21.3	20.8	30.4	43.6	38.7	37.1
Rib roast	Lb.	19.0	18.9	23.8	30.0	27.9	28.1	17.5	18.4	25.3	34.9	31.5	32.1
Chuck roast	Lb.	15.8	16.1	20.2	25.9	21.9	22.8	15.0	15.4	22.0	30.3	25.7	24.4
Plate beef	Lb.	9.9	9.7	15.0	20.0	16.2	17.4	12.2	13.4	17.5	23.4	19.3	17.9
Pork chops	Lb.	25.0	22.7	36.3	42.5	41.7	41.5	18.2	19.8	33.3	46.2	43.2	39.8
Bacon	Lb.	31.1	30.0	50.1	61.8	57.2	56.7	21.5	24.0	45.1	59.1	49.4	46.2
Ham	Lb.	30.8	30.0	43.2	53.8	53.8	54.0	27.5	31.0	46.8	59.3	56.8	54.4
Lamb	Lb.	20.2	19.3	32.1	38.1	36.1	36.5	18.0	19.0	31.3	39.2	34.5	32.5
Hens	Lb.	21.0	20.4	31.7	38.6	40.0	38.4	20.2	20.0	29.6	40.2	43.6	41.2
Salmon (canned)	Lb.			23.5	27.0	28.2	30.6			25.5	28.0	32.5	33.5
Milk, fresh	Qt.	10.6	10.6	17.5	20.0	22.5	25.0	8.7	8.7	12.0	17.0	16.0	16.0
Milk, evaporated (unsweetened)	(²)					17.4	17.9					16.1	16.4
Butter	Lb.	39.8	39.4	55.1	65.7	74.1	76.5	38.4	40.3	53.9	69.6	72.1	78.1
Oleomargarine	Lb.					44.3	44.4					40.8	40.4
Nut margarine	Lb.					38.7	40.2					36.2	36.1
Cheese	Lb.	25.0	25.0	34.7	42.2	39.9	42.2	23.3	23.3	35.8	41.7	42.8	42.8
Lard	Lb.	15.3	15.5	32.8	35.1	35.1	36.5	15.0	14.8	32.7	34.5	34.1	35.5
Crisco	Lb.					35.1	35.9					34.4	35.3
Eggs, strictly fresh	Doz.	40.0	36.9	50.1	67.6	64.7	71.8	45.9	42.0	58.0	73.1	65.5	76.3
Eggs, storage	Doz.			43.5	52.8	60.0	60.5	33.1	29.9	44.0	57.9	57.7	61.1
Bread	Lb. ³	5.6	6.0	10.1	10.0	10.0	10.0	5.5	5.7	9.2	9.7	9.6	9.6
Flour	Lb.	3.5	3.7	7.1	6.8	7.2	7.3	3.1	3.7	6.8	6.9	7.5	7.7
Corn meal	Lb.	2.6	2.8	5.4	5.7	5.7	5.6	2.6	2.7	6.4	6.2	5.8	5.6
Rolled oats	Lb.					10.5	10.6					8.2	7.8
Corn flakes	(⁴)					14.0	14.0					13.0	13.1
Corn of Wheat	(⁵)					24.7	24.4					23.4	23.3
Macaroni	Lb.					20.3	20.3					18.6	18.2
Rice	Lb.	8.6	8.6	11.1	14.4	17.0	17.3	9.0	9.0	11.4	14.1	18.3	18.0
Beans, navy	Lb.			18.8	17.9	15.0	14.5			19.0	17.8	12.2	11.9
Potatoes	Lb.	2.3	1.8	4.0	4.4	5.0	5.0	1.8	1.5	3.0	3.8	3.8	3.7
Onions	Lb.			5.9	5.7	8.4	8.2			4.9	4.1	5.8	6.4
Cabbage	Lb.					6.2	6.2					3.8	4.0
Beans, baked	(⁶)					16.1	15.9					16.1	15.8
Corn, canned	(⁶)					20.3	20.4					19.1	18.1
Peas, canned	(⁶)					20.4	20.4					18.7	18.4
Tomatoes, canned	(⁶)					14.2	14.5					14.6	15.2
Sugar, granulated	Lb.	5.7	6.7	11.0	10.9	11.8	13.5	4.8	5.7	9.6	10.4	10.9	11.0
Tea	Lb.	60.0	60.0	78.4	88.6	87.1	91.3	56.0	56.0	64.9	73.3	73.0	71.1
Coffee	Lb.	32.0	33.0	29.2	30.7	49.8	49.8	24.4	24.4	28.1	29.8	45.0	46.1
Prunes	Lb.			18.0	19.2	25.3	24.4			17.3	18.5	29.5	30.0
Raisins	Lb.			16.1	18.1	21.0	21.5			14.6	15.9	21.9	22.6
Bananas	Doz.					31.8	37.7					33.5	31.8
Oranges	Doz.					54.1	40.6					59.1	59.1

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

² 15-16 ounce can.

PRICES AND COST OF LIVING.

1913, 1914, 1917, 1918, 1919, AND OCT. 15, 1919, FOR 19 CITIES.

dealers. As some dealers occasionally fail to report, the number of quotations varies from month to month.]

Birmingham, Ala.				Boston, Mass.						Buffalo, N. Y.										
Nov. 15—				Nov. 15—				Oct. 15, 1919.		Nov. 15, 1919.		Nov. 15—				Oct. 15, 1919.		Nov. 15, 1919.		
1913	1914	1917	1918	1913	1914	1917	1918	1913	1914	1917	1918	1913	1914	1917	1918	1913	1914	1917	1918	
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
28.0	28.5	34.0	40.5	39.1	39.1	34.0	38.8	41.8	45.0	46.7	60.2	22.2	23.0	31.1	39.0	37.3	35.9	32.4	32.4	35.9
23.0	24.0	31.0	37.0	37.3	36.8	35.0	36.0	42.1	56.8	55.7	55.7	19.4	20.6	28.9	36.5	34.0	32.4	28.7	28.7	32.4
19.4	20.9	25.0	33.5	31.7	31.3	23.9	24.6	30.7	38.5	39.9	41.3	16.4	17.8	24.3	31.1	29.9	25.0	24.2	24.2	28.7
16.5	17.1	20.2	28.9	26.4	26.2	16.2	17.8	24.9	30.8	30.7	30.9	15.2	15.8	22.0	27.1	25.0	24.2	24.2	24.2	28.7
10.0	12.0	16.3	22.1	17.6	17.9	.....	.....	.....	.....	.....	.....	11.7	12.8	16.6	22.3	18.3	17.3	17.3	17.3	17.3
.....
23.0	21.3	34.8	42.0	43.0	42.5	22.4	24.8	35.3	46.9	49.9	46.5	19.8	21.0	34.9	42.1	42.9	42.7	42.7	42.7	42.7
34.0	35.0	53.0	62.5	58.3	57.6	24.6	27.2	45.8	54.5	48.9	47.5	21.2	23.0	46.0	53.0	43.3	41.2	41.2	41.2	41.2
32.0	31.0	44.5	52.0	55.0	53.6	31.0	33.0	44.3	56.7	56.9	54.8	26.3	28.0	42.4	52.9	51.5	51.1	51.1	51.1	51.1
21.9	22.4	32.5	38.3	37.5	39.2	20.5	22.0	33.6	37.7	37.4	37.0	15.6	17.2	27.6	30.8	26.7	25.6	25.6	25.6	25.6
19.3	17.5	28.6	38.6	38.2	37.1	24.3	24.0	32.6	44.6	45.5	45.5	20.0	19.6	29.7	38.7	39.1	37.5	37.5	37.5	37.5
.....	.....	27.8	31.4	34.7	38.4	.....	.....	30.0	32.0	33.3	34.3	.....	.....	28.0	28.7	32.3	33.3	33.3	33.3	33.3
10.0	10.4	15.2	20.0	25.0	25.0	8.9	8.9	14.0	16.5	16.4	17.0	8.0	8.0	14.0	16.0	16.0	16.0	16.0	16.0	16.0
41.7	39.2	56.1	69.1	75.0	79.0	38.2	37.5	51.7	63.8	68.3	71.1	38.1	39.0	50.6	65.4	70.0	74.7	74.7	74.7	74.7
.....	.....	.....	.....	44.6	45.4	.....	.....	.....	.....	42.5	42.4	.....	.....	.....	41.6	42.5	42.5	42.5	42.5	42.5
.....	.....	.....	.....	40.1	39.2	.....	.....	.....	.....	35.8	35.0	.....	.....	.....	34.0	34.2	34.2	34.2	34.2	34.2
23.0	23.1	34.1	45.3	40.0	41.5	23.4	23.1	32.6	35.9	42.2	42.2	21.5	21.5	.....	38.3	40.9	40.9	40.9	40.9	40.9
15.1	15.5	32.9	33.5	36.0	36.2	15.8	15.5	32.9	34.4	37.1	37.3	14.2	14.3	31.5	32.7	33.4	34.7	34.7	34.7	34.7
.....	.....	.....	.....	37.8	38.7	.....	.....	.....	.....	36.1	36.7	.....	.....	.....	36.0	35.9	35.9	35.9	35.9	35.9
39.0	36.0	48.8	64.8	59.3	67.3	60.6	64.8	73.7	90.2	92.9	102.1	48.5	45.0	59.5	73.9	72.7	79.0	79.0	79.0	79.0
.....
32.5	30.0	45.0	55.5	55.0	60.0	35.2	34.2	47.7	55.1	.....	.....	64.7	30.6	28.7	42.8	52.6	57.6	59.0	59.0	59.0
5.4	5.5	10.6	11.7	9.6	9.6	6.0	6.1	9.1	9.1	9.6	9.1	5.6	5.2	9.8	10.0	10.0	10.0	10.0	10.0	10.0
3.6	3.7	7.1	6.9	7.5	7.6	3.6	4.1	7.5	6.7	7.8	7.9	3.0	3.5	6.4	6.3	6.9	7.0	7.0	7.0	7.0
2.5	2.5	5.0	5.3	5.3	5.3	3.5	3.8	7.6	7.1	7.8	7.3	2.6	2.9	7.4	6.0	6.2	6.3	6.3	6.3	6.3
.....	.....	.....	.....	11.2	11.0	.....	.....	.....	.....	8.1	7.9	.....	.....	.....	7.6	7.6	7.6	7.6	7.6	7.6
.....	.....	.....	.....	14.7	14.6	.....	.....	.....	.....	14.0	14.0	.....	.....	.....	13.1	12.9	12.9	12.9	12.9	12.9
.....	.....	.....	.....	25.7	25.9	.....	.....	.....	.....	24.7	24.7	.....	.....	.....	24.0	24.1	24.1	24.1	24.1	24.1
.....	.....	.....	.....	20.6	21.0	.....	.....	.....	.....	21.6	21.9	.....	.....	.....	20.0	19.4	19.4	19.4	19.4	19.4
8.2	7.9	12.4	14.2	17.5	17.8	9.4	9.4	11.8	13.9	17.1	17.5	9.3	9.3	11.3	13.7	17.4	17.7	17.7	17.7	17.7
.....	.....	19.4	17.0	15.0	14.0	.....	.....	18.4	16.9	11.7	11.5	.....	.....	19.6	15.1	11.6	11.5	11.5	11.5	11.5
2.2	1.8	3.6	4.1	4.9	5.0	1.7	1.4	3.5	3.4	3.2	3.5	1.8	1.0	3.2	2.8	3.0	3.1	3.1	3.1	3.1
.....	.....	5.5	4.4	7.6	8.4	.....	.....	.....	.....	6.1	6.4	.....	.....	5.6	3.8	6.3	6.4	6.4	6.4	6.4
.....	.....	.....	.....	5.5	5.4	.....	.....	.....	.....	3.8	4.5	.....	.....	.....	4.9	4.8	4.8	4.8	4.8	4.8
.....	.....	.....	.....	18.4	17.9	.....	.....	.....	.....	17.6	17.5	.....	.....	.....	13.9	13.9	13.9	13.9	13.9	13.9
.....	.....	.....	.....	19.2	18.9	.....	.....	.....	.....	21.3	21.0	.....	.....	.....	18.4	18.2	18.2	18.2	18.2	18.2
.....	.....	.....	.....	22.0	21.7	.....	.....	.....	.....	20.6	20.1	.....	.....	.....	17.5	17.7	17.7	17.7	17.7	17.7
.....	.....	.....	.....	14.8	14.4	.....	.....	.....	.....	17.0	15.8	.....	.....	.....	16.3	16.4	16.4	16.4	16.4	16.4
5.4	6.4	10.4	10.8	11.6	20.3	5.4	6.0	10.2	10.7	10.9	10.9	5.3	6.1	9.9	10.6	10.9	11.0	11.0	11.0	11.0
61.3	61.3	73.9	82.9	89.1	87.1	58.6	58.6	64.8	65.3	66.3	66.6	45.0	45.0	53.9	63.0	66.2	66.0	66.0	66.0	66.0
28.8	28.8	33.3	32.6	49.5	49.6	33.0	32.1	34.4	34.8	53.0	52.7	29.3	29.3	29.5	30.0	46.2	46.6	46.6	46.6	46.6
.....	.....	15.0	16.4	33.3	30.0	.....	.....	16.8	19.3	31.8	29.0	.....	.....	16.6	19.2	28.7	28.0	28.0	28.0	28.0
.....	.....	15.3	16.5	20.4	20.9	.....	.....	15.0	15.4	20.8	22.9	.....	.....	14.0	14.5	18.8	20.0	20.0	20.0	20.0
.....	.....	.....	.....	40.0	41.6	.....	.....	.....	.....	44.6	46.9	.....	.....	.....	42.3	42.2	42.2	42.2	42.2	42.2
.....	.....	.....	.....	50.3	45.5	.....	.....	.....	.....	62.1	61.7	.....	.....	.....	60.2	58.5	58.5	58.5	58.5	58.5

³ Baked weight.
⁴ 8-ounce package.

⁵ 28-ounce package.
⁶ No. 2 can.

AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD FOR NOV. 15,

Article.	Unit.	Chicago, Ill.						Cleveland, Ohio.						
		Nov. 15—				Oct. 15, 1919.	Nov. 15, 1919.	Nov. 15—				Oct. 15, 1919.	Nov. 15, 1919.	
		1913	1914	1917	1918			1913	1914	1917	1918			
		<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>
Sirloin steak.....	Lb.	24.7	26.3	29.7	37.3	36.6	37.0	25.0	24.7	29.0	36.6	37.6	37.1	
Round steak.....	Lb.	21.4	23.4	26.5	34.1	32.5	32.5	22.4	21.7	27.0	33.9	34.5	33.4	
Rib roast.....	Lb.	19.5	21.1	24.5	31.3	28.9	29.6	18.6	18.9	22.6	28.0	28.3	27.8	
Chuck roast.....	Lb.	15.9	17.7	20.6	27.6	24.3	24.3	17.0	17.1	20.6	26.2	24.3	24.0	
Plate beef.....	Lb.	12.0	12.7	16.2	20.6	17.0	17.0	12.6	12.4	15.6	19.8	17.4	16.7	
Pork chops.....	Lb.	19.3	19.7	31.2	37.7	41.0	36.8	21.6	22.0	33.1	41.0	44.9	41.7	
Bacon.....	Lb.	32.4	31.9	49.7	59.5	54.6	54.2	28.1	29.6	46.7	56.4	49.8	48.3	
Ham.....	Lb.	32.3	33.1	44.5	52.5	54.0	52.3	35.7	33.5	44.1	54.5	56.2	54.2	
Lamb.....	Lb.	19.3	20.1	28.2	33.7	33.1	32.9	18.1	19.7	28.8	32.4	31.6	31.9	
Hens.....	Lb.	17.4	18.1	25.8	31.5	33.1	33.3	19.9	19.4	29.4	37.4	39.2	37.3	
Salmon (canned).....	Lb.			30.1	31.7	34.9	36.2			29.1	30.0	35.0	36.1	
Milk, fresh.....	Qt.	8.0	8.0	11.9	14.0	15.0	15.0	8.0	8.0	12.0	15.0	15.7	16.0	
Milk, evaporated (unsweetened).....	(1)					15.3	15.5					16.8	17.1	
Butter.....	Lb.	36.5	36.4	49.2	65.3	67.8	73.6	40.7	40.9	53.0	68.8	73.8	79.8	
Oleomargarine.....	Lb.					40.4	41.7					43.7	45.5	
Nut margarine.....	Lb.					33.4	33.5					35.3	35.5	
Cheese.....	Lb.	25.3	25.0	37.4	40.4	44.4	44.6	24.0	24.0	34.8	39.0	42.4	41.9	
Lard.....	Lb.	15.0	15.1	30.9	32.7	34.6	34.4	16.3	16.1	33.2	34.2	36.2	36.1	
Crisco.....	Lb.					35.5	36.3					38.4	37.6	
Eggs, strictly fresh.....	Doz.	39.8	35.8	49.6	67.7	65.6	74.2	50.0	47.7	60.5	75.8	75.8	84.2	
Eggs, storage.....	Doz.	30.3	28.6	41.1	51.3	56.1	58.2	35.7	32.3	43.1	53.4	61.5	63.1	
Bread.....	Lb. ²	6.1	6.2	10.1	10.2	10.7	10.6	5.6	5.7	9.9	10.0	9.7	9.3	
Flour.....	Lb.	2.9	3.4	6.4	6.3	7.1	7.3	3.2	3.7	6.9	6.7	7.4	7.6	
Corn meal.....	Lb.	2.9	2.9	6.9	6.5	6.7	6.7	3.0	3.4	7.6	6.2	6.5	6.6	
Rolled oats.....	Lb.					7.0	7.1					9.4	9.6	
Corn flakes.....	(3)					12.8	13.0					14.2	14.5	
Cream of Wheat.....	(4)					24.1	24.4					24.4	24.6	
Macaroni.....	Lb.					17.8	18.0					18.6	19.2	
Rice.....	Lb.	9.0	9.3	11.4	13.7	16.6	16.7	9.0	9.5	11.8	14.5	18.0	18.4	
Beans, navy.....	Lb.			19.0	15.7	11.8	12.0			19.4	14.6	11.9	11.7	
Potatoes.....	Lb.	1.7	1.2	2.7	2.6	3.4	3.8	2.0	1.2	3.3	3.1	4.1	4.0	
Onions.....	Lb.			4.5	3.4	5.9	6.8			5.5	3.2	5.6	6.8	
Cabbage.....	Lb.					4.5	4.6					4.7	4.5	
Beans, baked.....	(5)					16.6	16.2					16.3	15.7	
Corn, canned.....	(5)					17.6	17.4					18.9	19.3	
Peas, canned.....	(5)					17.5	17.5					18.6	18.7	
Tomatoes, canned.....	(5)					15.5	15.8					16.2	16.0	
Sugar, granulated.....	Lb.	5.1	5.7	8.5	10.6	12.4	13.2	5.4	6.3	9.7	10.8	11.0	12.7	
Tea.....	Lb.	55.0	55.0	58.8	60.4	63.7	64.7	50.0	50.0	55.6	66.7	73.8	72.8	
Coffee.....	Lb.	30.7	30.0	28.7	28.6	44.4	44.8	26.5	26.5	29.5	30.5	49.3	50.2	
Prunes.....	Lb.			16.3	17.9	28.9	28.9			17.9	18.6	29.4	28.3	
Raisins.....	Lb.			15.0	15.7	20.2	23.3			14.3	15.6	22.1	22.8	
Bananas.....	Doz.					35.6	38.7					46.0	46.4	
Oranges.....	Doz.					52.8	52.3					57.8	57.7	

¹ 15-16 ounce can.² Baked weight.³ 8-ounce package.

PRICES AND COST OF LIVING.

1913, 1914, 1917, 1918, 1919, AND OCT. 15, 1919, FOR 19 CITIES—Continued.

Denver, Colo.								Detroit, Mich.						Los Angeles, Calif.					
Nov. 15—				Oct. 15, 1918.	Nov. 15, 1919.	Nov. 15—				Oct. 15, 1919.	Nov. 15, 1919.	Nov. 15—				Oct. 15, 1919.	Nov. 15, 1919.		
1913	1914	1917	1918			1913	1914	1917	1918			1913	1914	1917	1918				
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.		
22.9	22.1	28.2	35.7	33.3	33.6	25.6	23.3	29.4	35.3	37.8	36.7	23.9	23.7	26.5	32.9	31.1	31.7		
20.3	21.1	26.2	31.9	30.1	29.9	20.6	20.4	26.8	32.5	32.5	32.1	21.4	21.2	24.0	31.4	28.1	28.7		
16.7	17.9	22.0	27.0	26.4	25.8	20.0	18.7	23.5	28.0	29.5	23.6	18.9	19.7	22.2	26.2	26.2	26.4		
15.3	15.3	19.7	24.0	21.0	21.2	15.2	15.6	19.3	24.0	22.7	22.2	16.0	15.9	18.9	24.6	19.7	19.6		
9.9	10.7	13.8	17.3	14.1	14.2	11.4	11.9	15.4	19.0	16.6	16.0	13.4	13.4	15.7	20.0	15.6	16.0		
20.4	21.0	34.6	39.9	45.3	42.6	19.4	20.4	32.6	39.8	45.1	41.8	26.0	26.6	36.8	46.4	44.7	46.8		
28.0	30.6	50.6	59.3	54.8	53.7	22.3	25.0	45.8	55.8	49.2	46.7	33.5	34.5	52.7	65.7	58.5	56.8		
29.2	31.7	46.8	57.1	57.2	55.0	27.0	29.0	42.0	55.6	56.6	53.7	35.0	36.3	52.2	61.9	59.1	59.0		
15.2	17.1	29.8	30.4	27.8	28.3	15.1	16.4	28.6	33.1	34.4	33.3	18.6	19.3	29.7	33.4	29.7	30.8		
18.5	18.8	27.8	32.3	36.7	35.4	19.2	18.3	29.3	35.5	39.3	36.8	26.3	26.3	32.6	44.5	46.0	46.8		
.....	.....	26.9	29.2	35.6	36.1	.....	.....	29.3	31.3	34.6	35.8	.....	.....	29.8	36.1	43.1	45.8
8.4	8.4	12.0	12.8	12.7	12.8	9.0	9.0	12.0	15.0	16.0	16.0	10.0	10.0	12.0	14.0	14.0	16.0		
.....	.....	.....	.....	16.4	16.6	.....	.....	.....	.....	16.1	16.5	.....	.....	.....	.....	14.8	14.9
35.0	39.0	48.5	64.5	71.0	74.3	37.1	38.9	50.5	67.0	71.5	76.7	39.7	42.6	48.5	67.1	73.4	74.1		
.....	.....	.....	.....	42.2	41.5	.....	.....	.....	.....	41.4	41.8	.....	.....	.....	.....	45.4	45.3
.....	.....	.....	.....	35.6	35.3	.....	.....	.....	.....	34.9	34.4	.....	.....	.....	.....	36.4	36.0
26.1	26.1	35.1	39.3	44.9	44.9	22.3	22.7	34.2	41.0	42.0	43.1	19.5	20.0	34.2	40.8	44.7	44.0		
16.0	15.8	34.4	34.7	37.9	38.4	16.4	15.8	33.3	34.0	35.5	36.5	18.1	17.3	30.9	34.6	34.9	34.6		
.....	.....	.....	.....	35.5	37.7	.....	.....	.....	.....	36.6	36.9	.....	.....	.....	.....	34.8	36.5
45.0	38.0	52.8	67.9	64.0	75.8	41.0	37.0	58.2	76.1	70.7	80.8	58.8	52.9	62.5	81.1	77.6	83.5		
33.0	30.0	44.4	54.0	55.0	62.8	32.2	29.3	41.1	51.0	57.4	59.9	37.0	35.5	44.9	56.8	63.0	63.8		
5.5	5.6	9.9	12.0	11.2	11.2	5.6	5.9	9.2	9.5	10.2	9.9	6.0	6.5	8.9	9.3	9.4	9.7		
2.5	3.0	5.7	6.0	6.1	6.2	3.1	3.5	6.6	6.5	7.2	7.4	3.5	4.0	6.3	7.2	7.2	7.3		
2.6	2.7	6.1	5.9	6.1	5.9	2.9	3.2	8.3	6.6	6.9	7.2	3.4	3.8	7.6	7.4	7.6	7.5		
.....	.....	.....	.....	8.7	8.6	.....	.....	.....	.....	8.6	8.3	.....	.....	.....	.....	9.0	8.7
.....	.....	.....	.....	14.7	14.6	.....	.....	.....	.....	14.1	14.2	.....	.....	.....	.....	13.2	13.0
.....	.....	.....	.....	25.0	24.8	.....	.....	.....	.....	25.0	25.0	.....	.....	.....	.....	24.4	24.4
.....	.....	.....	.....	19.5	19.3	.....	.....	.....	.....	19.4	19.6	.....	.....	.....	.....	17.6	16.9
8.6	8.6	11.6	15.0	17.1	17.8	8.4	8.4	11.8	14.1	18.1	18.5	7.7	8.0	10.2	14.0	16.3	16.5		
.....	.....	18.6	15.7	13.2	13.2	.....	.....	19.1	14.6	11.8	11.3	.....	.....	17.3	15.9	11.0	10.6
1.6	1.2	2.9	2.8	3.4	4.1	1.7	1.1	2.7	2.6	3.3	3.5	1.9	1.7	2.0	3.2	3.7	4.1		
.....	.....	4.9	3.7	6.4	7.1	.....	.....	5.5	3.7	6.2	6.6	.....	.....	3.7	3.4	4.9	6.1
.....	.....	.....	.....	2.7	3.9	.....	.....	.....	.....	4.1	4.1	.....	.....	.....	.....	3.0	3.0
.....	.....	.....	.....	17.6	17.7	.....	.....	.....	.....	16.0	16.2	.....	.....	.....	.....	18.0	17.7
.....	.....	.....	.....	17.7	17.5	.....	.....	.....	.....	19.8	19.3	.....	.....	.....	.....	19.1	18.5
.....	.....	.....	.....	19.2	19.5	.....	.....	.....	.....	18.0	18.6	.....	.....	.....	.....	18.2	18.9
.....	.....	.....	.....	15.2	15.2	.....	.....	.....	.....	16.6	16.9	.....	.....	.....	.....	15.3	15.3
5.1	5.8	8.9	11.4	12.4	12.6	5.2	6.1	8.8	10.6	11.1	13.0	5.3	6.3	8.4	10.6	11.7	12.4		
52.8	52.8	57.7	64.1	70.5	70.4	43.3	43.3	57.6	61.3	63.3	64.0	54.5	54.5	57.1	67.8	68.8	69.1		
29.4	29.4	30.0	30.9	49.2	49.8	29.3	30.0	29.9	30.3	49.2	49.0	36.3	36.3	30.3	30.4	46.5	45.0		
.....	.....	18.2	19.0	28.3	29.6	.....	.....	16.4	19.1	31.4	31.0	.....	.....	15.1	18.4	29.0	27.0
.....	.....	14.3	15.1	21.0	23.6	.....	.....	13.6	15.8	21.1	23.5	.....	.....	13.3	15.8	19.6	21.0
.....	.....	.....	.....	43.2	43.5	.....	.....	.....	.....	31.7	36.3	.....	.....	.....	.....	40.0	41.7
.....	.....	.....	.....	50.1	53.6	.....	.....	.....	.....	52.5	54.0	.....	.....	.....	.....	41.3	38.9

⁴ 28-ounce package.

⁵ No. 2 can.

AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD FOR NOV. 15,

Article.	Unit.	Milwaukee, Wis.						New Orleans, La.					
		Nov. 15—				Oct. 15, 1919.	Nov. 15, 1919.	Nov. 15—				Oct. 15, 1919.	Nov. 15, 1919.
		1913	1914	1917	1918			1913	1914	1917	1918		
Sirloin steak.....	Lb..	23.6	23.3	28.0	34.0	36.0	34.6	21.5	22.2	27.3	32.5	31.7	31.3
Round steak.....	Lb..	21.6	21.7	26.9	32.9	34.0	32.7	19.0	20.1	23.8	29.6	29.2	28.1
Rib roast.....	Lb..	18.4	18.7	22.9	27.7	28.9	27.8	18.0	19.3	22.8	29.2	28.3	27.8
Chuck roast.....	Lb..	16.2	17.0	20.5	25.6	25.7	24.4	14.9	14.5	18.6	22.3	22.1	20.6
Plate beef.....	Lb..	12.1	12.8	15.2	19.6	18.1	17.0	11.9	12.1	15.1	19.2	18.2	17.9
Pork chops.....	Lb..	19.6	19.3	31.0	37.9	41.7	37.3	24.5	23.9	36.0	45.0	47.2	45.2
Bacon.....	Lb..	27.8	28.2	47.5	55.9	54.0	50.9	30.5	31.9	53.0	63.5	55.5	52.3
Ham.....	Lb..	28.2	27.7	43.0	51.7	52.7	50.0	26.0	27.0	45.0	51.0	49.5	46.3
Lamb.....	Lb..	19.0	19.6	29.8	33.5	34.0	32.3	20.5	20.9	29.5	37.5	38.5	37.3
Hens.....	Lb..	17.2	17.7	23.8	31.2	32.5	30.3	20.5	22.3	29.7	39.3	43.5	42.7
Salmon (canned).....	Lb.			27.8	29.6	37.4	36.9			31.9	34.0	36.6	36.7
Milk, fresh.....	Qt.	7.0	7.0	11.0	13.0	13.0	13.0	9.8	9.8	13.6	16.0	18.5	18.7
Milk, evaporated (unsweetened).....	(²)					16.9	17.1					16.5	16.5
Butter.....	Lb.	36.6	37.7	49.8	66.5	71.8	76.3	38.1	39.5	51.2	66.6	71.5	76.1
Oleomargarine.....	Lb.					42.4	42.8					43.4	44.3
Nut margarine.....	Lb.					34.4	35.1					36.1	36.2
Cheese.....	Lb.	22.3	22.3	34.4	42.7	42.0	42.0	21.9	22.8	34.8	43.1	42.0	42.9
Lard.....	Lb.	16.0	16.3	32.4	34.9	36.3	36.7	15.0	14.6	31.4	34.8	35.9	36.4
Crisco.....	Lb.					37.6	36.8					39.5	39.1
Eggs, strictly fresh.....	Doz.	45.0	38.3	48.3	63.8	65.1	73.5	41.3	34.4	46.1	64.8	62.3	69.3
Eggs, storage.....	Doz.	33.0	29.0	41.4	49.8	55.8	58.6	30.0	28.8	39.7	51.6	57.2	61.0
Bread.....	Lb. ³	5.7	6.3	9.8	9.2	10.0	10.0	4.8	5.3	9.0	9.2	9.2	9.2
Flour.....	Lb..	3.1	3.7	6.4	6.5	7.4	7.5	3.7	3.9	7.8	7.3	7.5	7.5
Corn meal.....	Lb..	3.3	3.6	7.7	6.7	6.7	6.4	2.8	2.9	7.0	6.2	5.8	5.5
Rolled oats.....	Lb..					8.4	8.2					8.7	8.9
Corn flakes.....	(⁴)					14.2	14.2					14.1	14.4
Cream of Wheat.....	(⁵)					25.3	25.4					24.8	24.8
Macaroni.....	Lb.					19.0	18.4					11.4	11.3
Rice.....	Lb..	9.0	9.5	11.5	14.3	17.6	17.7	7.5	7.5	10.1	12.2	14.8	15.1
Beans, navy.....	Lb..			19.5	14.6	11.6	11.5			17.3	15.9	11.4	11.6
Potatoes.....	Lb..	1.7	1.2	2.8	2.6	3.4	3.6	2.2	2.1	4.2	4.2	5.0	4.9
Onions.....	Lb..			4.8	3.3	6.2	7.3			5.2	4.3	5.9	6.7
Cabbage.....	Lb..					2.8	3.4					5.0	4.5
Beans, baked.....	(⁶)					16.3	16.2					17.6	17.2
Corn, canned.....	(⁶)					18.2	17.8					17.6	17.8
Peas, canned.....	(⁶)					17.5	17.8					18.4	17.8
Tomatoes, canned.....	(⁶)					17.0	16.4					14.9	15.1
Sugar, granulated.....	Lb..	5.3	6.0	8.8	10.8	11.8	13.7	5.1	6.1	9.6	10.5	10.9	11.1
Tea.....	Lb..	50.0	50.0	58.6	65.9	68.2	69.1	62.1	62.1	61.3	63.4	67.1	68.6
Coffee.....	Lb..	27.5	27.5	27.0	26.6	47.1	47.5	25.7	25.0	27.4	27.2	42.5	42.5
Prunes.....	Lb..			15.8	15.6	29.9	28.6			17.0	18.5	33.3	31.3
Raisins.....	Lb..			14.7	15.1	20.8	22.8			15.5	16.6	19.2	22.5
Bananas.....	Doz.					40.0	39.3					25.0	25.0
Oranges.....	Doz.					57.9	58.6					65.0	41.0

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

² 15-16 ounce can.

PRICES AND COST OF LIVING.

1913, 1914, 1917, 1918, 1919, AND OCT. 15, 1919, FOR 19 CITIES—Continued.

New York, N. Y.						Philadelphia, Pa.						Pittsburgh, Pa.					
Nov. 15—				Oct. 15, 1919.	Nov. 15, 1919.	Nov. 15—				Oct. 15, 1919.	Nov. 15, 1919.	Nov. 15—				Oct. 15, 1919.	Nov. 15, 1919.
1913	1914	1917	1918			1913	1914	1917	1918			1913	1914	1917	1918		
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	
25.9	26.6	32.6	43.0	42.6	42.5	30.5	31.1	37.4	53.4	50.4	49.3	27.3	29.0	34.5	45.6	45.2	
25.4	26.5	33.5	44.8	44.5	44.4	25.7	26.6	34.4	46.5	46.8	45.0	24.0	24.0	31.8	42.2	40.7	
21.3	21.7	27.9	38.3	37.2	37.6	21.5	22.3	28.3	37.6	38.8	38.0	21.7	22.4	26.5	35.3	34.2	
16.0	16.7	21.8	30.3	27.6	27.6	18.0	18.5	23.7	32.6	30.5	29.3	17.3	18.0	23.1	30.8	28.3	
14.5	15.7	20.9	27.0	24.4	24.7	12.0	12.2	16.9	22.6	19.4	17.5	12.8	13.5	16.8	22.5	18.2	
22.6	23.3	33.9	45.5	45.7	46.7	22.5	22.7	35.6	44.9	46.2	43.1	22.5	23.0	35.0	43.3	44.8	
25.6	26.6	45.9	55.3	47.9	48.0	26.9	27.8	46.9	58.3	53.1	51.4	30.4	30.9	49.4	61.3	55.8	
27.8	30.0	46.0	39.5	57.0	56.3	30.4	31.8	48.2	58.1	58.6	56.7	29.8	32.5	45.6	58.8	59.8	
15.1	16.7	26.5	31.2	29.0	29.3	18.8	19.7	31.0	36.9	39.4	39.2	20.3	21.2	34.2	37.9	38.5	
21.1	21.4	29.5	40.8	40.5	39.9	23.1	23.2	32.2	44.1	44.1	44.1	23.8	24.2	33.8	44.1	44.6	
9.0	9.0	34.0	35.4	39.8	42.4	8.0	8.0	26.3	29.4	31.4	32.5	9.2	9.3	29.9	31.9	36.3	
39.9	41.0	51.6	68.5	15.5	15.8	44.3	44.7	56.7	71.6	14.0	14.0	9.2	9.3	12.7	15.0	16.0	
.....	.....	.....	.....	41.7	42.3	.....	.....	.....	.....	15.8	16.2	.....	.....	.....	16.3	16.4
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	77.2	81.9	40.4	40.6	52.8	69.5	74.5
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	44.5	45.7	.....	.....	.....	42.2	43.4
.....	.....	.....	.....	34.5	34.5	.....	.....	.....	.....	38.3	38.0	.....	.....	.....	35.5	35.8
20.2	20.6	33.8	36.7	42.3	42.9	25.0	25.5	35.7	40.0	44.9	45.9	24.5	25.0	35.1	42.0	43.2	
16.2	15.9	33.1	34.3	35.7	36.3	15.5	15.0	33.0	33.9	35.2	35.7	15.7	15.4	33.1	34.3	36.3	
.....	.....	.....	.....	36.1	36.9	.....	.....	.....	.....	34.8	35.2	.....	.....	.....	37.3	37.4
56.1	49.3	64.7	80.2	80.0	88.1	50.8	47.5	59.3	77.6	75.5	82.9	46.3	39.5	55.3	75.2	70.2	
37.3	32.4	44.6	56.1	60.5	62.5	34.7	32.2	43.4	57.8	61.2	62.8	33.4	30.7	45.3	55.1	59.3	
6.0	6.3	9.8	9.9	10.0	10.0	4.8	4.8	8.8	9.5	9.4	9.4	5.4	5.5	10.1	9.8	10.3	
3.2	3.6	7.7	7.1	7.5	7.7	3.2	3.7	7.2	6.7	7.4	7.4	3.2	3.7	7.0	6.7	7.5	
3.5	3.6	8.3	7.6	7.3	7.6	2.9	3.0	7.2	6.7	6.3	6.5	3.0	3.2	8.7	7.3	7.6	
.....	.....	.....	.....	7.9	7.9	.....	.....	.....	.....	8.3	8.3	.....	.....	.....	9.4	9.5
.....	.....	.....	.....	12.0	12.1	.....	.....	.....	.....	12.4	12.4	.....	.....	.....	13.9	13.8
.....	.....	.....	.....	24.1	24.2	.....	.....	.....	.....	24.4	24.7	.....	.....	.....	25.2	25.1
.....	.....	.....	.....	20.0	21.0	.....	.....	.....	.....	21.0	20.7	.....	.....	.....	17.8	17.7
8.0	8.3	11.9	13.9	16.4	16.7	9.8	10.0	12.3	14.7	17.4	18.1	9.2	9.2	11.2	14.5	18.0	
.....	.....	18.7	16.8	12.3	12.6	.....	.....	18.4	16.1	12.0	11.9	.....	.....	19.5	15.9	12.3
2.3	1.9	3.6	3.9	4.1	4.4	2.3	1.9	3.8	4.2	4.4	4.5	2.0	1.4	3.3	3.3	3.9	
.....	.....	6.0	4.3	6.0	6.8	.....	.....	5.4	4.1	6.0	6.8	.....	.....	5.3	4.3	5.9
.....	.....	.....	.....	3.9	4.2	.....	.....	.....	.....	5.7	5.3	.....	.....	.....	4.9	4.6
.....	.....	.....	.....	15.4	15.2	.....	.....	.....	.....	14.2	14.6	.....	.....	.....	16.6	16.3
.....	.....	.....	.....	19.1	19.2	.....	.....	.....	.....	18.3	18.3	.....	.....	.....	18.9	18.8
.....	.....	.....	.....	18.3	18.0	.....	.....	.....	.....	18.4	18.5	.....	.....	.....	18.5	19.1
.....	.....	.....	.....	16.2	16.0	.....	.....	.....	.....	16.0	15.7	.....	.....	.....	16.1	15.3
4.9	5.4	10.0	10.6	10.8	10.8	5.0	5.4	9.6	10.5	10.7	10.8	5.7	6.4	10.5	10.4	11.1	
43.3	43.3	53.2	54.1	55.8	57.0	54.0	54.0	58.5	59.0	61.0	61.6	58.0	60.0	71.5	78.0	80.7	
27.2	26.3	26.1	28.3	43.9	45.1	24.5	24.5	27.9	27.7	45.0	44.5	30.0	29.3	29.8	30.5	49.2	
.....	.....	16.9	19.5	31.8	31.7	.....	.....	16.7	19.5	31.8	30.3	.....	.....	17.2	21.3	29.7
.....	.....	14.7	15.2	19.9	22.2	.....	.....	13.3	14.6	20.1	21.2	.....	.....	14.6	15.1	22.0
.....	.....	.....	.....	37.2	38.2	.....	.....	.....	.....	37.9	40.0	.....	.....	.....	46.8	47.9
.....	.....	.....	.....	61.8	61.0	.....	.....	.....	.....	55.9	57.1	.....	.....	.....	52.4	53.2

³ Baked weight.
⁴ 8-ounce package.

⁵ 28-ounce package.
⁶ No. 2 can.

AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD FOR NOV 15,

Article.	Unit.	St. Louis, Mo.						San Francisco, Calif.						
		Nov. 15—				Oct. 15, 1919.	Nov. 15, 1919.	Nov. 15—				Oct. 15, 1919.	Nov. 15, 1919.	
		1913	1914	1917	1918			1913	1914	1917	1918			
		<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>
Sirloin steak.....	Lb.	26.6	27.3	29.6	37.3	34.5	34.5	21.0	21.0	24.0	33.0	29.5	29.1	
Round steak.....	Lb.	23.6	25.0	28.9	36.8	34.4	34.5	19.7	20.3	23.6	32.1	28.5	28.1	
Rib roast.....	Lb.	20.1	20.0	24.9	30.8	29.5	28.6	21.3	22.0	23.4	30.5	28.6	28.7	
Chuck roast.....	Lb.	16.0	16.5	20.5	25.3	21.3	20.8	15.5	15.5	16.7	23.9	20.4	20.4	
Plate beef.....	Lb.	12.4	14.2	16.7	20.9	17.7	17.5	14.3	14.8	16.2	22.1	16.9	17.3	
Pork chops.....	Lb.	17.8	20.3	30.1	39.5	39.7	36.7	24.2	24.5	36.3	44.9	43.0	43.2	
Bacon.....	Lb.	25.8	27.5	48.0	56.5	49.4	48.2	34.4	35.7	53.7	60.5	59.2	59.1	
Ham.....	Lb.	27.3	27.5	45.6	55.0	54.0	52.8	32.0	33.0	48.8	56.2	57.5	55.7	
Lamb.....	Lb.	18.3	19.3	29.5	32.6	31.1	32.2	17.0	18.8	28.9	34.5	32.4	31.4	
Hens.....	Lb.	16.5	18.0	24.8	32.2	32.8	31.9	24.8	24.3	33.4	49.9	47.3	47.9	
Salmon (canned).....	Lb.			28.5	31.9	33.4	34.2			25.0	28.1	31.6	33.4	
Milk, fresh.....	Qt.	8.8	8.8	13.0	14.0	16.0	16.0	10.0	10.0	12.1	14.0	14.7	15.0	
Milk, evaporated (unsweetened).....	(1)					15.8	16.2					15.1	15.2	
Butter.....	Lb.	38.1	38.5	52.2	67.3	72.1	78.5	40.4	38.8	50.1	68.3	73.5	74.3	
Oleomargarine.....	Lb.					39.9	40.5					38.8	38.5	
Nut margarine.....	Lb.					35.5	35.0					35.4	35.6	
Cheese.....	Lb.	20.3	21.8	35.3	42.6	40.7	41.3	21.0	21.0	32.4	39.3	44.7	44.4	
Lard.....	Lb.	12.9	14.5	31.5	31.6	32.2	31.5	17.7	17.9	32.2	33.6	37.4	36.8	
Crisco.....	Lb.					35.8	35.8					38.5	38.9	
Eggs, strictly fresh.....	Doz.	38.9	33.3	47.1	67.6	60.3	71.9	65.0	55.8	63.8	84.4	79.1	88.7	
Eggs, storage.....	Doz.	32.5	28.0	39.3	49.9	54.0	57.8	40.7	34.3	45.1	54.7	60.7	69.8	
Bread.....	Lb. ²	5.6	6.0	10.4	10.0	10.0	10.0	5.9	6.0	9.3	10.0	10.0	11.7	
Flour.....	Lb.	2.9	3.4	6.1	6.3	6.8	6.9	3.4	3.9	6.1	6.9	7.1	7.2	
Corn meal.....	Lb.	2.5	2.6	6.4	5.2	5.7	5.5	3.5	3.7	7.4	7.3	7.1	7.2	
Rolled oats.....	Lb.					6.5	6.4					8.6	8.5	
Corn flakes.....	(3)					13.4	13.2					14.2	14.2	
Cream of Wheat.....	(4)					24.3	24.4					24.7	24.6	
Macaroni.....	Lb.					18.2	18.0					14.7	15.8	
Rice.....	Lb.	8.1	8.7	11.2	13.7	16.9	16.8	8.5	8.5	10.8	14.1	15.3	16.0	
Beans, navy.....	Lb.			18.7	15.2	11.9	11.7			17.4	15.0	10.3	9.8	
Potatoes.....	Lb.	1.8	1.3	3.1	3.0	3.7	4.1	1.9	1.8	3.1	3.1	3.3	3.6	
Onions.....	Lb.			4.4	3.9	6.1	6.8			3.4	2.6	4.4	5.2	
Cabbage.....	Lb.					4.3	4.2							
Beans, baked.....	(5)					15.1	15.6					18.4	18.6	
Corn, canned.....	(5)					16.5	16.7					18.7	18.0	
Peas, canned.....	(5)					16.3	16.0					17.9	17.5	
Tomatoes, canned.....	(5)					14.5	15.2					13.3	13.4	
Sugar, granulated.....	Lb.	5.1	5.6	8.8	10.9	12.8	13.0	5.4	6.0	8.1	10.5	10.8	10.8	
Tea.....	Lb.	55.0	55.8	63.2	70.1	73.1	72.0	50.0	50.0	53.9	57.0	59.5	58.9	
Coffee.....	Lb.	24.4	24.8	28.2	28.7	45.7	46.7	32.0	32.0	30.5	31.4	45.3	44.7	
Prunes.....	Lb.			17.0	19.3	30.2	30.2			14.7	17.1	23.6	22.4	
Raisins.....	Lb.			16.8	17.4	21.3	22.6			13.2	13.8	18.3	20.3	
Bananas.....	Doz.					32.9	36.0					46.0	46.0	
Oranges.....	Doz.					49.9	44.4					54.2	57.7	

¹ 15-16 ounce can.² Baked weight.³ 8-ounce package.

PRICES AND COST OF LIVING.

1913, 1914, 1917, 1918, 1919, AND OCT. 15, 1919, FOR 19 CITIES—Concluded.

Seattle, Wash.						Washington, D. C.					
Nov. 15—				Oct. 15, 1919.	Nov. 15, 1919.	Nov. 15—				Oct. 15, 1919.	Nov. 15, 1919.
1913	1914	1917	1918			1913	1914	1917	1918		
<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>
23.6	22.8	26.7	36.3	36.0	35.2	26.5	27.1	36.0	51.0	48.8	47.9
20.6	20.8	25.3	35.3	33.4	32.6	22.5	24.4	33.2	47.8	44.4	43.3
20.0	19.0	22.1	31.2	29.3	28.5	21.0	21.0	27.7	39.4	36.8	37.0
15.6	14.6	18.3	25.9	22.5	22.2	17.6	17.8	23.7	34.8	29.6	29.0
12.8	12.4	15.4	21.1	18.3	17.8	12.8	12.7	18.4	23.7	18.9	18.6
24.0	23.5	39.6	47.9	48.9	45.1	21.4	23.4	37.0	51.3	49.8	45.2
32.0	33.8	52.2	62.8	61.5	59.2	26.4	26.8	49.2	58.9	52.6	50.0
30.0	30.0	43.4	52.4	58.1	56.5	31.3	31.2	43.2	57.1	58.4	56.3
18.4	17.6	29.6	35.4	32.3	32.2	19.1	21.0	33.7	40.9	38.4	39.0
24.2	23.0	28.3	39.3	42.8	42.3	21.3	20.0	31.1	44.5	45.8	45.3
.....	.....	28.8	30.5	34.1	34.2	.....	.....	26.9	33.9	33.0	34.5
10.0	9.5	12.0	15.0	15.0	15.0	9.0	9.0	14.0	17.0	18.0	18.0
.....	.....	.....	.....	15.4	15.5	.....	.....	.....	.....	16.1	16.5
40.8	39.4	54.2	68.9	73.9	74.5	40.3	41.4	53.4	70.0	74.1	78.1
.....	.....	.....	.....	40.2	40.4	.....	.....	.....	.....	43.0	42.6
.....	.....	.....	.....	36.8	36.7	.....	.....	.....	.....	35.3	35.5
22.8	21.4	30.8	38.8	43.0	43.0	23.5	23.5	35.4	39.5	42.8	42.5
16.9	16.0	30.7	33.8	38.5	39.1	15.0	14.6	32.5	34.8	35.6	36.1
.....	.....	.....	.....	41.2	42.1	.....	.....	.....	.....	37.2	37.7
59.2	57.9	66.6	88.1	82.5	90.1	47.9	42.3	64.5	78.2	71.7	84.3
37.5	33.6	48.8	57.4	64.8	66.6	35.0	32.5	45.3	57.6	60.5	62.1
5.6	6.0	10.4	10.3	11.5	11.5	5.7	5.7	10.1	10.1	10.1	9.9
2.9	3.4	5.9	6.3	6.6	6.8	3.8	4.1	7.3	6.9	7.8	7.7
3.2	3.4	7.4	7.3	7.4	7.3	2.6	2.8	6.7	5.8	5.6	5.6
.....	.....	.....	.....	8.7	8.7	.....	.....	.....	.....	10.3	10.6
.....	.....	.....	.....	14.8	14.9	.....	.....	.....	.....	13.9	14.0
.....	.....	.....	.....	27.1	27.5	.....	.....	.....	.....	24.6	24.8
.....	.....	.....	.....	16.5	16.3	.....	.....	.....	.....	19.9	20.4
7.7	8.6	11.1	14.5	18.1	18.3	9.4	9.4	12.1	14.4	18.2	18.1
.....	.....	18.7	16.8	11.8	11.9	.....	.....	20.1	15.4	12.6	12.6
1.4	1.3	2.2	2.5	3.0	3.7	1.8	1.4	3.3	3.3	3.9	3.7
.....	.....	4.5	4.0	5.5	7.1	.....	.....	5.2	3.5	6.6	6.7
.....	.....	.....	.....	4.6	4.9	.....	.....	.....	.....	5.2	4.5
.....	.....	.....	.....	21.5	21.6	.....	.....	.....	.....	14.9	14.7
.....	.....	.....	.....	20.4	20.3	.....	.....	.....	.....	19.1	18.9
.....	.....	.....	.....	21.3	20.6	.....	.....	.....	.....	18.6	19.0
.....	.....	.....	.....	17.7	17.6	.....	.....	.....	.....	16.8	17.4
6.1	6.6	8.9	10.9	10.9	11.6	5.1	5.7	9.6	10.5	11.1	11.5
50.0	50.0	55.0	60.4	63.3	63.2	57.5	57.5	63.0	72.1	77.9	75.9
28.0	30.0	31.2	32.1	47.8	48.2	28.8	28.8	28.6	29.7	48.4	47.7
.....	.....	14.4	17.7	27.3	27.7	.....	.....	17.7	20.4	32.1	31.3
.....	.....	13.4	15.2	21.3	22.4	.....	.....	14.8	16.0	21.2	22.8
.....	.....	.....	.....	50.0	50.0	.....	.....	.....	.....	44.2	44.8
.....	.....	.....	.....	56.1	56.6	.....	.....	.....	.....	56.3	57.6

*28-ounce package.

†No. 2 can.

‡Pound.

RETAIL PRICES OF THE PRINCIPAL ARTICLES OF

Article.	Unit.	Bridgeport, Conn.		Butte, Mont.		Charleston, S. C.		Cincinnati, Ohio.		Columbus, Ohio.	
		Oct. 15, 1919.	Nov. 15, 1919.	Oct. 15, 1919.	Nov. 15, 1919.	Oct. 15, 1919.	Nov. 15, 1919.	Oct. 15, 1919.	Nov. 15, 1919.	Oct. 15, 1919.	Nov. 15, 1919.
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Sirloin steak.....	Lb...	50.3	51.1	31.8	31.8	37.0	37.0	30.8	30.8	33.4	35.9
Round steak.....	Lb...	47.8	46.9	26.7	27.1	36.4	37.2	29.8	29.5	34.4	32.9
Rib roast.....	Lb...	36.5	37.3	24.9	24.1	30.0	30.0	25.4	25.7	30.0	28.7
Chuck roast.....	Lb...	28.5	29.2	17.4	17.9	24.2	25.4	19.2	19.1	25.8	25.1
Plate beef.....	Lb...	15.5	15.9	11.8	12.7	18.8	18.8	17.5	17.4	18.5	18.5
Pork chops.....	Lb...	47.7	45.0	44.2	40.9	44.4	44.7	40.8	38.1	38.0	37.3
Bacon.....	Lb...	55.2	54.8	62.0	60.0	56.0	55.4	46.5	44.8	49.2	49.1
Ham.....	Lb...	61.3	59.8	59.6	59.5	52.3	53.0	52.5	49.5	54.2	51.6
Lamb.....	Lb...	36.2	35.4	27.7	26.9	30.2	41.1	37.0	29.4	27.5	30.0
Hens.....	Lb...	44.0	43.5	32.8	30.6	49.2	47.9	38.3	36.6	37.7	32.1
Salmon (canned).....	Lb...	37.8	37.9	44.0	43.2	32.4	33.1	34.3	35.5	34.3	31.9
Milk, fresh.....	Qt.	16.0	18.0	15.5	15.6	23.5	24.7	14.9	15.0	14.0	14.7
Milk, evaporated (unsweetened).....	(²)	16.8	16.6	17.9	18.3	16.7	16.0	15.5	16.2	16.7	16.5
Butter.....	Lb...	66.3	69.7	68.7	70.2	68.6	73.6	72.1	76.4	73.1	77.2
Oleomargarine.....	Lb...	41.8	41.3	45.0	46.3	45.0	45.0	41.1	42.0	42.4	42.7
Nut margarine.....	Lb...	35.4	35.4	.....	.....	45.7	45.7	34.3	34.6	35.0	35.2
Cheese.....	Lb...	42.6	43.2	44.7	46.3	41.2	41.9	41.7	43.4	42.2	43.0
Lard.....	Lb...	35.8	35.6	38.8	38.6	37.3	38.3	32.1	32.1	33.7	34.2
Crisco.....	Lb...	36.5	36.3	43.7	44.0	37.9	39.0	34.5	35.1	36.2	36.5
Eggs, strictly fresh.....	Doz.	87.6	96.3	73.9	87.1	56.7	68.6	63.0	74.0	64.2	77.2
Eggs, storage.....	Doz.	60.2	62.2	60.0	62.8	54.8	57.0	55.5	59.3	56.2	60.6
Bread.....	Lb ³	10.7	10.4	12.3	12.4	10.0	10.0	9.9	9.9	9.8	9.8
Flour.....	Lb...	7.3	7.4	8.0	8.1	7.8	7.7	7.1	7.4	6.9	6.9
Corn meal.....	Lb...	7.9	8.8	7.9	8.0	5.7	5.3	6.0	5.5	6.3	5.8
Rolled oats.....	Lb...	9.7	9.7	9.3	9.4	10.4	10.4	8.2	7.3	9.4	10.2
Corn flakes.....	(⁴)	13.5	13.5	14.6	14.5	14.9	14.9	13.8	13.9	14.3	14.1
Cream of Wheat.....	(⁵)	23.9	23.8	30.0	30.0	25.0	25.0	24.8	24.8	25.0	24.9
Macaroni.....	Lb...	22.5	23.0	20.0	20.3	21.1	20.9	16.7	17.1	18.6	19.8
Rice.....	Lb...	16.9	17.0	15.3	16.7	14.4	14.8	17.4	17.8	17.5	18.2
Beans, navy.....	Lb...	11.8	11.5	13.4	12.9	14.5	14.8	10.9	10.7	11.6	11.3
Potatoes.....	Lb...	3.4	3.5	2.7	3.5	4.7	4.7	4.3	4.3	4.4	4.1
Onions.....	Lb...	6.2	6.3	5.7	6.5	7.5	7.9	5.8	6.5	6.8	7.4
Cabbage.....	Lb...	4.3	4.4	4.8	5.1	6.4	5.9	4.6	4.5	5.7	5.1
Beans, baked.....	(⁶)	16.5	16.2	22.4	22.2	15.4	15.4	15.2	15.7	16.7	16.6
Corn, canned.....	(⁶)	21.9	21.3	18.4	18.8	21.2	21.0	17.2	16.7	16.4	16.5
Peas, canned.....	(⁶)	20.5	20.0	18.6	18.8	22.1	21.8	17.6	17.1	16.4	16.5
Tomatoes, canned.....	(⁶)	16.3	16.2	18.0	17.9	15.6	15.6	15.1	15.3	15.3	14.9
Sugar, granulated.....	Lb...	11.0	11.0	12.4	13.7	10.9	11.1	11.4	14.4	11.1	12.6
Tea.....	Lb...	63.0	60.8	75.0	74.4	81.2	81.3	77.3	77.1	82.1	82.1
Coffee.....	Lb...	46.7	47.6	58.1	56.8	47.6	48.4	42.4	42.5	50.5	49.3
Prunes.....	Lb...	29.9	29.2	27.0	26.5	29.2	30.0	26.2	28.3	24.5	31.5
Raisins.....	Lb...	21.8	23.0	19.4	21.5	21.3	22.5	20.2	22.1	21.8	24.2
Bananas.....	Doz.	38.7	40.6	47.5	47.5	42.9	44.0	36.4	39.0	39.1	42.1
Oranges.....	Doz.	61.0	61.2	53.8	56.6	51.5	47.0	46.6	41.9	51.5	53.1

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

² 15-16 ounce can.

PRICES AND COST OF LIVING.

FOOD FOR 31 CITIES ON OCT. 15 AND NOV. 15, 1919.

Dallas, Tex.		Fall River, Mass.		Houston, Tex.		Indianapolis, Ind.		Jacksonville, Fla.		Kansas City, Mo.	
Oct. 15, 1919.	Nov. 15, 1919.	Oct. 15, 1919.	Nov. 15, 1919.	Oct. 15, 1919.	Nov. 15, 1919.	Oct. 15, 1919.	Nov. 15, 1919.	Oct. 15, 1919.	Nov. 15, 1919.	Oct. 15, 1919.	Nov. 15, 1919.
<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>
34.2	36.9	¹ 59.8	¹ 59.5	32.5	32.8	33.7	35.2	37.9	38.8	34.8	34.5
32.9	36.6	48.9	47.1	32.5	32.8	33.4	34.4	35.5	36.1	31.9	31.5
29.8	31.3	33.9	34.4	25.8	26.7	25.3	26.9	27.7	28.5	26.0	25.7
24.2	26.4	26.3	26.6	22.4	22.5	22.6	24.3	23.0	22.8	20.5	19.8
21.8	22.9	-----	-----	18.3	18.8	16.7	17.4	16.0	16.1	15.7	15.0
42.3	44.8	46.5	43.9	41.0	41.8	40.5	39.6	42.7	43.7	41.3	37.4
56.9	53.6	49.8	49.0	64.1	59.3	51.1	49.3	55.5	52.9	55.2	52.7
55.0	57.1	54.3	52.6	50.0	50.0	54.7	53.4	52.7	50.8	54.0	53.2
37.0	32.5	33.9	33.5	38.3	35.6	37.5	35.0	34.0	34.3	28.9	29.1
35.0	35.3	46.7	46.3	33.3	37.8	36.0	34.4	43.2	43.4	33.8	33.8
35.5	36.9	33.4	33.6	32.8	33.8	28.2	28.3	34.4	37.5	32.9	33.1
19.0	21.0	15.0	15.7	19.8	20.0	13.7	14.0	20.0	20.0	15.3	16.0
17.2	18.1	16.2	16.6	16.8	16.5	16.9	17.2	16.6	16.8	17.3	17.7
67.1	71.8	66.0	68.9	68.9	74.3	71.5	75.7	72.9	77.1	70.8	76.4
37.5	37.0	40.1	41.4	43.1	42.9	44.3	44.1	43.3	43.6	41.2	41.3
36.9	35.7	36.3	36.5	37.3	37.3	35.2	35.6	38.3	39.0	35.9	35.4
42.8	43.3	42.9	42.6	39.1	39.6	42.3	45.1	40.6	41.2	44.1	44.4
34.9	36.8	35.3	35.6	34.2	33.7	33.4	34.0	35.5	35.6	37.8	38.3
36.1	36.8	37.3	36.9	33.7	33.8	37.3	37.5	37.4	38.4	39.3	39.8
57.5	65.0	91.6	106.3	57.2	67.7	65.6	74.7	68.8	76.3	63.0	70.9
-----	61.3	60.9	63.1	52.5	56.6	57.8	59.4	57.0	60.0	50.0	59.3
10.0	10.0	10.9	10.9	9.2	9.2	9.7	9.7	10.0	10.0	10.0	10.0
7.3	7.6	7.7	7.7	7.3	7.4	7.2	7.1	7.7	7.7	6.7	7.0
6.3	6.9	8.4	8.8	5.9	6.0	6.1	5.6	5.7	5.5	7.0	6.9
10.8	10.9	9.7	9.8	9.8	9.8	9.4	10.0	19.9	10.8	11.1	11.6
13.9	13.9	14.5	14.2	14.5	14.6	14.8	14.7	15.1	15.0	15.0	15.0
26.4	27.0	25.1	25.5	24.8	24.8	25.6	25.1	25.0	25.2	26.1	25.9
20.0	19.4	22.5	22.9	19.6	20.1	20.8	21.5	20.7	20.6	18.7	19.0
18.8	18.6	17.2	17.3	15.9	16.1	19.5	19.4	16.2	16.1	19.1	18.7
13.4	13.7	12.0	12.1	12.6	12.4	12.1	11.9	14.2	13.9	13.0	12.3
5.0	5.1	3.6	3.5	4.4	4.6	3.7	3.9	4.8	4.8	4.1	4.3
6.2	7.1	7.1	7.1	6.3	6.9	7.1	7.6	7.7	8.0	7.6	7.9
5.8	6.3	4.4	4.4	5.5	5.6	4.8	4.7	6.5	6.4	4.4	4.5
18.6	18.8	16.5	16.4	18.2	18.3	18.1	18.1	17.8	17.4	17.0	17.3
20.0	21.3	20.0	20.5	17.9	17.9	18.0	18.4	20.2	20.9	16.4	16.4
20.3	21.6	20.9	20.8	19.6	19.7	17.1	17.5	22.1	21.4	16.4	16.8
15.1	15.3	16.1	16.9	14.4	14.6	16.2	15.9	15.4	15.4	15.8	15.5
11.9	12.8	11.0	11.3	11.3	11.3	11.3	13.3	11.3	13.2	12.7	13.0
85.4	76.0	59.0	59.5	65.4	64.4	84.7	85.0	86.9	84.3	81.7	78.8
53.3	55.0	49.2	50.3	44.5	45.7	51.4	51.0	53.7	53.8	48.3	47.5
31.3	30.2	25.1	25.8	28.2	28.1	30.0	31.3	33.3	33.7	31.9	29.6
21.3	22.8	22.3	23.2	19.1	18.5	24.4	24.7	25.3	25.1	23.3	25.4
39.3	41.0	39.8	40.3	37.1	39.2	30.6	34.3	38.3	40.0	46.0	51.7
50.5	59.9	52.6	49.2	49.3	49.2	49.1	49.9	45.0	35.0	53.0	57.3

³ Baked weight.
⁴ 8-ounce package.

⁵ 25-ounce package.
⁶ No. 2 can.

RETAIL PRICES OF THE PRINCIPAL ARTICLES OF

Article.	Unit.	Little Rock, Ark.		Louisville, Ky.		Manchester, N. H.		Memphis, Tenn.	
		Oct. 15, 1919.	Nov. 15, 1919.	Oct. 15, 1919.	Nov. 15, 1919.	Oct. 15, 1919.	Nov. 15, 1919.	Oct. 15, 1919.	Nov. 15, 1919.
		<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>
Sirloin steak.....	Lb...	35.6	34.7	33.3	33.1	¹ 54.6	¹ 54.5	36.5	36.3
Round steak.....	Lb...	33.3	32.5	31.3	30.4	49.2	47.8	34.0	33.6
Rib roast.....	Lb...	30.0	27.9	27.2	26.2	31.6	30.3	29.3	28.2
Chuck roast.....	Lb...	23.7	23.7	22.8	22.3	28.1	26.6	24.2	22.8
Plate beef.....	Lb...	17.8	17.7	19.1	18.5			18.8	18.1
Pork chops.....	Lb...	43.8	41.3	42.1	37.6	48.1	44.3	42.4	40.7
Bacon.....	Lb...	55.5	55.9	54.8	52.0	50.1	47.8	55.9	53.6
Ham.....	Lb...	53.5	53.2	53.9	48.8	51.3	48.9	54.1	54.6
Lamb.....	Lb...	36.9	35.6	30.0	29.2	35.4	36.1	37.5	38.0
Hens.....	Lb...	36.3	34.4	37.6	37.9	46.4	45.9	37.2	36.6
Salmon (canned).....	Lb...	34.2	34.2	31.8	32.3	35.5	36.2	36.2	35.7
Milk, fresh.....	Qt.	20.0	20.0	15.0	15.0	15.0	15.0	18.0	19.3
Milk, evaporated (unsweet- ened).....	(²)...	18.1	18.2	16.5	17.2	17.7	18.1	17.8	17.3
Butter.....	Lb...	69.7	73.8	72.0	77.5	70.9	76.4	72.7	76.9
Oleomargarine.....	Lb...	44.5	43.5	44.7	43.8	42.9	43.4	43.1	43.1
Nut margarine.....	Lb...	38.5	37.8	35.0	33.5	33.5	34.8	42.3	40.8
Cheese.....	Lb...	41.4	42.5	40.7	41.8	42.9	42.9	41.2	42.1
Lard.....	Lb...	38.5	39.8	34.7	34.8	36.9	37.8	36.3	36.6
Crisco.....	Lb...	39.5	39.8	35.0	35.2	38.2	38.6	37.9	36.8
Eggs, strictly fresh.....	Doz..	59.8	68.6	60.5	74.7	84.4	104.5	63.6	68.7
Eggs, storage.....	Doz..	57.0	61.4	55.0	59.3	60.9	63.8	57.5	56.3
Bread.....	Lb. ³	10.0	10.0	10.0	10.0	9.5	9.5	10.0	10.0
Flour.....	Lb...	7.4	7.4	7.3	7.3	7.7	7.9	7.4	7.4
Corn meal.....	Lb...	5.8	5.6	5.5	5.2	7.4	7.4	5.5	5.3
Rolled oats.....	Lb...	11.1	11.1	9.7	9.8	9.7	9.7	10.8	10.9
Corn flakes.....	(⁴)...	14.8	14.6	14.0	14.0	14.9	14.9	14.3	14.2
Cream of Wheat.....	(⁵)...	25.4	25.4	25.7	25.9	25.1	25.0	24.4	24.3
Macaroni.....	Lb...	18.6	19.0	18.0	17.5	23.5	24.0	19.7	18.7
Rice.....	Lb...	17.4	17.0	18.4	18.5	16.7	17.1	16.6	16.5
Beans, navy.....	Lb...	13.6	13.1	12.4	12.1	12.4	12.5	13.6	13.9
Potatoes.....	Lb...	4.1	4.2	3.9	3.7	3.2	3.4	4.6	4.5
Onions.....	Lb...	7.2	8.0	5.3	5.8	6.3	6.3	6.9	7.9
Cabbage.....	Lb...	5.3	5.7	4.8	4.6	3.5	3.7	5.3	5.1
Beans, baked.....	(⁶)...	17.1	16.6	16.1	15.8	18.2	18.4	18.7	18.0
Corn, canned.....	(⁶)...	17.8	17.9	17.9	18.0	21.8	21.8	18.8	18.3
Peas, canned.....	(⁶)...	18.2	18.4	17.9	17.9	21.0	21.3	18.8	18.5
Tomatoes, canned.....	(⁶)...	15.0	14.9	15.0	15.3	17.5	18.3	16.2	16.2
Sugar, granulated.....	Lb...	12.0	17.6	11.1	11.7	11.2	11.2	11.5	21.5
Tea.....	Lb...	86.4	87.4	79.1	79.9	61.9	61.9	89.9	89.9
Coffee.....	Lb...	52.5	51.7	48.1	49.3	51.0	51.9	53.5	52.3
Prunes.....	Lb...	20.7	27.5	27.2	29.8	27.6	28.5	28.4	35.8
Raisins.....	Lb...	23.3	23.2	20.5	23.1	23.0	24.4	21.3	24.2
Bananas.....	Doz..	34.4	36.3	37.1	36.7	40.0	38.8	40.5	40.6
Oranges.....	Doz..	54.7	52.9	44.5	45.0	56.1	56.6	55.3	49.0

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

² 15-16 ounce can.

PRICES AND COST OF LIVING.

FOOD FOR 31 CITIES ON OCT. 15 AND NOV. 15, 1919—Continued.

Minneapolis, Minn.		Mobile, Ala.		Newark, N. J.		New Haven, Conn.		Norfolk, Va.		Omaha, Nebr.	
Oct. 15, 1919.	Nov. 15, 1919.	Oct. 15, 1919.	Nov. 15, 1919.	Oct. 15, 1919.	Nov. 15, 1919.	Oct. 15, 1919.	Nov. 15, 1919.	Oct. 15, 1919.	Nov. 15, 1919.	Oct. 15, 1919.	Nov. 15, 1919.
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
32.4	31.9	32.9	32.7	44.1	44.6	52.6	52.7	44.1	44.9	36.4	34.8
29.1	29.5	32.3	32.3	45.0	45.2	47.7	46.9	39.9	40.0	32.5	31.6
25.4	25.9	30.0	29.5	35.9	35.8	37.6	36.9	36.6	34.8	26.0	25.8
20.8	20.4	23.9	23.4	27.6	26.3	30.9	30.6	26.6	25.9	22.2	21.0
13.9	13.8	19.8	19.3	18.9	18.5	-----	-----	18.8	18.3	16.2	15.0
40.1	36.8	45.9	46.8	47.2	44.7	48.1	43.6	43.0	42.3	41.1	38.6
55.4	54.5	60.0	58.8	47.6	46.1	54.7	53.7	52.6	50.6	56.3	54.7
54.2	51.0	54.5	52.3	50.0	50.0	57.9	55.2	48.3	50.0	56.5	55.0
27.6	28.9	35.0	33.6	36.6	35.4	37.8	37.1	38.3	37.4	32.0	31.9
30.1	28.8	43.8	41.4	41.5	41.6	46.4	45.6	46.0	44.8	33.5	32.9
42.1	41.9	33.3	34.5	35.4	37.8	36.6	36.5	30.7	34.7	37.1	37.5
13.0	13.0	17.5	22.0	16.7	17.3	16.0	16.0	21.0	21.0	15.2	15.2
17.7	17.8	17.6	18.0	15.7	15.7	16.5	16.5	16.0	16.2	17.5	17.6
66.6	71.9	70.9	76.9	75.3	79.1	66.3	70.4	72.6	76.4	70.9	75.8
41.1	41.4	44.9	44.5	42.7	42.5	42.9	43.1	47.2	45.8	44.2	44.2
33.1	33.1	41.8	40.9	35.7	35.5	36.4	36.2	39.0	39.0	35.3	35.8
40.2	41.4	41.2	43.7	43.9	43.9	42.7	42.8	41.6	41.7	42.5	43.6
35.0	35.5	37.2	38.9	38.6	37.2	35.5	36.4	37.8	39.2	38.1	37.6
38.0	38.0	36.5	38.9	36.4	36.2	35.7	35.6	38.3	37.8	40.0	39.7
62.9	71.8	61.4	75.0	82.7	86.6	84.9	96.5	64.3	75.7	64.3	73.2
55.0	58.5	58.0	64.5	63.1	64.3	59.1	63.3	57.3	61.8	56.4	59.5
9.6	9.6	9.6	9.6	9.8	9.8	10.6	10.6	9.9	9.9	10.0	10.0
7.2	7.4	7.1	7.1	7.4	7.5	7.2	7.5	7.5	7.6	6.8	7.0
6.3	6.4	6.3	6.0	7.5	7.3	7.5	7.8	6.0	5.9	6.6	6.7
7.7	7.7	11.1	11.2	8.9	8.9	9.9	9.6	10.2	10.1	9.0	9.2
14.5	14.6	14.7	14.7	12.4	12.3	13.9	14.2	14.6	14.4	14.7	15.0
25.2	25.4	25.5	25.2	23.9	24.1	24.4	24.5	25.5	25.8	25.6	25.9
17.2	17.3	19.2	19.1	21.0	21.8	20.8	20.7	19.2	19.3	19.5	21.6
17.8	18.8	16.6	16.2	17.1	17.2	17.3	17.4	18.1	19.0	18.2	18.6
11.6	11.6	14.1	14.2	12.7	12.3	12.4	12.1	13.5	14.0	13.4	13.2
3.5	3.4	4.8	4.8	4.5	4.3	3.3	3.5	4.3	4.0	4.2	4.3
5.9	6.7	7.3	7.3	6.8	7.3	6.9	7.2	7.5	7.8	6.6	7.8
2.8	3.8	5.2	5.6	4.8	4.4	3.8	3.7	5.2	4.6	4.1	4.4
18.7	18.4	18.5	18.2	15.0	14.9	17.7	17.6	14.3	14.1	20.1	20.0
17.4	17.5	19.5	19.8	20.7	20.6	21.9	21.7	20.5	20.8	17.8	18.3
17.1	16.9	18.9	19.6	19.9	19.8	21.6	22.1	21.7	21.2	18.4	18.9
16.7	16.4	15.8	15.7	15.2	15.8	16.1	16.1	17.5	18.0	17.2	17.5
12.3	13.4	11.3	23.0	10.9	11.0	11.1	11.6	11.3	11.5	12.1	13.1
64.5	62.6	79.2	78.4	56.4	56.6	61.4	62.9	80.9	83.7	76.6	76.9
53.1	53.0	46.3	46.2	45.8	46.1	50.0	50.5	52.1	52.1	52.2	52.4
27.9	29.4	27.1	27.8	29.9	28.2	29.2	28.9	28.3	31.3	29.4	29.9
18.4	19.4	19.8	25.2	19.9	21.6	20.9	24.1	21.1	21.8	23.9	25.8
41.7	44.3	30.5	30.0	39.1	40.4	35.8	37.9	38.9	39.5	43.8	46.3
57.8	57.8	56.1	41.7	63.8	65.0	56.4	61.3	53.6	50.0	55.9	58.9

³ Baked weight.
⁴ 8-ounce package.

⁵ 28-ounce package.
⁶ No. 2 can.

RETAIL PRICES OF THE PRINCIPAL ARTICLES OF

Article.	Unit.	Peoria, Ill.		Portland, Me.		Portland, Oreg.		Providence, R. I.	
		Oct. 15, 1919.	Nov. 15, 1919.	Oct. 15, 1919.	Nov. 15, 1919.	Oct. 15, 1919.	Nov. 15, 1919.	Oct. 15, 1919.	Nov. 15, 1919.
		<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>
Sirloin steak.....	Lb...	33.2	32.5	¹ 56.4	¹ 55.3	30.5	30.6	66.3	65.3
Round steak.....	Lb...	31.7	30.3	47.5	46.8	29.8	29.1	55.0	53.6
Rib roast.....	Lb...	24.8	24.3	31.1	31.1	28.2	27.9	41.2	42.0
Chuck roast.....	Lb...	21.6	21.2	24.8	24.4	21.6	20.9	35.6	34.8
Plate beef.....	Lb...	16.0	15.3	.....	.....	15.5	15.9	.....	.....
Pork chops.....	Lb...	39.1	34.9	47.6	47.6	44.8	41.5	53.3	48.7
Bacon.....	Lb...	54.9	51.2	49.9	48.8	58.6	55.6	50.2	48.1
Ham.....	Lb...	54.9	52.3	54.5	52.8	57.5	52.9	62.7	61.1
Lamb.....	Lb...	33.6	31.3	34.1	33.5	31.0	30.7	40.9	41.4
Hens.....	Lb...	34.7	32.5	46.2	45.4	38.3	37.5	48.5	47.2
Salmon (canned).....	Lb...	32.9	33.3	33.3	34.9	39.1	40.8	39.8	40.0
Milk, fresh.....	Qt...	14.3	14.3	14.5	15.0	15.9	15.9	16.5	17.0
Milk, evaporated (unsweetened).	(²)	17.6	17.7	17.3	17.4	17.1	17.2	17.2	17.4
Butter.....	Lb...	69.3	72.9	71.3	76.9	74.1	74.1	67.9	72.3
Oleomargarine.....	Lb...	44.3	44.5	44.0	44.6	43.1	43.0	41.0	40.5
Nut margarine.....	Lb...	35.9	35.5	35.9	35.9	38.5	38.6	34.6	35.0
Cheese.....	Lb...	43.3	43.7	44.4	44.8	42.9	43.8	42.2	42.8
Lard.....	Lb...	36.7	36.1	36.2	37.1	40.9	40.7	36.4	36.6
Crisco.....	Lb...	39.5	38.7	38.3	38.0	41.9	42.1	37.4	37.4
Eggs, strictly fresh.....	Doz...	63.2	74.4	81.8	98.3	74.6	87.9	87.7	104.7
Eggs, storage.....	Doz...	57.0	60.8	60.9	67.4	64.2	69.5	61.4	62.8
Bread.....	Lb 8...	10.0	10.0	11.0	11.0	9.9	10.7	10.6	10.6
Flour.....	Lb...	7.7	8.0	7.4	7.6	6.5	6.8	7.9	8.0
Corn meal.....	Lb...	6.5	6.3	7.0	6.9	7.7	7.6	6.6	6.4
Rollod oats.....	Lb...	9.5	9.1	8.2	8.3	9.0	9.1	8.9	9.3
Corn flakes.....	(⁴)	14.7	14.7	14.3	14.3	14.5	14.6	14.1	13.9
Cream of Wheat.....	(⁵)	26.6	26.0	25.0	25.2	27.9	28.2	24.8	24.7
Macaroni.....	Lb...	19.1	19.1	22.7	23.0	19.1	18.7	21.7	22.6
Rice.....	Lb...	17.5	17.9	15.7	16.6	17.1	18.8	17.4	17.4
Beans, navy.....	Lb...	12.4	12.2	12.0	12.1	11.9	11.8	11.9	11.7
Potatoes.....	Lb...	3.6	3.6	2.9	3.4	3.1	3.3	3.6	3.7
Onions.....	Lb...	7.3	7.5	6.0	6.3	4.9	5.6	6.2	6.6
Cabbage.....	Lb...	4.5	4.4	2.3	2.7	3.7	3.4	3.8	4.1
Beans, baked.....	(⁶)	18.5	18.0	19.3	20.0	23.4	21.9	16.8	16.4
Corn, canned.....	(⁶)	17.4	17.4	21.0	19.8	22.3	22.3	20.2	20.0
Peas, canned.....	(⁶)	18.6	18.5	20.7	20.8	22.3	22.5	20.2	19.8
Tomatoes, canned.....	(⁶)	16.3	15.9	19.5	19.0	18.7	18.4	16.8	17.3
Sugar, granulated.....	Lb...	12.0	13.1	10.9	11.0	11.0	11.8	11.0	11.1
Tea.....	Lb...	73.4	73.7	63.5	63.6	63.2	63.2	59.9	60.2
Coffee.....	Lb...	48.9	46.9	50.6	51.0	50.7	50.4	52.2	52.1
Prunes.....	Lb...	30.4	31.7	27.6	28.1	23.9	25.2	30.5	29.0
Raisins.....	Lb...	21.4	22.4	20.6	24.3	19.7	20.9	21.4	22.8
Bananas.....	Doz...	⁷ 10.5	⁷ 11.0	37.1	38.3	43.8	45.0	39.3	42.0
Oranges.....	Doz...	32.5	53.7	61.5	64.7	59.6	64.6	66.2	64.3

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

² 15-16 ounce can.

PRICES AND COST OF LIVING.

FOOD FOR 31 CITIES ON OCT. 15 AND NOV. 15, 1919—Concluded.

Richmond, Va.		Rochester, N. Y.		St. Paul, Minn.		Salt Lake, Utah.		Scranton, Pa.		Springfield, Ill.	
Oct. 15, 1919.	Nov. 15, 1919.	Oct. 15, 1919.	Nov. 15, 1919.	Oct. 15, 1919.	Nov. 15, 1919.	Oct. 15, 1919.	Nov. 15, 1919.	Oct. 15, 1919.	Nov. 15, 1919.	Oct. 15, 1919.	Nov. 15, 1919.
<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>
42.2	42.3	38.8	38.0	33.4	31.3	33.2	30.9	44.1	43.2	33.4	31.5
38.9	38.5	36.3	35.0	29.3	27.5	29.6	28.8	38.8	37.5	32.7	31.4
34.7	32.7	30.9	30.6	27.1	27.3	25.4	25.3	34.9	34.4	24.5	22.8
28.8	27.9	27.8	27.2	22.3	21.9	21.3	20.8	28.9	27.5	20.5	19.9
23.2	22.3	18.9	18.8	14.4	13.7	15.8	15.1	18.8	17.4	16.3	15.5
44.4	43.1	44.8	41.4	38.4	35.4	43.5	41.3	48.1	45.1	39.5	37.6
51.5	48.5	43.6	42.4	48.6	47.4	53.7	53.7	57.0	53.7	50.0	45.7
51.8	49.0	50.9	49.1	52.1	48.8	55.8	53.0	55.0	50.0	51.3	48.8
40.4	39.4	32.0	30.1	25.7	25.9	27.3	27.4	41.6	39.9	33.3	33.3
45.0	41.3	43.4	41.1	30.3	28.9	34.4	35.6	46.6	45.5	31.0	33.0
27.2	27.4	33.7	35.8	36.8	36.9	33.8	35.0	37.4	39.2	35.3	35.6
15.7	16.7	14.0	14.5	13.0	13.0	12.5	12.5	14.0	15.0	16.7	16.7
17.1	17.1	16.8	17.3	17.4	17.4	17.0	16.9	15.8	16.1	18.2	18.3
73.6	79.8	69.4	72.9	66.9	72.9	70.3	74.4	66.2	69.6	72.7	77.8
43.9	43.8	43.1	44.6	40.5	41.1	42.8	42.9	43.4	44.4	44.3	45.4
36.8	37.3	34.3	34.6	34.6	34.6	38.4	39.3	36.9	37.6	36.3	36.0
43.5	43.4	41.2	42.0	40.8	41.9	42.9	42.7	41.5	41.1	43.5	44.6
36.4	37.4	35.8	36.4	35.5	35.4	39.7	39.8	37.1	37.5	36.3	36.3
38.6	38.7	36.1	36.7	41.0	41.2	42.9	42.3	37.5	37.9	41.9	40.2
64.0	76.9	74.2	94.4	62.4	73.8	70.4	82.7	72.6	88.6	61.1	72.8
60.2	64.5	58.5	61.2	56.9	60.5	58.9	65.2	59.9	63.1	58.0	61.1
10.6	11.1	10.0	10.0	9.2	9.4	10.1	10.1	10.0	10.0	10.0	10.0
7.6	7.7	7.4	7.5	7.3	7.5	6.1	6.2	7.8	7.9	7.4	7.6
6.3	6.1	6.9	7.0	6.6	6.5	7.3	7.4	9.0	8.7	6.5	6.7
10.8	10.8	7.1	7.4	8.0	7.8	8.9	9.2	10.5	10.4	10.1	10.4
14.8	14.7	13.6	13.8	14.5	14.4	14.8	14.7	14.2	14.2	15.0	14.9
25.7	25.7	24.5	24.8	25.5	25.6	26.4	26.1	25.4	25.4	27.1	27.5
18.6	18.7	20.5	20.8	19.2	19.2	19.5	19.0	21.6	21.8	19.8	18.9
17.8	19.1	17.8	18.0	18.6	19.0	17.7	17.8	18.0	18.0	18.4	18.8
14.0	14.0	12.1	12.1	11.9	12.0	13.0	12.9	15.2	14.8	12.8	12.7
4.8	4.8	2.7	2.9	3.2	3.2	3.1	3.3	3.4	3.4	3.8	4.1
6.5	6.9	6.2	6.4	6.2	6.7	4.6	6.1	6.7	6.3	6.6	6.9
5.7	5.1	3.5	3.4	2.5	3.5	4.6	5.4	2.5	3.0	4.3	4.4
14.7	14.9	14.8	15.2	18.9	19.3	19.4	19.3	16.5	16.3	18.6	18.2
19.2	19.4	19.5	19.8	17.5	18.0	18.1	18.1	20.0	20.0	17.1	17.2
22.1	22.4	19.1	19.7	16.7	17.1	18.1	18.0	18.5	19.1	17.3	17.9
16.9	18.4	17.3	17.4	16.3	16.0	17.5	17.2	17.0	17.5	17.2	16.7
11.2	11.3	10.9	11.0	11.9	13.8	11.8	12.3	11.0	11.6	15.3	13.9
81.9	83.3	61.0	63.3	63.9	63.4	78.5	79.9	64.7	67.2	85.3	85.3
47.1	47.4	45.1	46.4	50.1	50.8	56.4	58.6	49.8	50.0	50.1	50.6
31.7	33.3	27.4	28.7	29.8	29.1	21.0	18.8	28.3	27.9	30.5	31.7
20.1	21.9	19.4	21.8	19.4	22.9	22.3	23.1	20.9	21.8	23.8	25.0
44.7	45.4	40.3	41.1	55.0	55.0	50.0	51.0	34.6	34.6	41.3	38.3
55.4	50.9	57.6	57.2	56.8	58.4	57.5	56.4	57.5	58.6	51.6	52.2

³ Baked weight.
⁴ 8-ounce package.
⁵ 28-ounce package.

⁶ No. 2 can.
⁷ Pound.

Comparison of Retail Food Costs in 50 Cities in the United States.

THE table following shows for 39 cities the percentage of increase or decrease in the retail cost of 22 food articles¹ combined, in November, 1919, compared with the average cost in the year 1913, in November, 1918, and in October, 1919. For 11 other cities, comparisons are given for the one-year and one-month periods. These cities have been scheduled by the Bureau at different dates since 1913.

The average family expenditure is based on the prices sent to the Bureau each month by retail dealers, and on the average family consumption of these articles in each city.

The amounts given as the expenditures in November, 1918, and in October and November, 1919, represent the amounts necessary to buy a year's supply of these 22 food articles when purchased at the average retail prices charged in the months specified. This method makes it easier to note the increase over the year 1913. The year 1913 has been selected for the comparison because it was the last year before the war when prices were normal.

No attempt should be made in this table to compare one city with another, as the average number of persons in the family varies according to the city, and these 22 food articles represent a varying proportion of the entire food budgets according to locality. This table is intended to show merely comparisons in the retail cost of these 22 food articles for each city. Effort is made to secure prices on similar grades of commodities in all cities. Local customs, however, must be taken into consideration. For example:

1. In Boston, Mass.; Fall River, Mass.; Manchester, N. H.; New Haven, Conn.; Portland, Me.; and Providence, R. I., very little fresh plate beef is sold, and prices are not secured from these cities for this article.

2. The cut of beef known as "sirloin" in Boston, Mass.; Manchester, N. H.; Philadelphia, Pa.; and Providence, R. I., would be known as "porterhouse" in other cities. In these four cities, owing to the method of dividing the round from the loin, there is no cut that corresponds to "sirloin" in other cities. There is also a greater amount of trimming demanded by the trade in these cities.

3. The most of the sales in Newark, N. J., are on whole ham instead of the sliced, as in other cities.

While it is advised that comparisons should not be made as between cities, without taking these and other facts relative to local

¹ Sirloin steak, round steak, rib roast, chuck roast, plate beef, pork chops, bacon, ham, lard, hens, flour, corn meal, eggs, butter, milk, bread, potatoes, sugar, cheese, rice, coffee, and tea.

customs and transportation into consideration, the figures do represent a trend in the retail cost of these articles to the average family in each city.

RETAIL COST OF 22 FOOD ARTICLES¹ COMBINED, IN NOVEMBER, 1919, COMPARED WITH THE COST IN OCTOBER, 1919, NOVEMBER, 1918, AND WITH THE AVERAGE COST IN THE YEAR 1913, BY CITIES.

City.	Average family expenditure for 22 food articles, combined.				Percentage increase November, 1919, compared with—		
	1913	November, 1918. ²	1919		1913	November, 1918.	October, 1919.
			October. ²	November. ²			
Atlanta.....	\$361.00	\$660.67	\$680.22	\$701.35	94	6	3
Baltimore.....	335.15	681.16	662.23	666.96	99	3	1
Birmingham.....	377.53	712.05	741.97	771.53	104	8	4
Boston.....	388.16	692.27	723.12	735.00	89	6	2
Bridgeport.....	.....	683.91	675.71	695.16	.....	2	3
Buffalo.....	318.15	606.76	612.83	620.04	95	2	1
Butte.....	.....	469.49	464.87	478.71	.....	2	3
Charleston.....	348.60	668.74	679.34	699.39	101	5	3
Chicago.....	336.48	605.96	637.74	653.52	94	8	2
Cincinnati.....	338.26	608.77	626.39	645.31	91	6	3
Cleveland.....	354.01	634.80	676.58	686.52	94	8	1
Columbus.....	.....	633.84	648.88	658.04	.....	4	1
Dallas.....	395.41	702.55	716.30	750.58	90	7	5
Denver.....	247.36	440.51	452.35	463.47	87	5	2
Detroit.....	335.02	618.45	658.91	672.57	101	9	2
Fall River.....	375.51	680.86	697.84	713.78	90	5	2
Houston.....	.....	680.96	695.74	721.18	.....	6	4
Indianapolis.....	345.23	608.97	635.58	657.07	90	8	3
Jacksonville.....	377.10	672.38	682.08	694.52	84	3	2
Kansas City, Mo.....	340.12	618.23	647.28	658.29	94	6	2
Little Rock.....	390.14	694.09	716.01	735.88	89	6	3
Los Angeles.....	284.84	466.73	467.83	483.59	70	4	3
Louisville.....	363.85	674.06	687.50	687.24	89	2	(⁴)
Manchester.....	366.01	683.87	687.16	704.27	92	3	2
Memphis.....	368.46	684.91	718.04	744.70	102	9	4
Milwaukee.....	327.25	592.86	639.78	644.83	97	9	1
Minneapolis.....	319.98	560.73	614.70	624.79	95	11	2
Mobile.....	.....	690.69	720.88	773.06	.....	5	7
Newark.....	364.92	677.91	670.31	671.74	84	3	(⁵)
New Haven.....	376.96	709.68	696.85	708.93	88	(⁴)	2
New Orleans.....	369.29	694.83	703.62	700.58	90	1	(⁴)
New York.....	355.36	661.59	665.95	692.03	95	5	4
Norfolk.....	.....	680.48	688.19	700.49	.....	3	2
Omaha.....	334.52	609.98	653.20	662.54	98	9	1
Peoria.....	.....	592.73	632.97	636.07	.....	7	(⁵)
Philadelphia.....	352.19	659.66	672.20	676.56	92	3	1
Pittsburgh.....	350.35	646.23	667.06	680.75	94	5	2
Portland, Me.....	.....	680.02	679.22	704.38	.....	4	4
Portland, Oreg.....	266.03	455.40	469.53	475.73	79	4	1
Providence.....	380.85	721.64	739.95	753.62	98	4	2
Richmond.....	346.40	664.03	684.19	694.63	101	5	2
Rochester.....	.....	611.13	617.77	636.62	.....	4	3
St. Louis.....	326.36	613.58	634.37	649.42	99	6	2
St. Paul.....	.....	576.91	607.05	619.85	.....	7	2
Salt Lake City.....	261.87	436.47	450.10	459.06	75	5	2
San Francisco.....	271.48	468.96	467.00	479.50	77	2	3
Scranton.....	335.98	632.23	650.96	663.21	92	5	2
Seattle.....	265.35	471.32	484.99	490.69	85	4	1
Springfield, Ill.....	.....	611.90	648.79	658.06	.....	8	1
Washington, D. C.....	334.82	699.66	708.01	711.22	100	2	(⁵)

¹ See footnote on p. 90.

² Cost of year's supply at prices charged in specified month.

³ Decrease.

⁴ Decrease of less than five-tenths of 1 per cent.

⁵ Increase of less than five-tenths of 1 per cent.

As may be seen in the table, the average family expenditure increased in November in all but 2 of the 50 cities. In New Orleans and Louisville, the decrease was less than five-tenths of 1 per cent. In Newark, Peoria, and Washington, the increase was less than five-tenths of 1 per cent. In 10 cities the expenditure increased 1 per cent, each; in 18 cities, 2 per cent, each; and in 10 cities, 3 per cent, each. In Birmingham, Memphis, Houston, New York, and Portland, Me., the increase was 4 per cent; in Dallas, 5 per cent; and in Mobile, 7 per cent. During the year period, from November, 1918, to November, 1919, Minneapolis showed the greatest increase, or 11 per cent. Three cities decreased as compared with a year ago, as follows: Baltimore, 2 per cent; Newark, 1 per cent; and New Haven, less than five-tenths of 1 per cent. As compared with the year 1913 the cities showing an increase of 100 per cent and over were as follows: Washington, 100 per cent; Richmond, Detroit, and Charleston, 101 per cent, each; Memphis, 102 per cent; and Birmingham, 104 per cent.

Index Numbers of Wholesale Prices in the United States.

WHOLESALE prices in the United States reached new high levels in November, the Bureau's weighted index number standing at 230 as compared with 223 for October, an increase of 3 per cent. Marked increases occurred in the groups of farm products, food, etc., cloths and clothing, and house-furnishing goods, the index numbers rising from 230 to 240, from 211 to 219, from 313 to 325, and from 264 to 299, respectively. Smaller increases were shown in the metals and metal products, lumber and building materials, and chemicals and drugs groups. On the other hand, the index number for fuel and lighting decreased from 181 to 179, while that for the miscellaneous group remained unchanged.

Among the important commodities whose wholesale prices averaged higher in November than in October were cotton, grains, alfalfa hay, cattle, tobacco, butter, cheese, coffee, eggs, salmon, rye and wheat flour, apples, corn meal, fresh beef, mutton, molasses, oleomargarine, oleo oil, rice, tea, onions, potatoes, cotton and woolen goods, silk, anthracite coal, coke, crude and refined petroleum, iron and steel products, spelter, brick, pine lumber, turpentine, rosin, shingles, sulphuric acid, glycerin, alum, grain and wood alcohol, caustic soda, tableware, household furniture, bran, and cotton-seed meal. Timothy hay, hides, hogs, poultry, beans, buckwheat flour, lemons, oranges, prunes, lard, hams, lamb, veal, tallow, ingot copper, linseed oil, cottonseed oil, and jute were lower in November than in October, while sheep, canned goods, codfish, herring, mackerel,

raisins, glucose, milk, salt, sugar, vinegar, shoes, carpets, leather, gasoline, matches, plate and window glass, lime, cement, putty, paper, rope, rubber, soap, and wood pulp were practically unchanged in price.

Comparing prices in November, 1919, with those of a year ago, it is seen that the index number for farm products increased from 221 to 240, that for food articles from 206 to 219, and that for cloths and clothing from 256 to 325. During the same time the index number for fuel and lighting increased from 171 to 179, that for lumber and building materials from 164 to 236, and that for house-furnishing goods from 226 to 299. The index number for miscellaneous commodities, including such important articles as cotton-seed meal and oil, jute, malt, lubricating oil, newsprint paper, rubber, starch, soap, plug tobacco, and wood pulp increased from 203 to 220, while that for metals and metal products decreased from 188 to 164 and that for chemicals and drugs from 215 to 176 in the same period of time.

INDEX NUMBERS OF WHOLESALE PRICES IN THE UNITED STATES, OCTOBER AND NOVEMBER, 1919, AND NOVEMBER, 1913 TO 1918, BY GROUPS OF COMMODITIES.

[1913=100.]

Group.	1919		November—					
	Oct.	Nov. ¹	1913	1914	1915	1916	1917	1918
Farm products.....	230	240	101	101	102	146	212	221
Food, etc.....	211	219	105	106	107	150	184	206
Cloths and clothing.....	313	325	100	96	105	146	198	256
Fuel and lighting.....	181	179	99	93	98	155	155	171
Metals and metal products.....	161	164	96	81	104	160	174	188
Lumber and building materials.....	231	236	98	95	94	104	134	164
Chemicals and drugs.....	174	176	100	105	142	155	240	215
House-furnishing goods.....	264	299	100	99	99	123	155	226
Miscellaneous.....	220	220	100	96	100	135	166	203
All commodities.....	223	230	101	98	103	144	183	206

¹ Preliminary.

Comparison of Retail Price Changes in the United States and Foreign Countries.

THE index numbers of retail prices published by several foreign countries have been brought together with those of this Bureau in the subjoined table after having been reduced to a common base, viz, prices for July, 1914, equal 100. This base was selected instead of the average for the year 1913, which is used in other tables of index numbers compiled by the Bureau, because of the fact that in some instances satisfactory information for 1913 was not available. For Denmark, Great Britain, Norway, Sweden, and the city of Rome, Italy, the index numbers are reproduced as published in the original sources. With one exception all these are shown on the July, 1914, base in the source from which the information is

taken. The index numbers for Rome are based on the first half of 1914. The index numbers here shown for the remaining countries have been obtained by dividing the index for July, 1914, as published, into the index for each month specified in the table. As shown in the table, the number of articles included in the index numbers for the different countries differs widely. These results should not, therefore, be considered as closely comparable one with another. In one or two instances the figures here shown are not absolutely comparable from month to month over the entire period, owing to slight changes in the list of commodities included at successive dates.

INDEX NUMBERS OF RETAIL PRICES IN THE UNITED STATES AND CERTAIN OTHER COUNTRIES.

[July, 1914=100.]

Year and month.	United States: 22 foodstuffs; 45 cities. Weighted.	Australia: 46 foodstuffs; 30 towns. Weighted.	Canada: 29 foodstuffs; 60 cities. Weighted.	Denmark: Family food budget; 5 persons. Weighted.	France: Family budget, 13 articles.	
					Cities over 10,000 population (except Paris). Weighted.	Paris only. Weighted.
1914.						
July.....	100	100	100	100	1 100	100
October.....	103	99	108			
1915.						
January.....	101	107	107		1 110	120
April.....	97	113	105			114
July.....	98	131	105	128	1 123	120
October.....	101	133	105			118
1916.						
January.....	105	129	112		1 133	134
April.....	107	131	112		1 137	132
July.....	109	130	114	146	1 141	129
October.....	119	125	125		1 146	135
1917.						
January.....	125	125	138		1 154	139
February.....	130	126	141	158		
March.....	130	126	144			
April.....	142	127	145		1 171	147
May.....	148	127	159			
June.....	149	127	160			
July.....	143	126	157	166	1 184	183
August.....	146	129	157			
September.....	150	129	157			
October.....	154	129	159		1 200	184
November.....	152	129	163			
December.....	154	128	165			
1918.						
January.....	157	129	167		1 211	191
February.....	158	130	169	173		
March.....	151	131	170			
April.....	151	131	169		1 232	218
May.....	155	132	171			
June.....	159	132	172			
July.....	164	131	175	187	1 244	206
August.....	168	128	181			
September.....	175	128	179			
October.....	177	131	182		1 260	238
November.....	179	133	182			
December.....	183	134	184			
1919.						
January.....	181	140	186	186	1 277	248
February.....	169	141	181			227
March.....	172	143	176			248
April.....	178	145	180		1 293	257
May.....	181	146	182			268
June.....	180	147	185			264
July.....	186	147	186	212	1 288	261
August.....	188	148	185			238
September.....	184		183			259

¹Quarter beginning that month.

INDEX NUMBERS OF RETAIL PRICES IN THE UNITED STATES AND CERTAIN OTHER COUNTRIES—Concluded.

[July, 1914=100.]

Year and month.	Great Britain: 21 foodstuffs; 600 towns. Weighted.	Italy.		New Zealand: 59 foodstuffs; 25 towns. Weighted.	Norway: Family food budget. Weighted.	Sweden: 21 articles; 44 towns. Weighted.
		7 foodstuffs; 40 cities (variable). Not weighted.	Rome: Family food budget; 5 persons. Weighted.			
1914.						
July.....	100	100	¹ 100	100	100	100
October.....	112	104	.....	102	.....	² 107
1915.						
January.....	118	108	95	111	.....	² 113
April.....	124	113	107	113	.....	² 121
July.....	132 ³	120	95	112	.....	² 124
October.....	140	127	100	112	.....	² 128
1916.						
January.....	145	133	111	116	.....	² 130
April.....	149	132	116	118	.....	² 134
July.....	161	132	111	119	³ 160	² 142
October.....	168	132	111	120	.....	² 152
1917.						
January.....	187	144	124	127	.....	160
February.....	189	154	127	126	.....	166
March.....	192	161	121	126	.....	170
April.....	194	164	120	127	.....	175
May.....	198	167	123	128	.....	175
June.....	202	171	136	128	.....	175
July.....	204	172	137	127	.....	177
August.....	202	178	143	127	214	181
September.....	206	188	142	129	.....	187
October.....	197	.....	148	130	.....	192
November.....	206	197	166	130	.....	200
December.....	205	199	157	132	.....	212
1918.						
January.....	206	191	177	133	.....	221
February.....	208	221	181	134	.....	227
March.....	207	247	199	134	.....	235
April.....	206	236	200	137	.....	247
May.....	207	.....	202	139	.....	253
June.....	208	239	199	139	.....	261
July.....	210	253	203	139	279	268
August.....	218	.....	208	141	.....	280
September.....	216	267	219	141	.....	284
October.....	229	.....	235	142	.....	310
November.....	233	.....	249	144	275	320
December.....	229	.....	254	150	275	330
1919.						
January.....	230	.....	259	145	279	339
February.....	230	.....	258	142	278	334
March.....	220	.....	243	141	278	331
April.....	213	281	230	142	276	337
May.....	207	.....	232	142	271	328
June.....	204	.....	225	143	269	319
July.....	209	.....	206	144	269	310
August.....	217	.....	207	148	.....	.....
September.....	216	.....	214	148	.....	.....

¹ January-July.

² Quarter beginning that month.

³ August.

Retail Price Changes in Great Britain.

THE following table gives for Great Britain the increase in the cost of food and general family expenditure for January to December, 1919, over July, 1914. The food items included in this report are: Ribs and thin flank of beef, both British and chilled or frozen; legs and breast of mutton, British and chilled or

frozen; bacon, fish, flour, bread, tea, sugar, milk; butter, fresh and salt; cheese, margarine, eggs, and potatoes.

The table gives percentages of increase, and is not one of relative prices, as is the table given for the United States. When making comparisons this should be borne in mind, and to obtain the relative price it is necessary to add 100 to the percentage as given, i. e., January, 1919, the increase is 130, the relative price being 230.

The figures represent two comparisons:¹ First, the increase in price based on the same quantities as used in July, 1914; second, the increase in the cost of living, based on the change in the quality of the standard of living. In other words, the increase in column one of the table shows what the wage earner paid for the same quantities of food, while the figures in column two give the change that results from a substitution of one kind of food for another to meet war-time conditions.

The same method is used in family expenditures, the third column showing percentage of increase of all articles and the last column giving approximate figures, based on the increase in cost of all other articles and the estimated changed consumption of food.

PER CENT OF INCREASE IN FOOD AND ALL ITEMS IN GREAT BRITAIN, NOVEMBER, 1914, 1915, 1916, 1917, AND 1918, AND JANUARY TO DECEMBER, 1919, AS COMPARED WITH JULY, 1914.

[Compiled from the British Labour Gazette.]

Year and month.	Food.		All items in family budget.	
	Retail prices (assuming same quantities).	Expenditures (allowing for estimated changes in consumption).	Retail prices (assuming same quantities).	Expenditures (allowing for estimated changes in consumption).
December, 1914.....	16	.....	.....	.....
December, 1915.....	44	.....	.....	.....
December, 1916.....	² 84	.....	³ 60	.....
December, 1917.....	105	59	4 55	.....
December, 1918.....	129	90	5 120	95
1919.				
January.....	130	79	5 120	90
February.....	130	77	5 120	90-95
March.....	120	79	5 115	90
April.....	113	87	5 110	95
May.....	107	81	5 105	90
June.....	104	87	5 105	95
July.....	109	97	105-110	100
August.....	117	108	115	110
September.....	116	103	115	105
October.....	122	113	120	110-115
November.....	131	119	125	115-120
December.....	134	116	125	110-115

¹ For a more complete explanation, see article by Prof. W. F. Ogburn, pp. 169 and 170 in the MONTHLY LABOR REVIEW for May, 1919.

² Including tax on sugar and tea.

³ Not including taxes.

⁴ Including taxes.

⁵ The increase, excluding additional taxation, is 7 per cent less.

⁶ The increase, excluding additional taxation, is 6 per cent less.

Changes in Cost of Living in the United States, 1913, to October, 1919.

THE following table is an estimate, made by the Bureau of Labor Statistics, of the average increase in the cost of living in the United States since 1913. The Bureau has not complete retail price data back to 1913 and it has taken the average increase in the prices of the different groups of items for a number of industrial centers for the period from December, 1914, to June, 1919. While it is not held that the prices in these industrial centers necessarily agree with prices in every section of the country, yet the experience of the Bureau goes to show that the *changes* in prices in the industrial centers used are fairly representative of changes in the country generally except as to rents.

From data relating to food prices and to the *wholesale* prices of other groups of commodities, the changes from 1913 to December, 1914, and from June, 1919, to October, 1919, have been computed and the increases for these periods added to those from December, 1914, to June, 1919. The final results are shown in the table.

Rents are a purely local matter and changes in rents in a given locality can be obtained only by a special study in that locality. However, the percentage of increase in rents as well as in the other groups of items in the industrial centers mentioned have been applied to the increase shown in this table.

The first column in the table shows the average per cent of total expenditure that is devoted to the different groups of items—food, clothing, etc. This per cent is based on figures obtained from over 12,000 families in 92 localities, in a careful survey of the cost of living recently made by the Bureau. The second column shows the average per cent of increase in the prices of the several groups from 1913, to October, 1919. The third column is the product of the first and second columns and shows the per cent of increase applied to the total family budget. To illustrate: 38.2 per cent of the total expenditure goes for food; food costs have increased 80.7 per cent; this makes the per cent of increase in the price of food, as related to the total family expenditure, 30.8 per cent.

ESTIMATED PER CENT OF INCREASE IN COST OF LIVING IN THE UNITED STATES FROM 1913 TO OCTOBER, 1919.

Items of expenditure.	Per cent of total expenditure.	Average per cent of increase in prices from 1913 to October, 1919.	Per cent of increase as applied to family budget.
Food.....	38.2	80.70	30.8
Clothing.....	16.6	139.30	23.1
Housing.....	13.4	17.75	2.4
Fuel and light.....	5.3	45.07	2.4
Furniture and furnishings.....	5.1	139.62	7.1
Miscellaneous.....	21.3	81.31	17.3
Total.....			33.1

Changes in Cost of Living in the District of Columbia.

PRICES recently secured by the Bureau of Labor Statistics show that the cost of living in the District of Columbia increased 88.4 per cent from 1913 to November, 1919. The increase from April, 1919, to November, was 8.0 per cent. For the longer period named, the changes in the several groups of items entering into the family budget ranged from 3.4 per cent for housing to 156.7 per cent for furniture and furnishings.

The following table shows the per cent that the average expenditure for each group of items is of the average total expenditure per family, and the per cent of change in prices for each group and for all items from 1913 to December of each year from 1914 to 1918, inclusive, and to April and November, 1919. It also shows the increases from April to November, 1919. The latter figure, 8.0, does not agree with the per cent that would be derived from a computation based on the figures shown for April and November, respectively. The explanation of this is that the column showing the increase from April to November is based on the prices of comparable articles at these two dates. Articles that were not on sale at *both* dates were not used. On the other hand, the figures comparing November, 1919, with December, 1914, have been derived by comparing November, 1919, prices with December, 1918, prices, without reference to April prices, so that a direct comparison between the two columns, April 1919, and November, 1919, should not be made.

CHANGES IN COST OF LIVING IN WASHINGTON, D. C., FROM 1913 TO NOVEMBER, 1919.

Items of expenditure.	Per cent of total expenditure.	Per cent of increase from 1913 to—						Per cent of increase from April, 1919, to November, 1919.	
		December—					April, 1919.		November, 1919.
		1914	1915	1916	1917	1918			
Food.....	38.2	3.7	4.3	19.9	67.0	97.9	91.5	100.4	4.7
Clothing.....	16.6	¹ 4.0	¹ 4.4	18.3	53.7	104.1	101.1	155.3	22.6
Housing.....	13.4	(²)	¹ 1.5	¹ 3.7	¹ 3.4	¹ 1.5	¹ 1.4	3.4	4.1
Fuel and light.....	5.3	3.0	3.0	10.5	28.6	45.1	46.1	47.1	3.4
Furniture and furnishings.....	5.1	¹ 1.0	5.2	29.2	70.4	125.1	123.7	156.7	14.0
Miscellaneous.....	21.3	(²)	.4	15.3	44.3	55.9	57.4	62.7	4.9
Total.....		.9	1.9	15.4	48.6	75.2	72.5	88.4	8.0

¹ Decrease.

² No change.

Production, Cold-Storage Holdings, and Wholesale and Retail Prices of Butter and Cheese.

By ELMA B. CARR.

THE preservation of food from seasons of greatest production to seasons of scarcity should tend to make prices more uniform throughout the year. It not only takes care of an over-supply, preventing waste, but it provides a supply in seasons when certain foods, in the fresh state, could be had only in small quantities, if at all.

In this article an attempt is made to show the relation between the amount of butter and cheese in cold storage, the amount produced, and the trend in wholesale and retail prices.

The wholesale prices shown are those compiled each month by this Bureau from weekly quotations published in the Chicago Dairy Produce. The retail prices are averages computed from reports sent to this Bureau each month by retail dealers in Chicago.

Figures showing production and cold-storage holdings have been taken from monthly statements of the Bureau of Markets of the Department of Agriculture. Figures giving production prior to 1918 are not available. Figures showing cold-storage holdings represent the amounts held in cold-storage warehouses on the first of each month. Figures showing receipts, or the movement into storage, and deliveries, or the movement out of storage, are not available prior to September, 1919. Although prior to this date it is not known just how much butter was received or delivered by cold-storage warehouses during each month, the difference between the holdings on the first of any month and the holdings on the first of the following month does represent the net amount stored or withdrawn from storage during the month.

Figures showing exports and imports are taken from monthly statements of the Bureau of Foreign and Domestic Commerce of the Department of Commerce.

By adding to the total production for each month, the amount held in storage and the amount imported, and subtracting the amount exported and the amount held in storage on the first of the next month, the amount available for consumption during each month has been computed.

Creamery Butter.

The storage season for butter may be said to begin in May and end in April. Storage holdings are increased during May, June, July, and August, and hence these months are known as "storing months." Storage holdings are decreased during the months from September to April, inclusive. These months are known as "distributing months." September is sometimes a storing month if the season is late. The largest amount held in storage on the first of any month during a season is known as the "peak load" for the season. As shown in Table 1, about three-fourths of the peak load is stored during June and July; most of the distribution is within the months of October to March, inclusive. About one-fourth of the peak load is usually withdrawn during December. Table 1 shows, also, the percentage of the peak load that was on hand from the previous season and the percentage that was carried over into the following season.

TABLE 1.—MONTHLY PER CENT OF INCREASE OR DECREASE IN STORAGE HOLDINGS OF CREAMERY BUTTER, BASED ON THE PEAK LOAD FOR EACH PERIOD, MAY, 1907, TO APRIL, 1919.

Period (May-April).	Per cent on hand May 1.	Per cent of increase.				Per cent of decrease.								Per cent on hand at end of period.
		May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	
1907-1916 ¹	6.9	3.7	43.8	33.8	11.8	0.2	13.0	15.0	24.6	16.1	12.4	8.7	3.1	6.9
1916-17 ²	1.1	5.6	45.4	44.7	3.2	8.9	10.4	22.5	14.4	14.8	13.8	9.2	3.4	2.6
1917-18 ²	2.5	5.9	36.5	36.3	13.5	³ 5.3	6.0	21.3	28.5	19.2	7.3	3.9	4.0	9.8
1918-19 ²	10.2	2.7	36.0	38.8	12.3	11.7	6.9	16.6	20.3	7.8	12.4	12.1	2.6	9.5

¹ Figures taken from Bulletin No. 776 of the Bureau of Markets, Department of Agriculture.

² Computed from monthly reports of the Bureau of Markets.

³ Per cent of increase.

The 1919-20 season will not be completed until May 1, 1920, but figures are given in Table 2 which show the amount of creamery butter produced each month since January, 1918, the total cold-storage holdings on the first of each month, and the monthly net increase or decrease in storage holdings since August, 1916. Table 2 shows, also, the amount of butter exported, imported, available for consumption, and wholesale and retail prices in Chicago each month since August, 1916.

The relation between the amount of butter produced, the amount in storage, the amount available for consumption, and wholesale prices is shown also in the chart on page 103 for each month, January, 1918, to June, 1919. Later figures are not shown because no further information is available for production. For the same reason, figures prior to January, 1918, were not charted. The production figures given in Table 2 for July, August, and September are only pre-

liminary and are subject to change. The information as shown in the chart, however, covers an entire storage season.

TABLE 2.—PRODUCTION, STORAGE HOLDINGS, EXPORTS, IMPORTS, AMOUNT AVAILABLE FOR CONSUMPTION, AND WHOLESALE AND RETAIL PRICES OF CREAMERY BUTTER, BY MONTHS, AUGUST, 1916, TO SEPTEMBER, 1919.

Year and month.	Number of pounds produced. ¹	Number of pounds in storage. ²	Net increase (+) or decrease (−) in storage (pounds). ³	Number of pounds exported. ³	Number of pounds imported. ³	Number of pounds available for consumption. ⁴	Average price per pound in Chicago.	
							Wholesale ⁵ (cents).	Retail ⁶ (cents).
1916.								
August.....		94,518,871	+10,445,607	2,429,200	5,784		30.0	34.4
September.....		104,964,478	− 9,323,704	4,779,279	33,336		32.3	37.2
October.....		95,640,774	−10,899,592	8,065,203	28,740		34.5	39.4
November.....		84,741,182	−23,582,451	4,580,020	48,878		38.8	42.4
December.....		61,158,731	−15,162,217	2,298,548	32,725		38.3	43.6
1917.								
January.....		45,996,514	−15,542,314	1,888,825	20,789		38.0	43.8
February.....		30,454,200	−14,521,780	296,062	16,709		40.7	46.6
March.....		15,932,420	− 9,635,566	487,386	10,291		40.0	44.5
April.....		6,296,854	− 3,595,569	343,519	167,558		42.8	48.4
May.....		2,701,285	+ 6,309,584	569,283	25,937		39.0	43.1
June.....		9,010,869	+38,835,645	679,362	67,634		38.2	43.4
July.....		47,846,514	+38,636,153	266,852	192,795		37.6	43.2
August.....		86,482,667	+14,356,610	348,808	74,591		40.0	44.8
September.....		100,839,277	+ 5,636,483	429,264	52,464		42.5	48.4
October.....		106,475,760	− 6,361,000	275,017	14,795		43.1	48.7
November.....		100,114,760	−22,646,209	262,800	463,424		44.2	49.2
December.....		77,468,551	−30,398,605	1,345,740	191,763		48.1	53.0
1918.								
January.....	44,357,118	47,069,946	−20,452,025	4,195,551	747,154	61,360,746	48.6	54.4
February.....	42,389,031	26,617,921	− 7,809,618	821,421	29,617	49,406,845	48.9	54.7
March.....	49,086,028	18,808,303	− 4,201,286	4,309,478	5,274	48,983,110	44.3	50.6
April.....	57,331,653	14,607,017	− 4,214,040	3,636,006	20,188	57,929,875	41.5	46.0
May.....	85,563,665	10,392,977	+ 2,724,887	1,266,918	2,251	81,574,111	42.0	47.5
June.....	104,385,066	13,117,864	+36,599,338	578,111	11,609	67,219,225	42.0	46.8
July.....	97,440,132	49,717,202	+39,457,731	320,323	1,439	57,663,517	43.2	48.0
August.....	85,148,447	89,174,933	+12,518,377	337,188	26,703	72,319,585	44.3	49.0
September.....	72,396,845	101,693,310	−11,879,682	631,739	508,815	84,153,603	53.7	57.5
October.....	63,889,623	89,813,628	− 7,018,236	2,186,346	192,856	68,914,369	55.4	61.5
November.....	45,741,353	82,795,392	−16,885,852	4,677,742	78,933	58,028,396	61.0	65.3
December.....	45,560,340	65,909,540	−20,691,179	3,233,992	30,628	63,048,155	67.0	72.7
1919.								
January.....	52,189,198	45,218,361	− 7,959,663	4,452,371	644,252	56,340,742	61.8	71.3
February.....	44,342,568	37,258,698	−12,634,662	3,726,840	363,761	53,614,151	49.3	53.5
March.....	54,822,396	24,624,036	−12,343,564	4,127,635	661,980	63,700,305	60.2	63.9
April.....	67,487,317	12,280,472	− 2,621,544	8,475,366	219,932	61,853,427	61.6	67.1
May.....	103,941,021	9,658,928	+19,775,854	759,803	893,245	84,298,609	55.6	62.4
June.....	119,357,493	29,434,782	+60,723,321	810,763	508,925	58,332,334	51.3	57.5
July.....	787,921,650	90,158,103	+33,387,567	633,764	654,887	754,555,206	51.2	57.1
August.....	72,749,399	123,545,700	+ 7,842,744	2,395,139	961,718	763,473,234	53.3	58.4
September.....	57,877,563	131,388,414	− 9,572,255	1,387,148	496,442	766,559,112	56.9	60.3
October.....	(8)	121,816,159	−21,342,086	2,918,389	2,123,398	(8)	64.6	67.8
November.....	(8)	100,474,073	7−26,797,840	1,108,896	1,553,263	(8)	68.6	73.6
December.....	(8)	73,676,233	(8)	(8)	(8)	(8)	68.1	74.4

¹ Figures from Bureau of Markets, Department of Agriculture. Figures showing production prior to 1918 not available.

² Number of pounds in storage on the first of each month. Figures from Bureau of Markets.

³ During the month. Export figures do not include any amount sent in Army transports. Only the amount sent in merchant vessels is included.

⁴ The amount available for consumption equals total production, plus storage at beginning of month, plus imports, minus exports, minus storage at end of month.

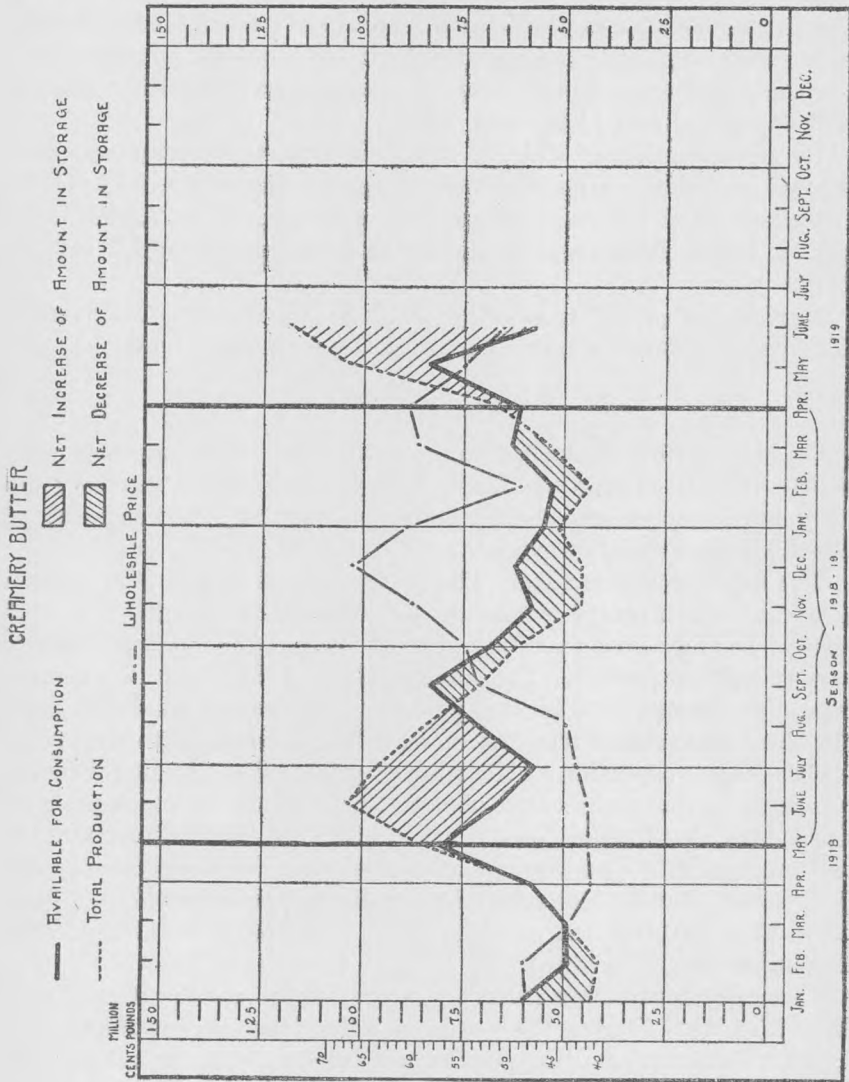
⁵ The wholesale prices shown are those compiled each month by the Bureau of Labor Statistics from weekly quotations published in the Chicago Dairy Produce.

⁶ The retail prices are averages computed from reports sent to the Bureau of Labor Statistics each month by retail dealers in Chicago.

⁷ From preliminary reports of Bureau of Markets, Department of Agriculture, and subject to change.

⁸ Information not yet available.

On May 1, 1917, at the beginning of the 1917-18 season, there were a little over 2½ million pounds in storage. During the months from May to October storage holdings showed a net increase of a little



Storage Season 1917-18.

over 103½ million pounds. The average wholesale price for these months was 39.5 cents. During June and July the net amount stored was almost 77½ million pounds. The average wholesale price for these two months was 37.9 cents. From October 1 to May 1, 1918, there

was a net withdrawal from storage of 96 million pounds. The average wholesale price during these months was 45.5 cents. In December there was a net decrease in storage holdings of 30 million pounds. The average wholesale price in December was 48.1 cents. During the storing months of this season, exports of butter totaled a little over 2 million pounds and imports about 419 thousand pounds. During the distributing months, exports totaled over 14½ million pounds and imports almost 1½ million.

By proclamation of July 9, 1917, the export of butter was prohibited except by virtue of a special license. Butter was included in the presidential license proclamations of October 8, 1917, and January 10, 1918. Butter was in the list of restricted imports, April 22, 1918.¹

During the period from May, 1917, to April, 1918, the average differential between wholesale and retail prices was 5 cents.

Storage Season 1918-19.

On May 1, 1918, at the beginning of the 1918-19 season, there were a little over 10 million pounds in storage. During the months from May until September, storage holdings showed a net increase of slightly over 91 million pounds.

The total production from May until September was 372½ million pounds. The average wholesale price for these months was 42.9 cents. During June and July the net increase in storage holdings was 76 million pounds. The total production for these two months was approximately 202 million pounds. The average wholesale price for these two months was 42.6 cents. The movement into storage of such a large proportion of the amount produced no doubt prevented a glutted market and a consequent decline in price. From September until May, 1919, there was a net withdrawal from storage of 92 million pounds. The average wholesale price for these months was 58.7 cents. During December there was a net withdrawal of a little more than 20½ million pounds. The average wholesale price in December was 67 cents.

Creamery butter was included in the export conservation list of May 17, 1918.¹ During the storing months, from May to September, exports totaled 2½ million pounds and imports 40 thousand pounds. During the months of distribution, September to May, 1919, exports totaled 31½ million pounds and imports 2½ million.

On August 28, 1918, there was commandeered for the use of the Army, Navy, and Allies, between 25 and 30 million pounds of cream-

¹ War Industries Board, Bulletin No. 21, p. 16.

ery butter. The wholesale price for September showed an increase of 10 cents per pound and the retail price an increase of 9 cents, as compared with prices in August.

In October there was the largest amount exported since May. Production decreased approximately 8 million pounds; there was a net withdrawal from storage of 7 million pounds; the wholesale price advanced 1 cent. In November, 1918, the wholesale price increased 6 cents per pound and the retail price, 4 cents. Production was 18 million pounds less than in October, but there was a net decrease of almost 17 million pounds in storage holdings. Over $4\frac{1}{2}$ million pounds were exported.

In December the wholesale price advanced another 6 cents, and the retail price 7 cents, although production was practically the same as in November, and there was a net decrease of 20 million pounds in the amount in storage. During December, however, 3 million pounds were exported.

The wholesale price for January, 1919, was 62 cents; for February, 49 cents; and for March, 60 cents. The amount produced in February was almost 7 million pounds less than in January. During February, however, there was a net decrease in cold storage holdings of $12\frac{1}{2}$ million pounds, which was greater by 5 millions than the net decrease during January. The Creamery Journal,¹ in commenting on the drop in prices in February and the advance in March, states that in addition to an unusually heavy production in midwinter, which swamped the market and made selling difficult, the Government returned butter which was commandeered but which was said not to be up to quality. It further states that in March the Food Administration decided to take the commandeered butter, and much of it went to England, and that this, together with the fact that consumption increased in March, caused the market to advance. The Purchase, Storage, and Traffic Division, Quartermaster Corps, of the War Department has stated that when shipment overseas was suspended there was a surplus of some 5 million pounds of canned and commercial butter, which was then in storage. About $1\frac{1}{2}$ million pounds of this was turned back to the manufacturers from whom it was bought and the balance was sold to dealers, and while some may have been exported by the dealers or manufacturers, and concerning which they would have no records, a great deal of it probably was retained in this country.

The wholesale price in April was 62 cents. During this month, storage holdings showed a net decrease of 2 million pounds, but over 8 million pounds were exported.

¹ Feb. 15, 1919.

During the season 1918-19, the average differential between the wholesale and retail price was 5 cents, approximately the same as for the 1917-18 season.

Storage Season 1919-20.

As previously stated, the 1919-20 season will not be completed until May 1, 1920, but as much information as is available at this time is given in Table 2. On May 1, 1919, at the beginning of the season, there were approximately $9\frac{1}{2}$ million pounds in storage. During May, June, and July, 1919, production increased. From May until August there was a great decrease in the amount exported. Prices declined, but not so much as they probably would have done had these not been the months when the greatest amounts are put into storage.

Figures showing receipts, or the movement into storage, and deliveries, or the movement out of storage, are shown in the following statement for September, October, and November, 1919:

	Receipts.	Deliveries.
September.....	12,520,318	21,908,798
October.....	12,885,354	33,892,164
November.....	10,141,492	36,558,305

A noticeable feature in October and November is the large amount of butter imported. Of the total amount of 2,123,298 pounds imported in October, 2,118,151 pounds came from Canada. The next largest amount imported, 5,181 pounds, came from Denmark. In November, out of a total of 1,553,263 pounds imported, 1,539,792 pounds came from Canada and 13,471 pounds from Denmark.

The amount of butter exported during these two months was much less than during the same months of the previous year. In November, 1919, the amount imported was 344,367 pounds more than the amount exported.

The wholesale price in November was about 8 cents higher and the retail price about 9 cents higher than in November, 1918.

In December, 1919, the wholesale price was only 1 cent higher and the retail price only 2 cents higher than in December, 1918.

Table 3 shows comparisons over two storage seasons, May, 1917, to April, 1918, and May, 1918, to April, 1919. Table 4 gives information for the first six months of 1918 and 1919 similar to that given in Table 3, by seasons.

TABLE 3.—COMPARISON OF PRODUCTION, STORAGE HOLDINGS, EXPORTS, IMPORTS, AMOUNT OF CREAMERY BUTTER AVAILABLE FOR CONSUMPTION, BY SEASONS, MAY, 1917, TO APRIL, 1918, AND MAY, 1918, TO APRIL, 1919.

Item.	May, 1917, to April, 1918.	May, 1918, to April, 1919.
	<i>Pounds.</i>	<i>Pounds.</i>
In storage at beginning of season.....	2,701,285	10,392,977
Produced during season.....	(¹)	818,966,950
Imported during season.....	1,894,636	2,743,159
Total.....	(¹)	832,103,086
Exported during season.....	17,139,582	34,014,571
In storage at end of season.....	10,392,977	9,658,928
Total.....	27,532,559	43,673,499
Available for consumption.....	(¹)	788,429,587

¹ Information not available.

TABLE 4.—COMPARISON OF PRODUCTION, STORAGE HOLDINGS, EXPORTS, IMPORTS, AMOUNT AVAILABLE FOR CONSUMPTION, AND AVERAGE WHOLESALE AND RETAIL PRICES OF CREAMERY BUTTER FOR THE FIRST SIX MONTHS OF EACH YEAR, 1918 AND 1919.

Item.	First six months of—	
	1918	1919
	<i>Pounds.</i>	<i>Pounds.</i>
Total production.....	383,112,561	442,139,993
Average monthly storage holdings.....	21,769,004	26,412,546
Net amount of previous season's storage holdings marketed.....	36,676,969	35,559,433
Net amount placed in cold storage for current season.....	39,324,225	80,499,175
Total exports.....	14,807,485	22,352,778
Total imports.....	816,093	3,292,095
Total amount available for consumption.....	366,473,913	378,139,568
	<i>Cents.</i>	<i>Cents.</i>
Average wholesale price.....	44.6	56.6
Average retail price.....	50.0	62.6

The following table shows the per cent of the total stocks of butter held by creameries, retail dealers, wholesale dealers, meat packers, cold-storage houses, and by miscellaneous dealers. This information, published in Food Surveys of the Department of Agriculture, is available for January and July, 1918, and for January, 1919. The information was secured and the paper published as a war-time emergency, and was discontinued after July 1, 1919. The table is given here to show that the proportion of the total commercial stocks held by the different groups was fairly constant, with the exception of that held by meat packers, which, in January, 1919, was more than double the proportion held by this group in January, 1918.

TABLE 5.—PER CENT OF TOTAL STOCKS OF CREAMERY BUTTER HELD BY CREAMERIES, COLD STORAGE WAREHOUSES, WHOLESALE DEALERS, RETAIL DEALERS, AND BY MISCELLANEOUS DEALERS, JANUARY AND JULY, 1918, AND JANUARY, 1919.

[From Food Surveys, June and August, 1918, and February and March, 1919, published by Bureau of Markets, Department of Agriculture.]

Group.	Total stocks.			Percentage of total stocks ¹ held by each group.		
	1918		1919	1918		1919
	January.	July.	January.	January.	July.	January.
	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>			
Total, all groups.....	183,686,073	176,143,419	162,028,916	100.0	100.0	100.0
Creameries.....	11,017,614	13,526,964	8,717,972	13.2	17.8	14.1
Cold storages.....	44,538,589	38,558,001	32,937,707	53.2	50.6	53.1
Wholesale dealers.....	23,168,122	22,084,232	19,080,323	27.7	29.0	30.8
Wholesale dealers in butter, eggs, and cheese.....	14,088,714	13,630,918	8,608,502	16.8	17.9	13.9
Meat packers.....	5,058,679	5,895,423	9,189,417	6.0	7.7	14.8
Other wholesale dealers.....	4,020,729	2,557,891	1,282,404	4.8	3.4	2.1
Retail dealers.....	10,082,845	6,026,056	(²)			
Miscellaneous.....	4,961,748	1,974,222	1,292,914	5.9	2.6	2.0
Bakers.....	(³)	505,988	501,947		.7	.8
Oleomargarine manufacturers.....	(³)	370,196	56,268		.5	.1
Cheese factories.....	(³)	295,905	61,222		.4	.1
Other miscellaneous.....	(³)	802,133	673,477		1.1	1.1

¹ Not including retail stocks.

² Retail stocks not secured by Bureau of Markets.

³ Detailed information not available.

American Cheese.

The storage season for cheese is not so clearly defined as that for butter. It may be said to begin either in May or June and end in April or May. In this article the storage season has been taken as beginning in May, although in both May, 1917, and May, 1918, over 2 million pounds net were withdrawn from storage.

An exceptionally large quantity of American cheese was placed in cold storage during the 1917-18 season. At the beginning of the season there were approximately $7\frac{1}{2}$ million pounds in storage. This was reduced during May by a net withdrawal of almost 3 million pounds. There was an increase each month from June to October in the amount in storage. On October 1 there were 92 million pounds in storage. This amount represents the peak load of the season. From this date until the end of the season the net withdrawal from storage was almost 68 million pounds. The average wholesale price during the months when more cheese was being stored than was being withdrawn was 22 cents and during the months when more was being put upon the market than was being stored was 23 cents.

On May 1, 1918, at the beginning of the 1918-19 season, there were $24\frac{1}{2}$ million pounds in storage. A net withdrawal of 2 million

pounds was made during the month of May. During June, July, and August almost 111 million pounds were produced. During these months a net amount of 34 million pounds was stored. The average wholesale price during these months was 23 cents. In September there was a reduction of approximately $4\frac{1}{2}$ million pounds in production and, although there was a net withdrawal of $14\frac{1}{2}$ million pounds from storage, the price advanced to 28 cents. December shows the lowest production, with a net release from storage of $5\frac{1}{2}$ million pounds. The price in December was 35 cents. In February, 1919, the price dropped 10 cents per pound, gradually rising to 30 cents in May.

On May 1, 1919, at the beginning of the 1919-20 season, there were only $6\frac{1}{2}$ million pounds in storage warehouses. To this sum was added a net increase of 70 million pounds during May, June, July, and August. A net sum of 50 million pounds of this amount was put in during June and July. The average wholesale price for these months was 31 cents. The July price was the highest since January, when the price was 36 cents.

The passage of cheese through trade channels is more difficult to follow than that of butter, but the following tables and the chart are given in order to show as nearly as it is possible to show it what influence factors affecting the supply have upon the trend in prices.

TABLE 6.—MONTHLY PER CENT OF INCREASE OR DECREASE IN STORAGE HOLDINGS OF AMERICAN CHEESE, BASED ON THE PEAK LOAD FOR EACH SEASON, MAY, 1907, TO APRIL, 1919.

Season (May-April.)	Per cent on hand May 1.	Per cent of increase.				Per cent of decrease.								Per cent on hand at end of sea- son.
		May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	
1916-17 ¹	17.1	2.9	27.2	40.5	12.3	5.3	7.2	8.5	11.1	23.0	15.9	10.5	3.1	15.4
1917-18 ¹	9.6	22.6	26.3	37.9	23.1	3.5	6.5	7.0	9.4	14.9	12.0	9.6	14.7	25.9
1918-19 ⁴	43.1	3.5	19.1	30.4	1.1	25.6	14.4	13.6	9.8	8.3	10.1	5.5	1.0	11.6

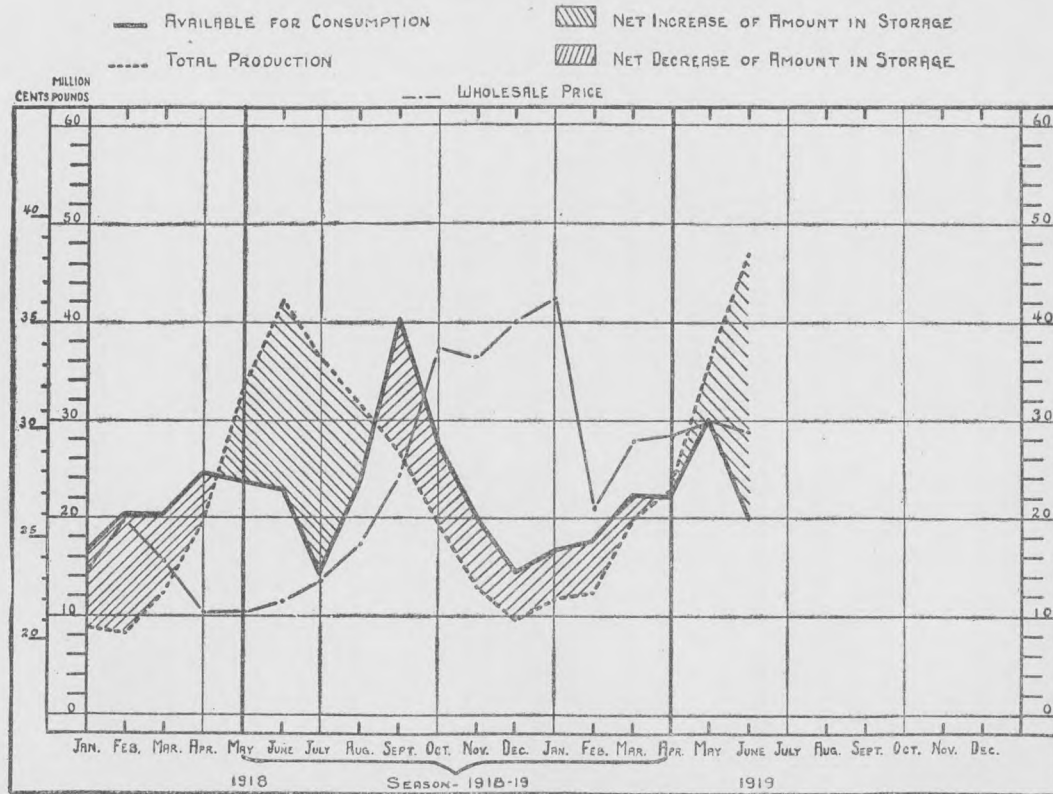
¹ Figures taken from Bulletin No. 776 of the Bureau of Markets, Department of Agriculture.

² Per cent of decrease.

³ Per cent of increase.

⁴ Computed from monthly reports of the Bureau of Markets.

AMERICAN CHEESE



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TABLE 7.—PRODUCTION, STORAGE HOLDINGS, EXPORTS, IMPORTS, AMOUNT AVAILABLE FOR CONSUMPTION, AND WHOLESALE AND RETAIL PRICES OF AMERICAN CHEESE, BY MONTHS, SEPTEMBER, 1916, TO SEPTEMBER, 1919.

Year and month.	Number of pounds produced. ¹	Number of pounds in storage. ²	Net increase (+) or decrease (-) in storage (pounds). ³	Number of pounds exported. ³	Number of pounds imported. ³	Number of pounds available for consumption. ⁴	Average price per pound in Chicago.	
							Wholesale. ⁵	Retail. ⁶
							Cents.	Cents.
1916.								
September	36,413,591	—	1,218,162	3,303,404	2,826,220	18.1	26.6	
October	35,195,399	+	5,239,125	5,970,313	2,540,315	18.9	27.7	
November	40,434,524	—	5,724,076	3,644,915	1,113,006	23.3	29.6	
December	34,710,448	—	2,855,469	4,036,169	662,207	23.0	32.9	
1917.								
January	31,854,979	—	11,439,543	8,101,103	376,650	21.8	32.1	
February	20,415,436	—	6,574,635	7,241,648	273,103	21.5	32.9	
March	13,840,801	—	4,884,517	7,577,082	278,412	23.9	31.8	
April	8,956,284	—	1,438,069	5,283,007	497,888	23.1	32.7	
May	7,518,215	—	2,949,426	7,109,161	505,387	23.8	33.4	
June	4,568,789	+	27,365,164	10,901,054	1,128,515	22.4	33.6	
July	31,933,953	+	30,483,340	2,236,144	1,138,165	21.1	33.9	
August	62,417,293	+	19,557,438	366,222	507,868	21.8	34.2	
September	81,974,731	+	10,475,265	2,006,683	293,002	23.9	34.4	
October	92,449,996	—	7,210,815	464,967	274,066	23.7	36.8	
November	85,239,181	—	5,157,821	951,465	543,703	22.9	37.4	
December	80,081,360	—	10,833,219	1,132,991	515,803	22.3	36.6	
1918.								
January	8,551,575	69,248,141	— 8,521,713	776,583	667,358	16,964,063	23.4	37.5
February	8,451,388	60,726,428	— 12,543,391	921,244	550,353	20,623,888	25.8	37.7
March	12,793,552	48,183,037	— 9,872,403	2,669,003	494,232	20,491,184	23.9	38.1
April	19,202,292	38,310,634	— 13,671,839	9,462,723	1,239,959	24,651,367	21.3	35.3
May	33,190,847	24,638,795	— 2,023,528	13,194,311	1,615,421	23,635,485	21.3	34.3
June	42,391,489	22,615,267	— 10,923,708	10,120,740	1,999,375	23,346,416	22.0	34.2
July	36,819,027	36,538,975	— 17,354,794	5,656,901	471,640	14,278,972	22.9	34.5
August	31,695,294	50,893,769	— 6,221,167	2,326,324	451,956	23,599,759	24.6	35.7
September	26,998,447	57,114,936	— 14,614,581	1,270,205	14,481	40,357,304	27.9	37.6
October	19,899,779	42,500,355	— 8,228,341	549,816	37,072	27,615,376	33.8	39.5
November	13,028,605	34,272,014	— 7,787,535	740,859	8,016	20,083,297	33.3	40.4
December	9,967,360	26,484,479	— 5,595,823	715,793	12,181	14,859,691	35.0	43.2
1919.								
January	11,989,816	20,888,656	— 4,767,578	384,554	106,350	16,479,190	36.3	43.9
February	12,524,012	16,121,078	— 5,751,698	397,016	19,382	17,808,076	26.3	38.9
March	19,839,742	10,369,380	— 3,137,766	963,109	16,122	22,021,521	29.4	38.5
April	22,965,423	7,231,614	— 596,422	1,722,721	166,363	22,004,487	29.6	40.5
May	36,624,636	6,636,192	— 5,841,515	1,732,286	1,058,462	30,109,297	30.4	42.4
June	46,989,500	12,477,707	— 25,023,587	2,335,099	80,281	19,711,065	29.9	42.5
July	29,624,522	37,501,294	— 25,143,580	988,788	35,225	7,527,109	31.1	44.1
August	24,909,466	62,645,144	— 14,015,646	805,213	1,375,617	7,146,424	30.2	44.6
September	19,029,458	76,660,790	— 4,698,680	671,334	1,656,053	15,315,497	28.2	44.8
October	(8)	81,359,470	— 8,470,534	1,144,403	1,787,603	(8)	28.3	44.4
November	(8)	72,888,936	— 10,591,195	1,765,781	3,547,276	(8)	30.5	44.6
December	(8)	62,297,741	—	—	—	(8)	30.3	45.0

¹ Figures from Bureau of Markets, Department of Agriculture. Figures showing production prior to 1918 not available.

² Number of pounds in storage on the first of each month. Figures from Bureau of Markets.

³ During the month. Export figures do not include any amount sent in Army transports. Only that amount sent in merchant vessels is included.

⁴ The amount available for consumption equals production plus amount in storage at beginning of month, plus imports, minus exports, minus amount in storage at end of month.

⁵ The wholesale prices shown are those compiled each month by the Bureau of Labor Statistics from weekly quotations published in the Chicago Dairy Produce.

⁶ The retail prices are averages computed from reports sent to the Bureau of Labor Statistics each month by retail dealers in Chicago.

⁷ From preliminary reports of Bureau of Markets, Department of Agriculture, and subject to change.

⁸ Information not yet available.

TABLE 8.—COMPARISON OF PRODUCTION, STORAGE HOLDINGS, EXPORTS, IMPORTS, AMOUNT OF AMERICAN CHEESE AVAILABLE FOR CONSUMPTION, BY SEASONS, MAY, 1917, TO APRIL, 1918, TO APRIL, 1918, TO APRIL, 1919.

Item.	May, 1917, to April, 1918.		May, 1918, to April, 1919.	
	<i>Pounds.</i>		<i>Pounds.</i>	
In storage at beginning of season.....	7,518,215		24,638,795	
Produced during season.....	(1)		281,300,841	
Imported during season.....	7,858,411		4,918,359	
Total.....			310,857,995	
Exported during season.....	38,998,240		38,042,319	
In storage at end of season.....	24,638,795		6,636,192	
Total.....	63,637,035		44,678,511	
Available for consumption.....	(1)		296,179,484	

¹ Information not available.

TABLE 9.—COMPARISON OF PRODUCTION, STORAGE HOLDINGS, EXPORTS, IMPORTS, AMOUNT AVAILABLE FOR CONSUMPTION, AND AVERAGE WHOLESALE AND RETAIL PRICES OF AMERICAN CHEESE FOR THE FIRST SIX MONTHS OF EACH YEAR, 1918 AND 1919.

Item.	First six months of—	
	1918	1919
	<i>Pounds.</i>	<i>Pounds.</i>
Total production.....	124,581,143	150,924,129
Average monthly storage holdings.....	43,953,717	12,287,437
Net amount of previous season's storage holdings marketed.....	46,632,874	14,252,464
Net amount placed in cold storage for current season.....	10,923,708	30,865,102
Total exports.....	37,144,604	7,534,785
Total imports.....	6,566,698	1,446,960
Total amount available for consumption.....	129,712,403	128,223,666
	<i>Cents.</i>	<i>Cents.</i>
Average wholesale price.....	23.0	30.3
Average retail price.....	36.2	41.1

TABLE 10.—PER. CENT OF TOTAL STOCKS OF AMERICAN CHEESE HELD BY MANUFACTURERS, COLD STORAGE WAREHOUSES, WHOLESALE DEALERS, AND BY MISCELLANEOUS DEALERS, JANUARY AND JULY, 1918, AND JANUARY, 1919.

[From Food Surveys for June and August, 1918, and February and March, 1919, published by Bureau of Markets, Department of Agriculture.]

Group	Total stocks.			Percentage of total stocks ¹ held by each group.		
	1918		1919	1918		1919
	January.	July.	January.	January.	July.	January.
	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>			
Total, all groups.....	141,639,322	174,163,338	161,028,598	100.0	100.0	100.0
Manufacturers.....	32,663,463	16,994,056	10,243,466	23.1	22.9	16.8
Cheese factories.....	24,673,360	14,953,338	9,370,469	17.4	20.2	15.4
Creameries.....	7,990,103	2,040,718	872,997	5.6	2.8	1.4
Cold storages.....	51,528,174	22,408,467	17,629,587	36.4	30.2	28.9
Wholesale dealers.....	53,402,057	34,068,286	32,689,178	37.7	45.9	53.6
Wholesale dealers in butter, eggs, and cheese.....	20,826,152	14,912,998	11,244,585	14.7	20.1	18.4
Wholesale grocers.....	16,997,355	7,683,206	5,838,176	12.0	10.4	9.6
Meat packers.....	12,086,783	7,864,029	12,995,307	8.5	10.6	21.3
Other wholesale dealers.....	3,491,767	3,608,053	2,611,110	2.5	4.8	4.3
Retail dealers.....	20,061,612	6,886,973	(2)			
Miscellaneous.....	4,045,628	692,529	466,367	2.8	1.0	.7
Condensaries.....		300,531	51,468		.4	.1
Bakers.....		211,286	205,424		.3	.3
Other miscellaneous.....		180,712	209,475		.2	.3

¹ Not including retail stocks.

² Figures showing retail stocks not available.

Export Figures.

The export figures used in this article in Tables 2, 3, and 4 for butter and in Tables 7, 8, and 9 for cheese have been those published by the Bureau of Foreign and Domestic Commerce of the Department of Commerce. These figures include only the amount of butter or cheese exported in merchant vessels. While Table 11 shows that the total amount of both butter and cheese exported during the 12 months ending June 30 of each year, 1913 to 1919, has greatly increased in the 6 years, this table and the figures in the tables referred to above take no account of the amount of butter that was sent out of the country during the period of the war on army transports. The amount sent on army transports, however, may be considered as supplying home needs, as all of this amount so sent was used for our own soldiers, with the exception of 4,970,000 pounds purchased by the French Government. However, in Table 12 is given the monthly amount of butter sent on army transports from June, 1917, to May, 1919. This information has been furnished by the Transportation Service, Quartermaster Corps, of the War Department. Similar information for cheese is not available, by months. However, the Subsistence Division of the Quartermaster Corps, War Department, has stated that the total amount of cheese exported in army transports during 1918 was 371,252 pounds, and that the total amount from January 1 to May 1, 1919, was 3,842,719 pounds, making a total since the beginning of 1918 of 4,213,971 pounds.

TABLE 11.—NUMBER OF POUNDS OF BUTTER AND CHEESE EXPORTED DURING THE 12 MONTHS ENDING JUNE 30 OF EACH YEAR, 1913 TO 1919.

Year ending June 30.	Number of pounds exported in merchant vessels.	
	Butter.	Cheese.
1913.....	3,585,600	2,599,058
1914.....	3,693,597	2,427,577
1915.....	9,850,704	55,362,917
1916.....	13,503,279	44,394,251
1917.....	26,835,092	66,050,013
1918.....	17,735,966	44,303,076
1919.....	33,739,960	18,794,853

TABLE 12.—NUMBER OF POUNDS OF BUTTER EXPORTED IN ARMY TRANSPORTS, BY MONTHS, JUNE, 1917, TO MAY, 1919.

Month.	Number of pounds.	Month.	Number of pounds.
1917.		1918—Concluded.	
June.....	62,000	July.....	1,244,000
July.....		August.....	1,720,000
August.....	68,000	September.....	3,104,000
September.....	262,000	October.....	3,114,000
October.....		November.....	1,230,000
November.....	528,000	December.....	8,162,000
December.....	460,000		
1918.		1919.	
January.....	154,000	January.....	4,482,000
February.....	672,000	February.....	2,788,000
March.....	1,274,000	March.....	862,000
April.....	704,000	April.....	1,485,000
May.....	1,312,000	May.....	2,109,000
June.....	1,274,000	Total.....	39,416,000

¹ Includes 3,972,000 pounds purchased by the French Government.

² Includes 998,000 pounds purchased by the French Government.

Cost of Living in Germany, 1916 to 1918.

SUPPLEMENT 21 to the bulletin of the German Bureau of Labor Statistics contains the results of an investigation into the cost of living of German urban families made by the war committee on consumers' interests.¹ The investigation covers the month of April, 1918. It was preceded by three investigations covering April and July, 1916, and April, 1917. The results of the first two investigations were discussed in detail in the MONTHLY REVIEW of March, 1918 (pp. 13-28), and a brief account of the general results of the third investigation was given in the MONTHLY LABOR REVIEW of February, 1919 (pp. 602-603). Owing to lack of space only a brief comparison of the general results of the first, third, and fourth investigations can be given here.

The investigation of April, 1918, having covered families of the same income classes as the investigations of April, 1916 and 1917, the general results of these three investigations are comparable. The average expenditures in April, 1918, per unit of consumption for food, rent, clothing, fuel, light, and miscellaneous items, as compared with the same kind of expenditures in April, 1916 and 1917, are shown in the following table:

¹ Statistisches Reichsamt, Abteilung für Arbeiterstatistik. Beiträge zur Kenntnis der Lebenshaltung im vierten Kriegsjahre. (21. Sonderheft zum Reichs-Arbeitsblatt.) Berlin, 1919.

AVERAGE EXPENDITURES OF GERMAN URBAN FAMILIES PER UNIT OF CONSUMPTION, APRIL, 1916, 1917, AND 1918.¹

Item.	April, 1916.		April, 1917.		April, 1918.	
	Amount.	Per cent.	Amount.	Per cent.	Amount.	Per cent.
	<i>Marks.</i>		<i>Marks.</i>		<i>Marks.</i>	
Food.....	39.04	52.14	38.57	51.03	51.57	47.95
Fuel and light.....	2.70	3.61	4.11	5.44	5.81	5.40
Rent.....	7.99	10.67	8.51	11.26	8.92	8.29
Taxes.....	2.32	3.10	1.82	2.41	2.83	2.63
Clothing, shoes, repairs.....	5.70	7.61	7.49	9.91	18.03	16.75
Laundry, soap, soda.....	1.44	1.92	1.96	2.59	2.52	2.34
Household utensils, china, glassware.....	.48	.64	.99	1.31	1.46	1.36
Books and newspapers.....	.92	1.23	1.78	2.36	2.31	2.15
Car fares.....	1.17	1.56	1.18	1.56	1.90	1.76
Physician, medicines.....	1.09	1.46	.91	1.20	1.69	1.57
Barber, baths.....	.39	.52	.44	.58	.58	.54
Insurance.....	2.25	3.01	1.58	2.09	2.74	2.55
Dues for societies.....	.79	1.06	.61	.81	1.00	.94
Amusements, sports.....	1.09	1.46	.36	.48	.69	.64
Gifts.....	1.94	2.59	1.72	2.27	1.78	1.65
Wages, and tips.....	2.27	3.03	.92	1.22	.74	.69
Miscellaneous.....	3.29	4.39	2.63	3.48	2.99	2.79
Total.....	74.87	100.00	75.53	100.00	107.56	100.00

¹ Owing to the greatly depreciated value of the mark, conversions into United States money are not made in this table. Normally the value of the mark is 23.8 cents.

According to the preceding table the average monthly expenditures of German urban families in April, 1918, per unit of consumption, amounting to 107.56 marks, show a considerable increase over those in April, 1916 and 1917, which varied but slightly. Not only the total expenditures have greatly increased but all individual items of the household budgets, with the exception of wages and tips, show an increase. Such regular increases in all items of the budgets, which in the case of food and of clothing are very considerable, can not be ascribed to fortuitous causes but is due to general price conditions.

While the absolute figures merely indicate how much prices have risen in 1918 as compared with 1916 and 1917, the relative figures give an entirely different picture. They show that in 1918 the expenditures for food formed a smaller percentage of the budget than in the two preceding years, while on the other hand expenditures for clothing represented 16.75 per cent of the entire budget as against 7.61 and 9.91 per cent, respectively, in 1916 and 1917. A striking fact in the average German budget shown here is that rent forms such a relatively small percentage of the budget and that in 1918 this percentage was even lower than in 1917. This is probably due to energetic enforcement of legislation against rent profiteering. The relative expenditure for fuel and lighting was practically the same in 1918 as in 1917. The average per cent of expenditure in 1918 for the principal groups of items of cost of living of German urban families is compared in the next table with that of white families in industrial centers of the United States.¹

¹ MONTHLY LABOR REVIEW, August, 1919. P. 118.

COMPARATIVE PER CENT OF FAMILY EXPENDITURE FOR THE SEVERAL ITEMS OF EXPENSE IN GERMANY AND THE UNITED STATES IN 1918.

Item.	Per cent of total expenditure.	
	Germany.	United States.
Food.....	48.0	38.2
Clothing.....	16.7	16.6
Rent.....	8.3	13.4
Fuel and light.....	5.4	5.3
Furniture and furnishings.....	1.4	5.1
Miscellaneous.....	20.2	21.3
	100.0	100.0

This comparison shows that the average relative expenditure of German families for food was much larger and that for rent and for furniture considerably smaller than the expenditure of American families for the same items, and that the average relative expenditure for clothing, fuel and light, and miscellaneous items was practically the same in the case of both nations' urban families.

The average amount and per cent of expenditure for food and the average consumption of food per unit of consumption of German urban families in April, 1916, 1917, and 1918, are shown in the following table:

AVERAGE EXPENDITURE FOR AND CONSUMPTION OF FOOD BY GERMAN URBAN FAMILIES PER UNIT OF CONSUMPTION, APRIL, 1916, 1917, AND 1918.

Article.	Amount of expenditure.			Per cent of expenditure. ¹			Consumption per unit.		
	April, 1916.	April, 1917.	April, 1918.	April, 1916.	April, 1917.	April, 1918.	April, 1916.	April, 1917.	April, 1918.
Food consumed in the household:	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>				<i>Lbs.</i>	<i>Lbs.</i>	<i>Lbs.</i>
Bread, rolls, etc.....	3.44	3.51	4.28	9.69	10.42	9.70	18.31	18.53	19.74
Other bakery goods, cakes, etc.....	.85	.68	.82	2.39	2.02	1.86	1.03	.44	.92
Flour, grits, farinaceous foods, etc.....	1.48	1.97	2.08	4.17	5.85	4.71	3.21	4.42	3.51
Potatoes.....	2.06	1.43	3.72	5.80	4.24	8.43	37.02	24.11	48.07
Butter, lard, margarine, oil.....	4.16	3.17	4.33	11.72	9.42	9.81	1.90	1.19	1.45
Meat, sausage, ham, etc.....	6.55	7.59	7.54	18.46	22.53	17.08	3.36	4.28	3.24
Conserved meat.....	1.18	.24	.30	3.32	.71	.68	.83	.09	.54
Fish, smoked and fresh; crabs, etc.....	1.14	1.18	1.73	3.21	3.50	3.92	1.54	.89	1.71
Fish canned.....	.46	.25	.....	1.30	.74	.....	.35	.....	.....
Eggs.....	2.36	2.05	3.07	6.65	6.08	6.95	² 12.00	² 7.00	² 8.00
Milk, fresh.....	2.23	2.26	2.89	6.28	6.70	6.55	³ 8.45	³ 8.14	³ 9.51
Milk, conserved.....	.55	.45	.40	1.55	1.34	.91	.....	.....	.....
Cheese, cottage cheese, etc.....	1.01	.93	1.11	2.84	2.76	2.51	.80	.74	.87
Vegetables, fresh and dried; fruit.....	1.35	1.87	2.60	3.80	5.55	5.88	3.75	5.32	6.31
Canned fruits and vegetables.....	.73	.65	.64	2.06	1.93	1.45	1.92	.97	1.78
Jam, preserved fruit, etc.....	1.02	.85	2.95	2.87	2.52	6.68	1.96	1.37	3.38
Sugar.....	.77	.59	.76	2.17	1.75	1.72	2.61	1.98	1.86
Cocoa, chocolate, sweets.....	.70	.45	.45	1.97	1.34	1.02	.31	.....	.....
Spices, salt, vinegar, lemons.....	.57	.91	.98	1.61	2.70	2.22	.....	.....	.....
Coffee, pure and in mixtures.....	1.06	.33	.27	2.99	.98	.61	.49	.20	.53
Coffee substitutes.....	.40	.57	.78	1.13	1.69	1.77	.76	.88	.95
Nonalcoholic drinks, tea, etc.....	.42	.38	.49	1.18	1.13	1.11	.....	.....	.....
Food substitutes.....	.34	.33	.35	.96	.98	.79	.....	.....	.....
Other foodstuffs.....	.67	1.05	1.60	1.88	3.12	3.64	.....	.....	.....
Total.....	35.50	33.69	44.14	90.94	87.35	85.59	.....	.....	.....
Alcohol, tobacco, cigars.....	1.53	2.21	3.76	3.92	5.73	7.29	.....	.....	.....
Food and beverages consumed outside the house.....	2.01	2.67	3.67	5.14	6.92	7.12	.....	.....	.....
Grand total.....	39.04	38.57	51.57	100.00	100.00	100.00	.....	.....	.....

¹ The percentages shown for the individual food items are based on the total expenditure for food consumed in the household and not on the grand total of the table.

² Number.

³ Quarts.

The total monthly expenditure for food per unit of consumption fell from 39.04 marks in 1916 to 38.57 marks in 1917 and rose to 51.57 marks in 1918. In April, 1918, the expenditure for bread, potatoes, vegetables, and jam increased considerably, and only in the case of a few less important foodstuffs the expenditure decreased as compared with April, 1917. If the percentual expenditure for the individual food articles consumed in the household is considered it is found that in 1918 the expenditure for meat, sausages, ham, etc., formed only 17.08 per cent as against 22.53 per cent in 1917, a fact due to the lowering of the meat ration. The relative expenditure for potatoes formed 4.24 per cent of the total expenditure in 1917 and 8.43 per cent in 1918, owing to the doubling of the potato ration in the latter year. That for bread decreased from 10.42 per cent in 1917 to 9.70 per cent in 1918. The expenditure for jam and preserved fruit rose from 2.52 per cent in 1917 to 6.68 per cent in 1918, owing to a greatly increased ration. The relative expenditures for all other foodstuffs underwent less marked changes.

The data relating to the consumption of the individual foodstuffs show that on the whole there was a slight improvement in April, 1918, in the food supply as compared with April, 1917. The consumption of potatoes was twice as large as in 1917; that of bread also shows an increase. Meat was practically the only important foodstuff of which the consumption had decreased.

The present investigation has brought out the fact that the family budgets of all income classes covered showed an excess of expenditures over income which had to be made up for through the spending of former savings or the contracting of debts. In the three preceding investigations family budgets showing a deficit were found only in the three lowest income classes, i. e., those with incomes of under 100 marks, over 100 to 200 marks, and over 200 to 300 marks, while the investigation covering April, 1918, has revealed that households with an income of over 300 to 400 marks had the largest deficits and that even in households with incomes of over 400 to 500 marks, and of over 500 marks, the excess of expenditures over income was considerable. The average monthly deficit per gainfully engaged person was 20.34 marks in the case of workers' families and 49.33 marks in that of low-salaried officials.

WAGES AND HOURS OF LABOR.

Wages and Hours of Labor in Woodworking Industries.

IN THE following tables are presented statistics concerning hours and earnings of employees in such woodworking industries as were included in the recent industrial survey. Comparisons were included in the recent industrial survey. Comparisons are also made with similar figures for earlier years gathered by the Bureau in previous investigations. The particular woodworking industries included in the survey were the manufacture of lumber, planing-mill products (sash, doors, and blinds), and furniture. The investigation of the furniture industry was confined to establishments engaged in the manufacture of plain or upholstered wooden furniture.

In each of the three industries the attempt was made to include in the survey a sufficient number of carefully selected establishments to give results that could be depended on as fairly typical. Table 1 shows what States were included in each industry, and the number of establishments and the number of employees in each State.

TABLE 1.—NUMBER OF ESTABLISHMENTS AND NUMBER OF EMPLOYEES IN THE LUMBER, MILLWORK, AND FURNITURE INDUSTRIES, BY STATES.

State.	Lumber industry.		Millwork industry.		Furniture industry.	
	Number of establishments.	Number of employees.	Number of establishments.	Number of employees.	Number of establishments.	Number of employees.
Alabama.....	6	981				
Arkansas.....	6	1,113				
California.....	7	936	15	1,004		
Florida.....	6	968				
Georgia.....	8	614	7	262		
Idaho.....	3	316				
Illinois.....			9	295	10	1,006
Indiana.....					10	1,364
Iowa.....			6	610		
Louisiana.....	8	1,178				
Maine.....	7	438				
Maryland.....					5	230
Massachusetts.....	6		8	206	8	915
Michigan.....		576	8	301	11	2,276
Minnesota.....	4	805	4	213		
Mississippi.....	6	1,291				
Missouri.....					8	485
Montana.....	3	459				
New Jersey.....					2	92
New York.....			13	555	14	1,167
North Carolina.....	7	681	3	146	7	623
Ohio.....			8	343	10	459
Oregon.....	6	1,321				
Pennsylvania.....	7	353	14	466	12	968
South Carolina.....	6	901				
Tennessee.....	8	365	4	119	5	497
Texas.....	5	830				
Virginia.....	9	832				
Washington.....	9	1,779				
West Virginia.....	8	659				
Wisconsin.....	6	625	6	859	9	1,389
Total.....	141	18,022	105	5,379	111	11,471

Owing to the conditions under which the survey was carried out it was impossible to obtain data for all establishments for the same pay-roll period. In normal times the spread of pay-roll periods over a reasonable time would make comparatively little difference in the results. At the time of the present survey, however, industry was so unsettled and conditions were changing so rapidly that the difference of two months in the time when particular establishments were visited might make material differences in the character of the information obtained. To assist the reader in estimating the effect of changing conditions upon the material herewith presented, there is shown in the following table for each industry the number of pay-roll periods falling in each month of the survey.

TABLE 2.—NUMBER OF PAY-ROLL PERIODS IN SPECIFIED MONTHS.

Industry.	Total number of pay-roll periods.	Number of pay-roll periods in—							
		Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
Lumber	141	9	12	8	15	70	15	8	4
Millwork	105	1	1	4	45	19	12	19	4
Furniture.....	111	.....	.....	3	45	23	25	15	.....

In the different industries the following percentages fell within the four months, December, January, February, and March: Sawmills, 90 per cent; planing mills, 77 per cent; furniture, 96 per cent; the three industries combined, 87 per cent. The information is presented as of the year 1919. In no one of the industries, so far as could be ascertained, were there any changes in rates of wages during the progress of the survey.

The information concerning hours and earnings on which Tables 4 and 5 are based was obtained directly from the pay rolls or other records of the companies by agents of the Bureau. Other information was obtained from responsible officials in personal interviews. Wherever the records of the company failed to indicate the time actually worked by piece workers during the selected pay-roll period, arrangements were made to have such a record kept for a future period from which the data were afterwards copied. In all cases the figures copied by the agents represented hours actually worked and earnings actually received.

As the material comes into the office the figures for hours and those for earnings are both in incommensurable form on account of inequalities in the length of pay-roll periods and in the time worked by different individual employees. Before they can be presented in tabular form it is necessary to reduce both hours and earnings to a common denominator. The comparable figures selected for

use in Tables 4 and 5 are hours worked per day and per week, and earnings per hour and per week. These figures are obtained in the following manner:

The hours per day of each employee are obtained by dividing the number of hours worked by him during the pay-roll period by the number of week days, holidays omitted, in the pay-roll period. Thus in the case of pay rolls for a single week containing no holiday, the hours worked by each employee during the pay-roll period are divided by six, whether the employee worked on each of the six days or not. Similarly the hours actually worked by an employee in any establishment during a pay-roll period containing 13 workdays were divided by 13, regardless of the number of days on which the employee worked. The resulting figure represents the number of hours per day that the employee would have worked, if his time had been uniformly distributed among the week days of the pay-roll period.

All one-week pay rolls included in the survey of these industries were six-day pay rolls. The half-monthly and monthly pay-roll periods, however, showed considerable difference in length. Table 3 shows for each industry the number of schedules covering each specified number of work days.

TABLE 3.—SCHEDULE DISTRIBUTION BY NUMBER OF WORKDAYS IN PAY-ROLL PERIOD.

Industry.	Number of schedules in pay-roll period covering—									Total number of schedules.
	One week or 6 work days.	Two weeks, one-half month, or—				One month or—				
		11 work days.	12 work days.	13 work days.	14 work days.	24 work days.	25 work days.	26 work days.	27 work days.	
Lumber.....	55	19	18	7	3	9	3	27	141	
Millwork.....	75	20	2	4	1	1			105	
Furniture.....	79	1	20	3	8				111	
Total.....	209	3	59	23	19	4	10	3	27	357

By using the average number of hours per week day as a factor it is possible to obtain a figure for the average number of hours worked per week by multiplying that factor in every case by 6. With one-week pay rolls the result represents approximately the original figure for hours per week actually worked. Such variations as are found are due to the fact that the average hours per day as given in the table are the averages of the hours of individual employees, with no weight to represent the proportion of the pay-roll period worked by different individuals. In the case of longer pay rolls, however, the resulting figure is hypothetical. It represents the number of hours per week that the employees would have worked in a six day week if their working hours had been distributed uniformly over the week days of the entire pay-roll period.

This figure of hours worked per week is no more useful for comparisons of hours in different occupations or industries than is the figure of hours per day. It has the advantage, however, of enabling comparisons to be drawn between the hours actually worked on the average by people in each occupation and the full-time hours of the same occupation.

By full-time hours per week is meant the number of hours that is thought of in the occupation as constituting a normal week's work—the number of hours the employee regularly expects to work and the employer expects him to work. This figure was obtained from the officials of the various establishments by the agents of the Bureau. The difference between average actual hours per week and average full-time hours per week is an indication of the degree of irregularity of employment among the employees to whom the figures apply.

Combining hours per day or hours per week computed from the records of one-week pay rolls with those computed from longer pay-rolls introduces a disturbing factor which must not be lost sight of in using the figures for comparative purposes. The figures for a group of employees computed for four weeks combined will differ from those computed for the same group of employees for any one of the same four weeks separately. This difference is always in the same direction, though varying in degree. The causes of it are twofold.

The first cause is related to the conduct of employees who remain on the pay roll throughout the four-week period. In any one week a certain percentage of these employees will be absent a number of days and consequently will show abnormally low hours per day. During the same week another group will do an unusual amount of overtime work and will show abnormally high hours per day. But while the percentages in these low and high groups in different weeks will run fairly uniform, the individuals in the groups change from week to week. The effect of this is to offset wholly or in part the abnormally high attendance record of an employee in one week by a normal or even abnormally low attendance record of the same employee in the other three weeks. The corresponding effect upon the hours per day of those with low-attendance record in any one week need not be shown at length.

So far as persistent employees are concerned the longer the period covered by the pay roll from which the data are obtained the smaller will be the number of employees found in the very high and very low hour groups and the larger the number in the intermediate groups. This movement, however, will have comparatively little effect upon

the final average; in fact, if the movement were perfectly symmetrical at both ends of the scale, the final average would remain unaffected.

The second cause is connected with the amount of labor turnover in different establishments. The number of short-time employees who leave permanently, and the equal number who take the places of those who leave, may be nearly the same from week to week. But the effect of this movement is cumulative, and will be approximately twice as great in a two-week period, and four times as great in a four-week period, as in any one of the weeks making up these longer periods. For this effect there is no offsetting factor. So far as this influence is concerned, therefore, the longer the pay-roll period, the lower will be the average hours per day.

For these reasons it is inadmissible to use the figures of average hours per week day or average hours per week for very close comparisons, without making allowance for the relative number of short and long pay-roll periods on which the averages are based. For practical purposes, however, the figures are sufficiently comparable to give a fairly accurate representation of relative hours of labor in different States, industries, or occupations, and of the percentage of the full time of each occupation which the employees in that occupation actually worked.

For comparative purposes the earnings of each employee are reduced to the form of average earnings per hour by dividing his total earnings for the pay-roll period by the total number of hours worked by him during the period. The resulting figure indicates how much he would have earned each hour he worked if his earnings had been distributed uniformly over all the hours actually worked by him during the period.

By multiplying the average hourly earnings of a group by the previously computed average hours per week worked by the same group, a figure is obtained which represents closely the average actual weekly earnings of the group. In the case of one-week pay rolls this process brings us back practically to the average actual earnings for the week as computed directly from the actual earnings of the individual employees as reported on the schedules. For employees with longer pay-roll periods, however, the average is not the average of what was actually earned in any one week, but the average of what would have been earned if they had worked the same number of hours on each week day of the pay-roll period. In some respects it is a more significant figure than the actual earnings for a single week; for in general the longer the pay-roll period from which average weekly earnings are computed, the more nearly typical may the resulting average be assumed to be.

One other somewhat variable factor involved in the figure for average actual weekly earnings should be pointed out. The practice of working fewer hours on Saturday than on other week days, while by no means universal, is widely prevalent, and the number of hours worked on Saturday varies more or less from establishment to establishment. Whenever fewer hours are worked on Saturday than on other days the theoretical figure for actual weekly earnings described above will express exactly what it professes to express (namely, the amount that would have been earned in a week if the earnings had been uniformly distributed) only in the case of employees for whom Saturdays constituted one-sixth of the total number of days worked by them. In all other cases the figure will vary by a few cents from theoretical exactness. If the number of Saturdays exceeds one in six, the computed weekly earnings will be somewhat too low; if the number is less than one in six the earnings will be correspondingly high. Careful experiment has shown, however, that these variations offset one another so largely that the net result is a variation of a cent or two at the most in the weekly average for the group, a variation so slight that it may be entirely disregarded.

Average actual earnings per week in each occupation, computed as described above, are brought into comparison in the tables with average full-time weekly earnings in the same occupation. In a general way the ratio of full-time earnings to actual earnings might be expected to be identical with the ratio of full-time hours to actual hours. As a matter of fact, however, these ratios may vary to a considerable extent. Actual earnings per week include the week's share of all extra pay for overtime and of all premiums and bonuses. Full-time earnings, on the other hand, represent what an employee can earn by working exactly the normal full-time hours of the establishment. The factor of extra pay for overtime, included in computing actual hourly earnings, was in general eliminated in computing full-time earnings. In those instances, however, which were comparatively rare in these industries, in which the normal working day consisted of a certain number of hours at a basic rate, and an additional hour or two at an increased rate, the extra pay for such additional hours was included in the full-time earnings. Each bonus had to be considered separately. Those that could be earned in regular time, as, for example, bonuses for regularity of attendance, were included; those that could be earned only by working overtime were excluded; while those earned partly in regular time and partly in overtime, as indicated by the relative amount of overtime work performed, were distributed accordingly. The result of eliminating these factors of extra pay for overtime and bonus is to reduce the ratio of full-time

earnings to actual earnings somewhat below the ratio of full-time hours to actual hours.

Owing to the necessary space limitations of an article of this nature it is possible to present in detail only a part of the information gathered during the survey. In the millwork industry alone are the data presented for all occupations included in the survey. In the other industries only those occupations have been shown in detail in which considerable numbers of employees were found. In the furniture industry the occupations given separately include 8,778 employees out of a total of 11,471. In the lumber industry 17,555 out of 18,022 employees are represented. In the figures for each industry as a whole are included the data for the occupations omitted in the detailed tables. The details here omitted will be presented in the final report on these industries. With the aid of the explanations already given as to the method of constructing the tables and the uses to which they may be put, the figures may be left to speak for themselves.

TABLE 4.—AVERAGE ACTUAL AND FULL-TIME HOURS AND EARNINGS IN WOODWORKING INDUSTRIES, BY OCCUPATION, SEX, AND STATE.

Lumber.

Occupation, sex, and State.	Number of establishments.	Number of employees.	Average actual hours worked.					Full-time hours per week.	Average actual earnings.					Full-time earnings per week.
			During one pay period.			Per week day.	Per week.		During one pay period.			Per hour.	Per week.	
			Weekly pay periods.	Biweekly and semi-monthly pay periods.	Monthly pay periods.				Weekly pay periods.	Biweekly and semi-monthly pay periods.	Monthly pay periods.			
<i>Doggers, male.</i>														
Alabama.....	6	23	50.7	.....	194.4	8.0	48.0	60.0	\$12.52	.....	\$55.13	\$0.261	\$12.53	\$15.64
Arkansas.....	6	22	56.4	113.5	.....	8.9	53.4	60.0	17.48	\$31.58	.....	.287	15.33	17.25
California.....	6	16	.....	125.0	177.7	7.9	47.4	52.5	.....	46.17	72.14	.400	18.96	20.55
Florida.....	6	30	47.1	.....	202.5	7.7	46.2	60.4	13.50	.....	53.80	.279	12.89	17.15
Georgia.....	7	16	49.9	77.2	194.2	8.1	48.6	61.8	10.71	14.14	57.65	.203	9.87	12.43
Idaho.....	3	5	.....	97.0	201.5	7.6	45.6	48.0	.....	48.50	100.49	.498	22.71	23.89
Louisiana.....	8	31	54.4	115.9	.....	9.1	54.6	60.0	17.92	38.87	.....	.327	17.85	19.65
Maine.....	6	10	57.4	.....	.....	9.6	57.4	59.4	19.72	.....	.....	.344	19.72	19.80
Michigan.....	6	20	.....	107.0	170.0	8.0	48.0	60.0	.....	35.85	64.99	.347	16.66	20.42
Minnesota.....	4	15	59.0	99.2	165.3	8.0	48.0	59.8	30.09	47.98	85.51	.501	24.05	29.99
Mississippi.....	6	30	46.2	85.9	223.7	7.3	43.8	60.0	15.14	27.20	74.14	.322	14.10	19.35
Montana.....	1	8	.....	.....	164.5	6.6	39.6	48.0	.....	77.32	.....	.470	18.61	22.56
North Carolina.....	7	19	50.9	110.0	.....	8.6	51.6	59.8	14.68	33.20	.....	.289	14.91	17.62
Oregon.....	6	25	.....	90.3	132.7	5.9	35.4	48.0	.....	48.83	70.14	.535	18.94	25.68
Pennsylvania.....	7	10	.....	105.4	234.8	9.0	54.0	60.0	.....	46.15	97.04	.421	22.73	25.11
South Carolina.....	8	28	53.5	.....	.....	8.9	53.5	60.1	16.23	.....	.....	.303	16.23	18.26
Tennessee.....	5	17	50.8	.....	217.0	8.5	51.0	59.2	15.91	.....	59.68	.312	15.91	18.50
Texas.....	9	39	.....	103.6	121.0	6.3	37.8	60.0	.....	35.77	38.97	.338	12.78	20.29
Virginia.....	5	35	50.0	95.0	250.0	8.4	50.4	60.2	15.13	26.12	81.25	.302	15.22	18.13
Washington.....	9	40	63.8	.....	150.8	5.9	35.4	48.0	.....	32.99	85.95	.539	19.08	25.87
West Virginia.....	8	18	.....	.....	218.2	8.2	49.2	59.7	.....	87.39	.....	.399	19.63	23.93
Wisconsin.....	6	14	60.0	119.2	.....	9.2	55.2	60.0	24.00	42.27	.....	.359	19.82	21.54
Total.....	136	471	51.8	100.2	172.3	7.8	46.8	57.8	16.02	36.20	71.79	.358	16.75	20.33
<i>Edgermen, male.</i>														
Alabama.....	6	13	51.8	.....	227.6	8.5	51.0	60.0	15.09	.....	82.07	.324	16.52	19.44
Arkansas.....	6	16	55.0	119.5	.....	9.1	54.6	60.0	22.00	75.57	.....	.388	21.18	23.27
California.....	7	18	.....	110.3	187.0	7.7	46.2	52.0	.....	54.12	104.28	.538	24.86	26.99

TABLE 4.—AVERAGE ACTUAL AND FULL-TIME HOURS AND EARNINGS IN WOODWORKING INDUSTRIES, BY OCCUPATION, SEX, AND STATE—Contd.

Lumber—Continued.

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Occupation, sex, and State.	Number of establishments.	Number of employees.	Average actual hours worked.					Full-time hours per week.	Average actual earnings.					Full-time earnings per week.
			During one pay period.			Per week day.	Per week.		During one pay period.			Per hour.	Per week.	
			Weekly pay periods.	Biweekly and semi-monthly pay periods.	Monthly pay periods.				Weekly pay periods.	Biweekly and semi-monthly pay periods.	Monthly pay periods.			
<i>Edgermen, male—Concluded.</i>														
Florida.....	6	12	48.7	232.2	8.3	49.8	60.3	\$15.82	\$75.94	\$0.345	\$17.18	\$20.86		
Georgia.....	8	9	58.6	108.1	9.4	56.4	62.0	15.76	\$19.73	78.65	.239	13.48	14.72	
Idaho.....	3	17	.....	100.5	7.2	43.2	48.0	.....	50.31	99.27	.538	23.24	25.82
Louisiana.....	8	17	57.5	97.5	9.5	57.0	60.0	24.66	39.00	.....	.425	24.23	25.51
Maine.....	7	8	57.4	.....	9.6	57.4	58.6	.....	.....	.....	.439	25.17	25.12
Michigan.....	6	15	.....	104.8	8.7	52.2	60.0	.....	42.31	96.14	.403	21.04	23.58
Minnesota.....	4	23	60.6	107.6	8.5	51.0	59.9	30.92	53.11	90.41	.502	25.60	30.09	
Mississippi.....	6	15	45.1	107.9	7.9	47.4	60.0	16.36	40.43	80.29	.379	17.96	22.72	
Montana.....	3	10	.....	180.3	7.1	42.6	50.4	.....	.....	105.19	.573	24.41	28.92
North Carolina.....	7	12	52.0	105.5	8.7	52.2	59.8	16.53	51.25	.....	.341	17.80	20.76
Oregon.....	6	12	.....	104.6	7.2	43.2	48.0	.....	83.75	135.62	.787	34.00	37.76
Pennsylvania.....	7	12	.....	112.3	8.9	53.4	60.0	.....	51.79	90.30	.454	24.24	27.23
South Carolina.....	6	12	50.9	.....	8.5	50.9	60.1	18.18	.....	.....	.358	18.18	21.51
Tennessee.....	7	12	54.6	.....	9.1	54.6	59.2	20.66	.....	77.00	.377	20.58	22.36
Texas.....	5	17	.....	97.5	6.5	39.0	60.0	.....	42.66	51.82	.426	16.61	25.54
Virginia.....	8	17	56.7	120.0	9.5	57.0	60.2	19.72	48.00	112.50	.354	20.18	21.18	
Washington.....	9	16	.....	82.3	7.6	45.6	48.0	.....	58.61	145.26	.706	32.19	33.88
West Virginia.....	8	16	.....	236.6	8.9	53.4	59.7	.....	.....	113.38	.473	25.26	28.24
Wisconsin.....	6	15	60.0	128.2	9.9	59.4	60.0	21.00	52.00	.....	.397	23.58	23.84
Total.....	140	314	54.7	108.9	8.4	50.4	57.5	20.62	49.26	103.06	.450	22.68	25.30	
<i>Laborers, male.</i>														
Alabama.....	6	870	46.6	149.3	6.5	39.0	60.1	11.05	.....	37.79	.242	9.44	14.53
Arkansas.....	6	1,000	50.0	93.4	7.4	44.4	60.0	15.28	25.15	.....	.280	12.43	16.78
California.....	7	798	.....	105.3	7.0	42.0	50.8	.....	37.83	70.70	.394	16.55	19.53
Florida.....	6	859	46.8	157.3	7.1	42.6	60.4	12.01	.....	39.63	.249	10.61	15.18
Georgia.....	8	531	52.9	73.9	7.1	42.6	61.4	11.64	12.88	29.37	.206	8.78	12.65	
Idaho.....	3	243	82.7	6.3	37.8	48.0	39.75	78.16	.477	18.03	22.91	
Louisiana.....	8	1,042	52.1	77.3	8.4	50.4	60.0	15.42	19.63201	14.67	17.47	

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Maine.....	7	366	53.8			9.0	53.8	50.3	18.54			346	18.54	20.07
Michigan.....	6	477		105.8	209.5	8.7	52.2	60.0		33.37	66.78	316	16.50	18.75
Minnesota.....	4	670	50.7	100.4	141.6	6.9	41.4	60.0	20.05	40.36	51.63	386	15.98	23.12
Mississippi.....	6	1,168	48.7	77.1	188.3	6.6	39.6	48.2	14.35	23.02	54.94	297	11.76	17.84
Montana.....	3	388			163.8	6.5	39.0	50.9			78.30	472	18.41	24.63
North Carolina.....	7	582	48.6	97.2		8.1	48.6	59.7	12.26	27.79		265	12.88	15.79
Oregon.....	6	1,167		90.3	137.5	5.8	34.8	48.0		48.15	70.81	518	18.03	24.86
Pennsylvania.....	7	283		102.7	210.2	8.3	49.8	60.0		39.82	77.63	381	18.97	22.88
South Carolina.....	6	788	49.0			8.1	49.0	60.1	12.73			257	12.73	16.84
Tennessee.....	8	293	46.4		154.7	7.3	43.8	58.9	13.66		41.22	292	12.75	15.47
Texas.....	5	698		84.9	126.0	5.9	85.4	60.0		27.41	38.25	312	11.04	18.71
Virginia.....	9	695	48.5	106.5	186.7	8.0	48.0	60.3	14.49	29.59	59.17	295	14.16	17.65
Washington.....	9	1,547		82.6	140.8	5.8	34.8	47.4		41.39	74.18	513	17.85	24.63
West Virginia.....	8	556			173.0	6.6	39.6	59.9			68.61	391	15.48	23.44
Wisconsin.....	6	521	51.8	106.3		8.2	49.2	60.0	15.10	34.54		317	15.60	19.04
Total.....	141	15,542	49.6	91.5	154.7	7.1	42.6	55.9	14.13	31.98	63.05	345	14.70	19.23
<i>Machine feeders, male.</i>														
Alabama.....	5	29	46.4		132.2	6.3	37.8	60.0	11.25		35.02	251	9.49	15.03
Arkansas.....	6	44	53.0	105.2		8.2	49.2	60.0	16.89	30.88		299	14.71	17.92
California.....	6	36		121.3	196.7	8.3	49.8	50.7		49.25	92.77	446	22.21	21.92
Florida.....	6	27	52.4		233.0	8.7	52.2	60.1	16.27		68.16	298	15.56	17.90
Georgia.....	7	23	46.1	70.4		6.6	39.6	61.4	11.35	12.61		201	7.96	12.27
Idaho.....	2	15		78.5	103.9	5.0	30.0	48.0		37.81	51.34	488	14.64	23.41
Louisiana.....	8	41	53.2	76.4		8.6	51.6	60.0	16.99	21.00		313	16.15	18.75
Maine.....	7	15	55.0			9.2	55.0	58.9	20.77			377	20.77	22.00
Michigan.....	4	16		116.5	216.8	8.9	53.4	60.0		38.79	79.35	350	18.69	20.06
Minnesota.....	4	25	47.0	107.0	181.9	7.7	46.2	59.9	19.94	44.40	65.85	396	18.30	23.95
Mississippi.....	6	36	57.1	90.7	227.6	8.1	48.6	60.0	16.96	30.30	73.25	321	15.60	19.29
Montana.....	3	18			172.4	6.8	40.8	51.3			83.79	486	19.83	23.92
North Carolina.....	5	33	57.3	116.3		9.6	57.6	59.5	16.81	34.96		385	22.13	17.76
Oregon.....	6	52		92.1	182.2	7.0	42.0	48.0		54.99	104.41	587	24.65	28.17
Pennsylvania.....	5	10		115.6	250.0	9.6	57.6	60.0		48.29	110.00	419	24.13	25.14
South Carolina.....	5	32	58.7			9.8	58.7	60.2	17.47			298	17.47	17.94
Tennessee.....	2	9	58.1			9.7	58.1	55.6	19.27			333	19.27	18.88
Texas.....	5	38		94.8	123.4	6.5	39.0	60.0		34.09	37.63	342	13.34	20.54
Virginia.....	7	31	55.4	98.6	247.0	9.0	54.0	60.6	18.34	27.58	83.37	327	17.66	19.83
Washington.....	9	89		85.3	165.5	6.5	39.0	48.0		48.73	92.65	558	21.76	26.81
West Virginia.....	6	18			208.8	8.1	48.6	60.0			83.32	396	19.25	23.74
Wisconsin.....	6	26	40.0	116.8		8.9	53.4	60.0	11.25	40.15		336	17.94	20.16
Total.....	120	668	54.0	99.1	178.1	7.8	46.8	56.5	16.38	38.33	81.05	390	18.25	21.13
<i>Sawyers, band, male.</i>														
Alabama.....	4	8	60.0		143.2	7.1	42.6	60.0	46.00		113.28	781	33.27	46.88
Arkansas.....	6	11	56.7	123.9		9.4	56.4	60.0	48.17	90.53		768	43.32	46.06
California.....	7	16		120.3	184.5	7.9	47.4	53.3		88.31	146.48	776	36.78	41.11
Florida.....	4	9	57.4		270.0	9.7	58.2	60.0	44.90		216.00	792	46.09	47.85

TABLE 4.—AVERAGE ACTUAL AND FULL-TIME HOURS AND EARNINGS IN WOODWORKING INDUSTRIES, BY OCCUPATION, SEX, AND STATE—Contd.

Lumber—Concluded.

Occupation, sex, and State.	Number of establishments.	Number of employees.	Average actual hours worked.					Full-time hours per week.	Average actual earnings.					Full-time earnings per week.
			During one pay period.			Per week day.	Per week.		During one pay period.			Per hour.	Per week.	
			Weekly pay periods.	Biweekly and semi-monthly pay periods.	Monthly pay periods.				Weekly pay periods.	Biweekly and semi-monthly pay periods.	Monthly pay periods.			
<i>Sawyers, band, male—Concluded.</i>														
Georgia.....	3	4	60.0	120.0	240.0	9.9	59.4	60.0	\$48.00	\$66.00	\$156.00	\$0.700	\$41.58	\$42.00
Idaho.....	3	10	.....	104.0	180.0	7.2	43.2	48.0	.....	100.88	157.00	.892	38.53	42.82
Louisiana.....	5	13	58.1	.....	.....	9.7	58.1	60.0	55.03	.....	.....	.950	55.03	56.97
Maine.....	5	7	58.4	.....	.....	9.7	58.4	58.4	36.83	.....	.....	.632	36.83	36.25
Michigan.....	5	12	.....	109.9	160.3	7.9	47.9	60.0	.....	66.64	105.77	.625	29.63	36.32
Minnesota.....	4	14	60.0	126.0	261.7	9.9	59.4	59.9	54.00	109.67	205.43	.853	50.67	51.11
Mississippi.....	4	9	65.0	86.0	222.2	7.6	45.6	60.0	42.57	71.26	188.85	.817	37.26	49.03
Montana.....	3	9	.....	.....	212.4	8.3	49.8	51.3	.....	.....	200.34	.942	46.91	48.43
North Carolina.....	6	10	59.6	115.0	.....	9.9	59.4	59.5	36.53	73.50	.....	.618	36.71	36.86
Oregon.....	5	10	.....	107.8	207.5	7.9	47.4	48.0	.....	121.04	251.28	1.160	54.98	55.67
Pennsylvania.....	7	10	.....	122.4	247.8	9.9	59.4	60.0	.....	74.83	157.24	.618	36.71	37.08
South Carolina.....	6	13	52.4	.....	.....	8.7	52.4	60.2	37.02	.....	.....	.701	37.02	42.15
Tennessee.....	8	11	54.7	.....	240.0	9.1	54.6	58.8	34.72	.....	144.00	.634	34.62	37.38
Texas.....	4	14	.....	105.0	150.8	7.3	43.8	60.0	.....	86.45	110.03	.799	35.00	47.93
Virginia.....	9	15	58.4	120.0	250.0	9.7	58.2	60.2	35.46	66.00	137.50	.600	34.92	35.92
Washington.....	8	12	.....	66.5	202.9	7.2	43.2	48.0	.....	81.24	195.64	1.029	44.45	49.39
West Virginia.....	8	20	.....	.....	211.9	8.0	48.0	59.3	.....	.....	137.40	.645	30.96	38.54
Wisconsin.....	6	12	60.0	130.8	.....	10.1	60.6	60.0	39.00	84.10	.....	.641	38.84	38.47
Total.....	120	249	57.3	113.1	202.7	8.7	52.2	57.5	41.96	85.45	161.82	.768	40.09	43.69
<i>Setters, male.</i>														
Alabama.....	6	12	57.1	.....	158.5	8.0	48.0	60.0	17.36	.....	59.64	.331	15.89	19.87
Arkansas.....	6	11	58.3	115.1	.....	9.0	54.0	60.0	23.33	41.49	.....	.370	19.98	22.17
California.....	7	23	.....	127.2	173.4	7.4	44.4	52.7	.....	52.58	85.78	.481	21.36	24.99
Florida.....	6	10	55.5	.....	220.8	8.7	52.2	60.6	20.54	.....	74.17	.354	18.48	21.03
Georgia.....	8	8	56.8	107.7	240.0	9.3	55.8	61.5	15.87	28.28	84.00	.276	15.40	16.89
Idaho.....	3	14	104.0	187.8	7.5	45.0	48.0	57.89	104.59	.557	25.07	26.72
Louisiana.....	8	15	55.5	133.5	9.3	55.8	60.0	22.66	60.10412	22.99	24.72

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Maine.....	7	12	55.2			9.2	55.2	58.7	22.20			.404	22.20	23.09
Michigan.....	6	14		111.8	191.3	8.5	51.0	60.0		46.25	86.26	.424	21.62	24.73
Minnesota.....	4	16	58.3	119.0	203.8	8.6	51.6	59.9	30.15	63.00	109.72	.528	27.24	31.59
Mississippi.....	6	14	59.5	95.2	250.3	8.7	52.2	60.0	20.52	36.90	112.03	.386	20.15	23.13
Montana.....	3	19			193.4	7.5	45.0	52.1			116.24	.602	27.09	31.53
North Carolina.....	7	13	49.4	115.5		8.4	50.4	59.5	16.52	38.93		.327	16.48	19.79
Oregon.....	6	12		105.5	168.3	7.1	42.6	48.0		62.83	101.45	.599	25.52	28.76
Pennsylvania.....	7	11		98.3	260.5	8.6	51.6	60.0		48.05	121.90	.486	25.08	29.15
South Carolina.....	6	11	59.1			9.8	59.1	60.1	21.63			.336	21.63	21.91
Tennessee.....	8	11	50.2		235.0	8.4	50.4	58.8	18.32		82.25	.364	18.35	21.42
Texas.....	5	11		118.1	126.1	7.5	45.0	60.0		49.69	46.03	.491	18.05	24.05
Virginia.....	9	17	49.4	120.0	250.0	8.4	50.4	60.2	17.99	48.00	100.00	.363	18.30	21.01
Washington.....	9	24		87.5	180.7	8.0	42.0	48.0		52.50	107.27	.591	24.82	28.30
West Virginia.....	8	19			230.3	8.6	51.6	59.7			106.66	.484	23.94	27.54
Wisconsin.....	6	14	60.0	118.5		9.3	55.8	60.0	24.00	47.83		.393	22.10	23.79
Total.....	141	311	54.5	111.0	194.4	8.3	49.8	57.0	20.43	43.33	99.34	.446	22.21	25.95
All occupations, United States..	141	18,022	50.3	93.4	159.3	7.2	43.2	59.1	15.05	34.1	67.70	.360	15.55	20.03

Millwork.

<i>Bench hands, male.</i>														
California.....	14	132	42.4	105.0	189.9	7.3	43.8	46.5	\$28.33	\$61.95	\$87.76	\$0.625	\$27.38	\$33.02
Georgia.....	7	55	51.8			8.6	51.6	56.2	22.75			.438	22.60	24.54
Illinois.....	9	122	45.5	89.0		7.4	44.4	48.9	21.80	44.47		.483	21.45	23.40
Iowa.....	6	131	53.9	105.2		8.9	53.4	57.6	21.01	43.07		.396	21.15	22.45
Massachusetts.....	8	72	46.7			7.8	46.8	47.9	21.78			.531	24.85	25.36
Michigan.....	8	54	52.7	91.7		8.1	48.6	51.1	20.27	42.05		.435	21.14	23.44
Minnesota.....	4	65	51.2	103.6		8.9	53.4	58.1	19.83	39.56		.373	19.92	21.54
New York.....	13	231	48.3			8.0	48.0	48.7	23.02			.481	23.09	23.18
North Carolina.....	3	35	53.4	94.5		8.2	49.2	53.4	21.63	29.01		.341	16.78	18.45
Ohio.....	8	100	49.1	81.6		8.0	48.0	52.2	21.15	52.04		.447	21.46	23.34
Pennsylvania.....	14	143	50.8	95.3		8.2	49.2	52.6	22.51	45.14		.460	22.63	23.80
Tennessee.....	4	35	46.1			7.7	46.2	51.5	19.40			.420	19.40	21.56
Wisconsin.....	6	196	58.4	108.3		8.9	53.4	58.1	19.59	37.25		.343	18.32	18.89
Total.....	104	1,374	49.3	100.9	189.9	8.2	49.2	52.5	22.57	41.58	87.76	.451	22.19	23.48
<i>Laborers, male.</i>														
California.....	15	489	42.2	84.2	164.3	7.1	42.6	47.8	18.06	37.20	62.75	.424	18.06	20.23
Georgia.....	7	113	44.3			7.4	44.4	56.1	10.67			.245	10.88	13.75
Illinois.....	9	51	47.6	75.2		7.6	45.6	48.9	14.71	21.18		.309	14.09	15.03
Iowa.....	6	210	52.7	109.7		8.9	53.4	58.6	15.21	30.54		.285	15.22	16.31
Massachusetts.....	7	26	47.1			7.8	46.8	47.6	15.32			.325	15.21	15.44
Michigan.....	8	150	48.7	88.3		7.8	46.8	51.6	15.75	25.50		.291	13.62	15.85
Minnesota.....	4	51	52.7	104.6		8.9	53.4	58.5	15.31	26.01		.267	14.26	15.54

TABLE 4.—AVERAGE ACTUAL AND FULL-TIME HOURS AND EARNINGS IN WOODWORKING INDUSTRIES, BY OCCUPATION, SEX, AND STATE—Contd.
Millwork—Concluded.

Occupation, sex, and State.	Number of establishments.	Number of employees.	Average actual hours worked.					Full-time hours per week.	Average actual earnings.					Full-time earnings per week.
			During one pay period.			Per week day.	Per week.		During one pay period.			Per hour.	Per week.	
			Weekly pay periods.	Biweekly and semi-monthly pay periods.	Monthly pay periods.				Weekly pay periods.	Biweekly and semi-monthly pay periods.	Monthly pay periods.			
<i>Laborers, male—Concluded.</i>														
New York.....	13	100	49.3	.....	.....	8.2	49.2	52.7	\$14.53	.....	.....	\$.296	\$14.56	\$15.71
North Carolina.....	3	58	50.1	75.7	.....	6.7	40.2	51.7	12.81	\$19.58	.....	.257	10.33	13.26
Ohio.....	8	83	49.8	94.7	.....	8.3	49.8	50.8	14.72	35.71	.....	.301	14.99	15.31
Pennsylvania.....	13	120	48.9	96.2	.....	8.1	48.6	54.2	15.60	31.08	.....	.320	15.55	17.14
Tennessee.....	4	42	49.4	.....	.....	8.3	49.8	51.2	13.97	.....	.....	.283	14.09	14.40
Wisconsin.....	5	260	57.6	102.9	.....	8.6	51.6	57.9	13.45	27.58	.....	.257	13.26	14.56
Total.....	102	1,756	48.5	93.6	164.3	7.9	47.4	53.1	14.74	29.89	\$62.75	.321	15.22	16.69
<i>Machine hands, male.</i>														
California.....	15	337	42.9	84.7	188.5	7.1	42.6	47.0	26.60	43.84	83.22	.563	23.98	26.25
Georgia.....	7	94	51.3	.....	.....	8.6	51.6	56.0	20.43	.....	.....	.408	21.05	22.84
Illinois.....	9	119	44.9	73.4	.....	7.3	43.8	49.0	21.71	36.17	.....	.486	21.29	23.56
Iowa.....	6	199	54.5	113.7	.....	9.2	55.2	58.0	20.59	46.08	.....	.388	21.42	22.04
Massachusetts.....	8	108	45.2	.....	.....	7.5	45.0	47.6	22.80	.....	.....	.504	22.68	23.94
Michigan.....	8	92	54.7	98.7	.....	8.6	51.6	54.1	21.19	39.21	.....	.396	20.43	21.42
Minnesota.....	4	91	54.2	106.3	.....	9.0	54.0	58.1	20.42	36.92	.....	.360	19.44	20.83
New York.....	13	224	49.1	.....	.....	8.2	49.2	50.5	22.52	.....	.....	.467	21.86	23.21
North Carolina.....	3	53	52.8	84.0	.....	7.3	43.8	52.1	16.09	26.46	.....	.310	13.58	16.13
Ohio.....	8	142	49.3	100.8	.....	8.2	49.2	51.6	20.75	58.45	.....	.433	21.30	22.17
Pennsylvania.....	14	202	52.1	96.3	.....	8.3	49.8	53.0	24.46	41.90	.....	.450	22.41	23.55
Tennessee.....	4	42	49.5	.....	.....	8.3	49.8	52.0	19.47	.....	.....	.391	19.47	20.25
Wisconsin.....	6	321	58.3	107.8	8.9	53.4	57.9	18.24	35.62325	17.36	18.01
Total.....	105	2,024	49.3	100.9	188.5	8.2	49.2	52.8	22.13	39.02	83.22	.435	21.40	22.34

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<i>Laborers, female.</i>														
Iowa.....	3	67	56.0	107.2	9.1	54.6	60.0	11.97	24.34222	12.12	13.02
Wisconsin.....	3	82	54.1	94.3	7.9	47.4	55.5	9.46	17.79185	8.77	10.05
Other States.....	6	76	48.3	89.3	180.3	7.4	44.4	49.5	11.44	23.82	57.05	.272	12.08	13.47
Total.....	12	225	52.8	96.9	180.3	8.1	48.6	54.7	11.27	20.93	57.05	.225	10.94	12.20
All occupations, male.....	105	5,154	49.1	97.8	174.5	8.1	48.6	52.8	20.24	35.73	71.68	.401	19.49	20.36
All occupations, female.....	12	225	52.8	96.9	180.3	8.1	48.6	54.7	11.27	20.93	57.05	.225	10.94	12.20
All occupations, male and female	105	5,379	49.2	97.8	175.0	8.1	48.6	52.9	20.05	34.71	70.39	.393	19.10	20.63

Furniture.

<i>Cabinetmakers, male.</i>														
Illinois.....	10	142	55.0	106.3	.....	8.8	52.8	56.8	\$21.03	\$46.30	.....	\$0.423	\$22.33	\$24.02
Indiana.....	10	153	53.8	102.1	.....	8.9	53.4	57.9	19.39	43.10	.....	.383	20.45	22.18
Maryland.....	5	39	51.9	98.6	.....	8.7	52.2	55.9	22.82	26.25	.....	.390	20.36	23.31
Massachusetts.....	3	122	43.3	.....	.....	7.2	43.2	46.8	22.89	.....	.....	.531	22.89	24.57
Michigan.....	8	213	52.1	100.8	.....	8.5	51.0	54.6	21.80	45.61	.....	.436	22.24	23.77
Missouri.....	7	75	53.6	116.4	.....	9.0	54.0	56.7	19.10	60.28	.....	.377	20.36	21.33
New York.....	12	158	52.2	.....	.....	8.7	52.2	54.9	20.35	.....	.....	.390	20.35	21.36
North Carolina.....	4	54	57.8	110.8	.....	8.6	51.6	53.3	18.59	37.43	.....	.332	17.13	17.72
Ohio.....	6	40	57.5	91.1	.....	9.1	54.6	56.0	20.97	43.98	.....	.391	21.35	21.77
Pennsylvania.....	10	132	54.7	113.2	.....	9.1	54.6	57.5	20.02	34.92	.....	.347	18.95	19.94
Tennessee.....	5	72	51.9	.....	.....	8.7	52.2	55.8	20.53	.....	.....	.399	20.53	22.07
Wisconsin.....	8	231	48.6	113.9	.....	8.8	52.8	59.2	18.58	34.83	.....	.327	17.27	19.37
Other States.....	1	18	48.0	.....	.....	8.0	48.0	48.0	23.88	.....	.....	.498	23.88	23.88
Total.....	89	1,449	51.6	108.0	.....	8.6	51.6	55.7	20.64	40.48	.....	.396	20.43	22.05
<i>Finishers, male.</i>														
Illinois.....	10	167	50.9	105.2	.....	8.4	50.4	57.0	18.61	48.09	.....	.421	21.22	23.98
Indiana.....	10	239	54.4	104.9	.....	8.9	53.4	58.5	17.28	27.73	.....	.302	16.13	17.64
Maryland.....	5	58	48.6	116.9	.....	8.3	49.8	55.2	18.92	27.19	.....	.359	17.88	19.77
Massachusetts.....	8	118	48.7	.....	.....	8.1	48.6	52.6	19.39	.....	.....	.403	19.39	21.08
Michigan.....	11	459	51.1	100.3	.....	8.3	49.8	54.0	19.05	39.98	.....	.384	19.12	20.73
Missouri.....	8	90	52.7	.....	.....	8.8	52.8	55.7	19.02	.....	.....	.362	19.02	19.98
New Jersey.....	2	18	55.0	.....	.....	9.2	55.2	55.3	24.73	.....	.....	.456	24.73	24.93
New York.....	14	238	51.6	.....	.....	8.5	51.0	56.0	20.02	.....	.....	.387	20.02	21.86
North Carolina.....	7	98	55.0	86.3	.....	7.0	42.0	52.6	13.21	24.63	.....	.281	11.80	14.78
Ohio.....	9	86	47.5	121.1	.....	8.3	49.8	53.6	16.16	50.40	.....	.362	18.03	19.42
Pennsylvania.....	12	209	53.6	108.5	.....	8.9	53.4	57.3	19.05	33.32	.....	.344	18.37	19.71
Tennessee.....	5	79	48.4	.....	.....	8.1	48.6	55.9	14.34	.....	.....	.289	14.34	15.99
Wisconsin.....	9	240	46.4	115.3	.....	8.9	53.4	59.0	17.24	35.03	.....	.322	17.19	19.01
Total.....	110	2,099	51.2	104.6	.....	8.5	51.0	55.9	18.55	36.83	.....	.358	18.26	19.98

WAGES AND HOURS OF LABOR.

TABLE 4.—AVERAGE ACTUAL AND FULL-TIME HOURS AND EARNINGS IN WOODWORKING INDUSTRIES, BY OCCUPATION, SEX, AND STATE—Contd.

Furniture—Continued.

Occupation, sex, and State.	Number of establishments.	Number of employees.	Average actual hours worked.					Full-time hours per week.	Average actual earnings.					Full-time earnings per week
			During one pay period.			Per week day.	Per week.		During one pay period.			Per hour.	Per week.	
			Weekly pay periods.	Biweekly and semi-monthly pay periods.	Monthly pay periods.				Weekly pay periods.	Biweekly and semi-monthly pay periods.	Monthly pay periods.			
<i>Laborers, male.</i>														
Illinois.....	10	152	52.3	100.3	.....	8.4	50.4	56.8	\$15.49	\$34.00	.....	\$0.322	\$16.23	\$18.27
Indiana.....	10	331	51.3	99.4	.....	8.5	51.0	58.7	12.09	24.17	.....	.224	11.42	13.13
Maryland.....	5	42	52.1	99.7	.....	8.5	51.0	57.2	13.53	20.52	.....	.234	11.93	13.36
Massachusetts.....	8	156	51.3	.....	.....	8.6	51.6	54.3	16.82	.....	.....	.326	16.82	17.67
Michigan.....	11	330	49.4	98.5	.....	7.9	47.4	53.8	15.31	29.18	.....	.301	14.27	16.14
Missouri.....	8	102	53.7	.....	.....	8.9	53.4	56.5	13.11	.....	.....	.246	13.11	13.80
New Jersey.....	2	7	55.8	.....	.....	9.3	55.8	55.9	14.11	.....	.....	.258	14.11	14.12
New York.....	14	132	52.6	.....	.....	8.6	51.6	56.2	13.88	.....	.....	.263	13.88	14.94
North Carolina.....	7	128	51.5	88.5	.....	7.4	44.4	53.3	9.20	20.37	.....	.223	9.90	11.89
Ohio.....	10	65	46.5	116.3	.....	8.1	48.6	56.2	11.27	33.54	.....	.256	12.44	14.36
Pennsylvania.....	12	92	44.5	85.7	.....	7.4	44.4	57.4	12.33	17.74	.....	.261	11.59	14.98
Tennessee.....	5	111	48.8	.....	.....	8.1	48.6	56.6	10.97	.....	.....	.224	10.97	12.61
Wisconsin.....	9	187	47.4	108.3	.....	8.6	51.6	55.9	13.17	27.63	.....	.258	13.31	14.39
Total.....	111	1,835	50.5	99.7	.....	8.3	49.8	56.0	13.64	26.72	.....	.265	13.20	14.84
<i>Machine hands, male.</i>														
Illinois.....	10	225	54.4	107.1	.....	8.8	52.8	57.0	20.23	43.02	.....	.389	20.54	22.01
Indiana.....	10	323	55.6	111.1	.....	9.3	55.8	58.0	18.38	31.49	.....	.314	17.52	18.23
Maryland.....	5	55	52.9	105.0	.....	8.9	53.4	56.0	22.76	28.26	.....	.384	20.51	21.31
Massachusetts.....	8	292	52.3	.....	.....	8.7	52.2	54.3	20.81	.....	.....	.402	20.81	21.63
Michigan.....	11	539	51.7	98.3	.....	8.1	48.6	54.0	21.29	38.86	.....	.401	19.40	21.61
Missouri.....	7	146	54.9	.....	.....	9.1	54.6	56.3	19.50	.....	.....	.356	19.50	20.03
New Jersey.....	2	25	49.2	.....	.....	8.2	49.2	50.9	24.81	.....	.....	.502	24.81	25.50
New York.....	14	318	54.5	.....	.....	9.0	54.0	56.2	19.32	.....	.....	.354	19.32	20.18
North Carolina.....	6	205	52.6	94.2	.....	7.6	45.6	51.9	14.10	28.48	.....	.297	13.54	15.44
Ohio.....	10	148	49.7	118.0	8.6	51.6	55.8	18.43	42.83361	18.63	20.16
Pennsylvania.....	12	219	54.2	105.0	8.9	53.4	57.2	19.63	32.84357	19.06	20.40

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Tennessee.....	5	115	51.3	8.6	51.6	56.0	18.37354	18.37	19.72
Wisconsin.....	8	366	46.2	116.2	8.9	53.4	59.1	17.11	34.18	.310	16.55	18.25
Total.....	108	2,976	53.0	105.6	8.7	52.2	56.0	19.68	35.80	.349	18.22	20.05
<i>Upholsterers, male.</i>												
Illinois.....	5	147	50.9	93.2	8.4	50.4	54.3	25.52	45.34	.499	25.15	27.08
Indiana.....	2	25	48.5	.....	8.1	48.6	57.0	19.74	.....	.397	19.74	22.57
Maryland.....	2	16	47.3	.....	7.9	47.4	52.0	31.60	.....	.671	31.60	34.87
Massachusetts.....	5	22	46.4	.....	7.7	46.2	50.0	28.97	.....	.621	28.97	30.59
Michigan.....	6	24	53.3	112.0	8.8	52.8	53.8	21.50	46.67	.409	21.60	21.98
New York.....	6	78	48.0	.....	8.0	48.0	57.3	21.30	.....	.445	21.30	25.28
North Carolina.....	3	19	.....	96.9	7.5	45.0	50.5	.....	34.37	.350	15.75	17.68
Ohio.....	5	18	45.4	128.0	7.9	47.4	53.3	20.98	44.19	.439	20.81	23.39
Pennsylvania.....	3	5	50.0	109.5	8.6	51.6	55.7	20.99	54.00	.450	23.22	25.05
Wisconsin.....	5	48	50.6	111.5	8.7	52.2	53.7	25.34	37.18	.463	24.17	24.87
Other States.....	2	17	50.5	.....	8.4	50.4	53.5	24.22	.....	.493	24.22	25.87
Total.....	44	419	49.4	102.1	8.2	49.2	54.4	24.18	41.38	.476	23.42	25.86
All occupations, male.....	111	10,556	51.7	104.5	8.5	51.0	55.2	18.70	35.20	.349	17.80	19.39
<i>Finishers, female.</i>												
Illinois.....	4	16	53.4	89.4	8.1	48.6	51.9	14.76	21.94	.270	13.12	14.01
Indiana.....	5	22	53.8	108.6	9.0	54.0	59.2	11.51	18.77	.198	10.69	11.70
Massachusetts.....	4	6	51.8	.....	8.6	51.6	53.0	13.62	.....	.267	13.62	13.98
Michigan.....	6	86	50.2	96.2	8.1	48.6	53.9	12.59	22.75	.244	11.86	13.17
Missouri.....	2	3	47.2	.....	7.9	47.4	53.7	10.35	.....	.217	10.35	11.63
New York.....	3	22	53.7	.....	8.5	51.0	54.0	12.49	.....	.233	12.49	13.37
Pennsylvania.....	5	30	43.9	.....	7.3	43.8	54.0	11.00	.....	.246	11.00	13.29
Tennessee.....	2	10	42.4	.....	7.1	42.6	56.2	8.40	.....	.200	8.40	11.16
Other States.....	3	9	50.0	119.7	8.8	52.8	54.2	11.50	18.63	.164	8.66	8.91
Total.....	34	204	49.3	101.0	8.1	48.6	54.4	12.01	21.35	.235	11.42	12.78
<i>Laborers, female.</i>												
Illinois.....	4	9	.....	99.2	8.1	48.6	51.9	.....	24.22	.245	11.93	12.72
Indiana.....	4	73	54.5	104.0	8.8	52.8	59.8	10.01	17.53	.174	9.19	10.39
Massachusetts.....	2	8	47.6	.....	7.9	47.4	54.0	9.36	.....	.198	9.36	10.69
Michigan.....	7	90	48.4	88.9	7.6	45.6	54.0	10.91	17.24	.210	9.58	11.36
Missouri.....	2	10	44.9	.....	7.5	45.0	50.3	8.83	.....	.195	8.83	9.70
New York.....	2	12	51.5	.....	8.6	51.6	54.0	11.47	.....	.223	11.47	12.03
Pennsylvania.....	8	52	49.0	76.4	7.8	46.8	54.1	10.52	12.75	.208	9.73	11.24
Tennessee.....	2	11	48.9	.....	8.2	49.2	56.1	8.00	.....	.166	8.00	9.30
Wisconsin.....	3	33	.....	104.2	7.8	46.8	55.0	.....	16.25	.155	8.13	9.50
Other States.....	1	3	48.0	8.0	48.0	48.0	13.80288	13.80	13.81
Total.....	35	301	49.5	98.0	8.0	48.0	55.4	10.35	17.40	.195	9.36	10.79

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TABLE 4.—AVERAGE ACTUAL AND FULL-TIME HOURS AND EARNINGS IN WOODWORKING INDUSTRIES, BY OCCUPATION, SEX, AND STATE—Contd.

Furniture—Concluded.

Occupation, sex, and State.	Number of establishments.	Number of employees.	Average actual hours worked.					Full-time hours per week.	Average actual earnings.					Full-time earnings per week.
			During one pay period.			Per week day.	Per week.		During one pay period.			Per hour.	Per week.	
			Weekly pay periods.	Biweekly and semi-monthly pay periods.	Monthly pay periods.				Weekly pay periods.	Biweekly and semi-monthly pay periods.	Monthly pay periods.			
<i>Machine hands, female.</i>														
Indiana.....	2	33	54.0	106.2	.....	8.9	53.4	59.8	\$11.88	\$18.96	.....	\$0.180	\$9.61	\$10.77
Massachusetts.....	2	12	47.2	.....	.....	7.9	47.4	54.0	11.98	.....	.....	.254	11.98	13.73
Michigan.....	3	44	46.7	103.0	.....	7.9	47.4	52.9	14.20	23.17	.....	.211	11.42	12.76
New York.....	6	17	52.7	.....	.....	8.5	51.0	54.0	13.94	.....	.....	.263	13.94	14.93
Pennsylvania.....	4	15	48.8	108.5	.....	8.3	49.8	54.3	13.39	20.62	.....	.265	13.39	14.36
Other States.....	2	7	54.0	.....	.....	9.0	54.0	54.0	15.60	.....	.....	.239	15.60	15.62
Total.....	19	128	54.6	104.7	.....	8.3	49.8	55.1	13.66	21.02	.....	.235	11.70	12.95
All occupations, female.....	60	915	49.0	101.0	.....	8.1	48.6	54.9	11.10	19.37	.....	.214	10.40	11.72
All occupations, male and female.	111	11,471	51.4	104.3	.....	8.5	51.0	55.2	18.05	34.03	.....	.338	17.24	18.78

[1934]

The woodworking industries here considered are noteworthy for the small number of female employees engaged in them. No women were found engaged in the manufacture of lumber. In planing mills there were 225 females out of a total of 5,379 employees. In the furniture industry 915 female employees were found in a total of 11,528 employees; female employees therefore constituted 7.9 per cent of the total number included in the survey of this industry. In 1915, the date of the last previous investigation of the industry by the Bureau, the corresponding figures were 325 in a total of 25,576, or a trifle over 1¼ per cent.

In 1919 the 915 female employees in the furniture industry were found in five occupations, and constituted 10.5 per cent of the total number in these occupations. The occupations, the number of women in each occupation, and the percentage which females constitute of the entire number of employees in the occupation are as follows:

TABLE 5.—NUMBER AND PER CENT OF FEMALES IN THE FURNITURE INDUSTRY.

Occupation.	Total employees.	Females.	
		Number.	Per cent.
Finishers.....	2,303	204	8.9
Laborers.....	2,136	301	14.1
Machine hands.....	3,104	128	4.1
Sanders, hand.....	739	248	33.6
Veneerers.....	420	34	8.1
Total.....	8,702	915	10.5

For only three of these occupations, namely, finishers, laborers, and machine hands, are detailed figures given in the general table just presented. The following brief analysis includes as well the two occupations, hand sanders and veneerers, previously omitted.

The earnings of female employees in the different occupations are from 7 to 12 cents per hour below those of males in corresponding occupations. In general, the larger the percentage of females in an occupation the lower the earnings of both males and females and the smaller the difference between the two figures. These facts may be clearly brought out by grouping the occupations according to the proportion of women in them and comparing the average wages of men and women in the different groups. The results of such procedure are herewith shown.

TABLE 6.—HOURLY EARNINGS BY OCCUPATIONS CLASSIFIED ACCORDING TO PERCENTAGE OF FEMALES.

Number of occupations.	Number of—		Per cent of females.	Average hourly earnings.	
	Employees.	Females.		Males.	Females.
Six occupations with no females.....	2,769			0.407	
Three occupations with 1 to 10 per cent females....	5,827	366	6.3	.352	0.235
Two occupations with 10 to 50 per cent females....	2,875	549	19.1	.274	.200

Wages of men and women in different occupations, therefore, seem to vary inversely as the proportion of women in the occupations, whether because the women more easily find an entrance into the low-paid occupations, or because the entrance of women into an occupation tends to lower the scale of wages in that occupation. Probably both influences are at work, the one enhancing the effect of the other.

On their face the figures for the earnings of men and women respectively in the furniture industry seem to furnish an illustration of the generally accepted view that women are paid less than men for the same kind and amount of work. A further analysis of the figures, however, on the basis of the respective earnings of male and female piece and time workers, seems to point to a different conclusion. The details of the analysis require too much space for a MONTHLY LABOR REVIEW article. They will be given in full in the forthcoming Bulletin dealing with those industries. They may be summarized as follows:

Whether we include figures from all establishments in which the five occupations under consideration were found, or only those from establishments in which both males and females were found in the several occupations, or, finally, only those from establishments in which both male and female piece and time workers were found, the earnings of male piece workers are found to exceed those of female piece workers more than the earnings of male time workers exceed those of female time workers. The last basis of comparison may be considered the most reliable, in spite of the fact that it very much reduces the numbers included, since it also diminishes the probability that the differences discovered are due to other causes than the sex of the employees or the method of wage payment.

Establishments with both male and female piece and time workers were found for only two occupations, finishers and machine hands. The data from these establishments is presented in the following table:

TABLE 7.—MALE AND FEMALE PIECE AND TIME WORKERS, IDENTICAL ESTABLISHMENTS.

Occupation.	Males.				Females.			
	Piece.		Time.		Piece.		Time.	
	Num-ber.	Earn-ings.	Num-ber.	Earn-ings.	Num-ber.	Earn-ings.	Num-ber.	Earn-ings.
Finishers.....	110	\$0.482	125	\$0.327	27	\$0.266	16	\$0.216
Machine hands.....	27	.409	89	.390	20	.237	11	.205
Total.....	137	.468	214	.353	47	.254	27	.212

The female timeworkers whose record is summarized in the table just presented were paid wages averaging 14.1 cents less per hour than the male timeworkers in the same occupations. Apparently, therefore, women were doing equal work with men and receiving only 60 per cent of the pay. But the comparative hourly earnings of pieceworkers seem to indicate that in these occupations women were worth less than men; for, while working at the same piece rate, female pieceworkers earned 21.4 cents per hour less than male pieceworkers; that is, their earnings were only 54.3 per cent of the earnings of the male pieceworkers. If, then, it is to be assumed that when men and women are working at the same occupation they are doing the same kind of work, this comparison would seem to indicate that in this particular case female timeworkers were paid more rather than less than male timeworkers in proportion to the amount of work they were doing. This condition suggests the necessity of using caution in applying the doctrine of "equal pay for equal work" for men and women.

In the following tables are shown relative hours and earnings for selected occupations in the three woodworking industries for the years for which the Bureau had the necessary data. The figures for 1913 are in all cases used as the base. The comparison is necessarily confined to those occupations for which the requisite information is at hand in comparable form. Owing to certain differences in the method of tabulating the data for 1919 as compared with the method followed in earlier years, it is impossible to compute relatives for male laborers. Moreover, female employees were not tabulated separately in any furniture occupation in earlier years, and consequently can not be included in the table of relatives.

There is presented in the table not only relatives for selected occupations but also relatives for each industry as a whole. It seems desirable to point out certain features of the method by which those relatives were computed. In the first place the averages of hours

and earnings on which the 1919 relative is based cover only selected occupations. In earlier years the relative has been based on all wage-earning employees found in the establishments visited. Those employees who did not fall within any of the selected occupations were grouped in the tables under the caption "other employees." This was done, not because of any value that was supposed to attach to figures for this heterogenous group, but because it was feared that the omission of these employees might seriously affect the averages for the industry as a whole. Careful experiments carried out by the Bureau indicate that, if the selected occupations include low-paid groups, such as laborers, in proportion to their numbers in the industry, the omission of "other employees" has little effect upon industry averages.

In the second place, it should be stated that the industry averages given in the table are based on all of the occupations listed in the several industries and not on those to which limitations of space made it necessary to confine the present article. The total number of selected occupations used in computing the industry relative was 7 in the furniture industry and 10 in the lumber industry. In the millwork industry no occupations were listed in addition to the three included in this report.

Finally no attempt has been made to base the relatives on data from identical establishments. With the changes that the lapse of time since the last investigation has brought about in the different establishments, the plan of confining the comparison to data from identical establishments would have two disadvantages. It would in some cases seriously limit the numbers on which the comparative figures are based; in other cases it might give undue weight to changes in hours and earnings taking place in one or another of the limited number of establishments covered, when those changes did not reflect conditions in the industry as a whole. The present relatives are based on the entire body of information available for each year for which a relative is shown.

TABLE 8.—AVERAGE AND RELATIVE FULL-TIME HOURS PER WEEK, HOURLY EARNINGS AND FULL-TIME EARNINGS PER WEEK, IN WOODWORKING INDUSTRIES, BY OCCUPATION, SEX, AND YEAR.

Lumber.

Occupation, sex, and year.	Number of establishments.	Number of employees.	Average.			Relative.		
			Full-time hours per week.	Hourly earnings.	Full-time weekly earnings.	Full-time hours per week.	Hourly earnings.	Full-time weekly earnings.
Doggers, male:								
1913.....	334	939	61.2	\$0.184	\$11.22	100.0	100.0	100.0
1915.....	345	1,099	61.3	.178	10.83	100.2	96.7	96.5
1919.....	136	471	57.8	.358	20.69	94.4	194.6	181.2
Edgemen, male:								
1913.....	361	754	61.0	.268	16.28	100.0	100.0	100.0
1915.....	348	756	61.0	.252	15.32	100.0	94.0	94.1
1919.....	140	314	57.5	.450	25.76	94.3	167.9	155.4
Laborers, male:								
1913.....	361	28,835	61.1	.171	10.40	100.0	100.0	100.0
1915.....	348	36,569	61.3	.157	9.58	100.3	91.8	92.1
1919.....	141	15,542	55.9	.345	19.27	91.5	201.8	184.9
Machine feeders, male:								
1913.....	253	1,531	61.1	.186	11.34	100.0	100.0	100.0
1915.....	269	1,679	61.2	.176	10.74	100.2	94.6	94.7
1919.....	120	668	56.5	.390	21.70	92.5	209.7	186.3
Sawyers, band, male:								
1913.....	288	554	60.9	.557	33.90	100.0	100.0	100.0
1915.....	286	572	61.0	.539	32.75	100.2	96.8	96.6
1919.....	120	249	57.5	.768	44.06	94.4	137.9	128.9
Sawyers, circular, male:								
1913.....	92	123	62.0	.513	31.71	100.0	100.0	100.0
1915.....	76	98	62.1	.462	28.27	100.2	90.1	89.2
1919.....	30	37	57.3	.748	42.77	92.4	145.8	132.4
Sawyers, gang, male:								
1913.....	71	80	61.4	.311	19.02	100.0	100.0	100.0
1915.....	81	93	61.8	.289	17.74	100.7	92.9	93.3
1919.....	34	46	56.2	.520	29.14	91.5	167.2	150.6
Sawyers, resaw, male:								
1913.....	138	192	60.7	.261	15.77	100.0	100.0	100.0
1915.....	152	215	60.9	.240	14.57	100.3	92.0	92.4
1919.....	67	111	55.2	.471	25.90	90.9	180.5	160.3
Setters, male:								
1913.....	361	782	61.0	.258	15.71	100.0	100.0	100.0
1915.....	348	687	61.2	.239	14.56	100.3	92.6	92.7
1919.....	141	311	57.0	.446	25.49	93.4	172.9	158.8
Trimmer operators, male:								
1913.....	346	538	61.0	.217	13.20	100.0	100.0	100.0
1915.....	345	564	61.1	.203	12.34	100.2	93.5	93.5
1919.....	139	273	57.3	.405	23.18	93.9	186.6	171.9
All occupations, male:								
1913.....	361	34,328	61.1	.185	11.26	100.0	100.0	100.0
1915.....	348	39,879	61.1	.169	10.30	100.0	91.4	91.5
1919.....	141	18,022	56.1	.360	20.13	91.8	194.6	177.9

Millcork.

Bench hands, male:								
1913.....	339	5,119	54.4	\$0.318	\$17.00	100.0	100.0	100.0
1915.....	346	4,931	54.3	.317	16.91	99.8	99.7	99.5
1919.....	104	1,374	52.5	.451	23.48	96.5	141.8	138.1
Laborers, male:								
1913.....	317	5,267	56.8	.183	10.34	100.0	100.0	100.0
1915.....	329	5,224	56.7	.184	10.40	99.8	100.5	100.6
1919.....	102	1,756	53.1	.321	16.69	93.5	175.4	161.4
Machine hands, male:								
1913.....	339	6,154	55.6	.294	13.09	100.0	100.0	100.0
1915.....	347	5,973	55.5	.283	15.46	99.8	96.3	96.1
1919.....	105	2,024	52.8	.435	22.34	95.0	148.0	138.8
All occupations, male:								
1913.....	339	16,540	55.6	.266	14.54	100.0	100.0	100.0
1915.....	347	15,727	55.4	.263	14.29	99.6	98.9	98.3
1919.....	105	3,154	52.8	.401	20.36	95.0	150.8	140.0

TABLE 8.—AVERAGE AND RELATIVE FULL-TIME HOURS PER WEEK, HOURLY EARNINGS AND FULL-TIME EARNINGS PER WEEK, IN WOODWORKING INDUSTRIES, BY OCCUPATIONS, SEX, AND YEAR.—Concluded.

Furniture.

Occupation, sex, and year.	Number of establishments.	Number of employees.	Average.			Relative.		
			Full-time hours per week.	Hourly earnings.	Full-time weekly earnings.	Full-time hours per week.	Hourly earnings.	Full-time weekly earnings.
Cabinetmakers, male:								
1913.....	199	3,184	57.2	\$0.234	\$13.30	100.0	100.0	100.0
1915.....	203	3,176	57.0	.240	13.62	99.7	102.6	102.4
1919.....	89	1,449	55.7	.366	22.05	97.4	169.2	165.8
Finishers, male:								
1913.....	228	5,287	57.2	.207	11.81	100.0	100.0	100.0
1915.....	238	5,300	56.9	.208	11.80	99.5	100.5	99.9
1919.....	110	2,099	55.9	.358	19.98	97.7	192.9	169.2
Carvers, hand, male:								
1913.....	82	355	55.1	.319	17.41	100.0	100.0	100.0
1915.....	97	321	55.5	.322	17.73	100.7	100.9	101.8
1919.....	36	111	52.9	.511	26.98	96.0	160.2	155.0
Chair assemblers, male:								
1913.....	23	562	57.5	.197	11.27	100.0	100.0	100.0
1915.....	31	591	57.6	.211	12.09	100.2	107.1	107.3
1919.....	26	521	54.4	.362	19.69	94.6	183.6	174.7
Machine hands, male:								
1913.....	226	6,700	57.6	.218	12.50	100.0	100.0	100.0
1915.....	232	5,817	57.5	.223	12.74	99.8	102.3	101.9
1919.....	108	2,976	56.0	.349	20.05	97.2	160.1	160.4
Upholsterers, male:								
1913.....	54	635	55.8	.296	16.42	100.0	100.0	100.0
1915.....	62	755	55.3	.312	17.12	93.1	105.4	104.3
1919.....	44	419	54.4	.476	25.86	97.5	160.8	157.5
Veneers, male:								
1913.....	123	698	57.2	.218	12.45	100.0	100.0	100.0
1915.....	124	640	57.0	.218	12.34	99.7	100.0	99.1
1919.....	69	389	56.3	.340	19.14	98.4	156.0	155.7
All occupations, male:								
1913.....	228	17,378	57.3	.222	12.64	100.0	100.0	100.0
1915.....	223	15,173	57.1	.224	12.74	99.7	100.9	100.8
1919.....	111	7,964	55.7	.369	20.55	97.2	166.2	162.6

The industrial survey covered eight industries for which the Bureau had material on hand for the calculation of industry relatives. That the increases in earnings in the industries included in this report may be compared with increases in the other five industries, the relatives of each industry are given in the following table:

TABLE 9.—RELATIVE EARNINGS PER HOUR IN EIGHT INDUSTRIES, 1913 TO 1919. [1913=100.]

Year.	Cigars.	Clothing, men's.	Furniture.	Hosiery and underwear.	Iron and steel.	Lumber.	Mill-work.	Silk goods.
1913.....	100	100	100	100	100	100	100	100
1914.....	(1)	(1)	(1)	103	103	(1)	(1)	100
1915.....	(1)	(1)	103	(1)	101	(1)	99	(1)
1916.....	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
1917.....	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
1918.....	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
1919.....	152	171	154	184	221	194	151	191

¹ Not reported.

An examination of this table shows that while employees in the lumber industry have received increases in earnings considerably in excess of the average for the eight industries and of the 75 per cent increase in the cost of living since 1913, both the furniture industry and the millwork industry have failed to keep pace with the general movement. On the contrary, the millwork industry is at the bottom of the list in this respect, and the furniture industry only slightly better off. How far that condition is to be attributed to the effect of the war, and how far to the existence of large numbers of comparatively small, isolated, and unorganized plants in those industries, it is impossible to determine.

War-Time Changes in Wages.

THE National Industrial Conference Board has recently published a report on wages in several important industries, from 1914 to 1919.¹ The report includes data for boot and shoe, chemical, cotton, metal, paper, rubber, silk, and woolen manufacturing. The period covered is approximately that of the war, including that immediately following the signing of the armistice. A large number of tables are given showing for the leading occupations or occupation groups of each industry the number of workers for whom the data are reported; the average hours worked per week; the average hourly and weekly earnings; and the relative hourly and weekly earnings for the period covered, using the figures for 1914 as a base.

The following table contains summaries of the items named above for each of the industries included in the study:

AVERAGE ACTUAL AND RELATIVE HOURLY AND WEEKLY EARNINGS IN SPECIFIED INDUSTRIES, 1914 TO 1919.

Boot and shoe manufacturing: 1½ establishments.

Pay roll for one week in—	Males.						Females.					
	Total number of workers.	Average hours per week.	Average actual earnings—		Relative earnings—		Total number of workers.	Average hours per week.	Average actual earnings—		Relative earnings—	
			Per hour.	Per week.	Per hour.	Per week.			Per hour.	Per week.	Per hour.	Per week.
Sept., 1914..	7,575	50.3	\$0.292	\$14.70	100	100	3,841	47.9	\$0.192	\$9.18	100	100
Sept., 1915..	7,259	50.8	.302	15.33	104	104	3,605	49.3	.193	9.53	101	104
Sept., 1916..	8,241	51.1	.325	16.60	112	113	4,191	50.5	.207	10.45	108	114
Sept., 1917..	7,373	49.9	.388	19.36	133	132	4,308	47.0	.243	11.42	127	125
Sept., 1918..	7,349	49.2	.489	24.04	167	164	4,305	47.7	.298	14.24	155	155
Mar., 1919..	7,419	48.0	.539	25.90	185	176	4,667	47.7	.308	14.69	160	160

¹ War-time changes in wages. September, 1914—March, 1919. National Industrial Conference Board. Boston, September, 1919. 128 pp.

AVERAGE ACTUAL AND RELATIVE HOURLY AND WEEKLY EARNINGS IN SPECIFIED INDUSTRIES, 1914 TO 1919—Concluded.

Chemical manufacturing: 12 establishments.

Pay roll for one week in—	Males.						Females.					
	Total number of workers.	Average hours per week.	Average actual earnings—		Relative earnings—		Total number of workers.	Average hours per week.	Average actual earnings—		Relative earnings—	
			Per hour.	Per week.	Per hour.	Per week.			Per hour.	Per week.	Per hour.	Per week.
Sept., 1914..	3,551	55.5	\$0.232	\$12.85	100	100	.....	.....	.....	.....	.....	.....
Sept., 1915..	3,865	56.0	.237	13.26	102	103	.....	.....	.....	.....	.....	.....
Sept., 1916..	4,724	55.8	.289	16.10	125	125	.....	.....	.....	.....	.....	.....
Sept., 1917..	6,700	57.1	.359	20.50	155	160	.....	.....	.....	.....	.....	.....
Sept., 1918..	6,946	60.1	.445	26.80	192	209	.....	.....	.....	.....	.....	.....
Mar., 1919..	5,942	53.5	.490	26.20	211	204	.....	.....	.....	.....	.....	.....

Cotton manufacturing: 15 establishments.

Sept., 1914..	5,187	52.9	\$0.189	\$10.00	100	100	4,924	50.9	\$0.152	\$7.70	100	100
Sept., 1915..	5,736	53.0	.189	10.05	100	101	5,166	51.8	.152	7.89	100	103
Sept., 1916..	5,650	53.5	.221	11.85	117	119	5,052	51.8	.186	9.65	122	125
Sept., 1917..	5,842	50.7	.280	14.22	148	142	5,202	51.0	.222	11.36	146	147
Sept., 1918..	4,925	53.7	.385	20.60	204	206	5,138	50.4	.304	15.37	200	200
Mar., 1919..	5,797	43.9	.389	17.10	206	171	5,943	41.0	.312	12.75	205	166

Metal manufacturing: Males, 72 establishments; females, 13 establishments.

Sept., 1914..	35,552	45.5	\$0.289	\$13.18	100	100	669	43.3	\$0.149	\$6.45	100	100
Sept., 1915..	43,696	52.1	.282	14.90	98	113	926	46.1	.169	7.82	113	121
Sept., 1916..	55,924	53.8	.317	17.22	110	131	1,767	45.8	.194	8.92	130	138
Sept., 1917..	64,156	53.6	.371	20.09	128	152	1,741	47.3	.223	10.55	150	164
Sept., 1918..	71,635	53.5	.495	26.80	171	203	2,331	46.1	.309	14.35	207	222
Mar., 1919..	56,253	49.0	.502	24.75	174	188	2,006	46.0	.314	14.50	211	225

Paper manufacturing: Males, 32 establishments; females, 15 establishments.

Sept., 1914..	8,505	53.3	\$0.239	\$12.73	100	100	779	42.3	\$0.177	\$7.47	100	100
Sept., 1915..	8,976	52.5	.243	12.75	102	100	856	44.3	.178	7.85	100	105
Sept., 1916..	9,602	51.0	.295	15.03	124	118	968	46.3	.191	8.80	108	118
Sept., 1917..	9,520	51.0	.374	19.03	157	150	889	45.3	.230	10.43	130	140
Sept., 1918..	9,830	50.0	.448	22.40	188	176	941	47.5	.294	13.95	166	187
Mar., 1919..	9,579	49.8	.450	22.40	189	176	986	41.3	.297	12.24	168	164

Rubber manufacturing: Males, 8 establishments; females, 6 establishments.

Sept., 1914..	9,612	48.8	\$0.288	\$14.00	100	100	1,819	53.2	\$0.174	\$9.25	100	100
Sept., 1915..	12,701	48.3	.310	14.95	108	107	1,992	54.1	.189	10.20	109	110
Sept., 1916..	15,863	48.7	.382	18.60	133	133	2,479	51.6	.208	10.76	120	117
Sept., 1917..	19,225	48.9	.466	22.80	162	163	3,397	51.7	.228	11.80	131	128
Sept., 1918..	16,722	49.6	.575	28.60	200	204	3,501	52.2	.247	12.94	142	140
Mar., 1919..	21,918	48.0	.612	29.35	212	210	3,431	51.1	.292	14.90	168	161

Silk manufacturing: 29 establishments.

Sept., 1914..	4,897	51.2	\$0.230	\$11.77	100	100	6,312	48.2	\$0.156	\$7.49	100	100
Sept., 1915..	4,922	53.1	.238	12.66	104	108	6,456	51.2	.157	8.02	101	107
Sept., 1916..	5,010	49.6	.284	14.10	124	120	6,794	49.2	.193	9.52	124	127
Sept., 1917..	4,778	50.2	.309	15.50	134	132	6,619	50.0	.215	10.75	138	144
Sept., 1918..	4,151	50.0	.431	21.54	188	183	6,095	49.3	.285	14.06	183	188
Mar., 1919..	4,539	50.1	.453	22.69	197	193	6,178	48.5	.312	15.10	200	202

Wool manufacturing: 20 establishments.

Sept., 1914..	9,105	53.8	\$0.215	\$11.52	100	100	6,943	52.0	\$0.167	\$8.70	100	100
Sept., 1915..	8,957	51.5	.214	11.05	100	96	6,648	48.8	.162	7.89	97	91
Sept., 1916..	9,875	54.0	.251	13.51	117	117	7,243	51.8	.199	10.30	119	118
Sept., 1917..	9,558	55.0	.308	16.97	143	147	7,279	50.5	.250	12.69	150	146
Sept., 1918..	9,406	55.0	.424	23.21	197	202	7,576	50.0	.329	16.42	197	189
Mar., 1919..	7,868	46.0	.405	18.61	188	162	6,635	41.0	.328	13.46	196	155

While the figures show, with few exceptions, an increasing hourly rate of earnings throughout the period, the weekly earnings show small increases, or, in several instances, decreases, between September, 1918, and March, 1919. This is due to the shorter hours worked in 1919, the reduction in a number of cases being considerable.

The following table shows the average hourly earnings in several occupations in the industries covered by the report, arranged in order beginning with the highest based on wages in March, 1919. The earnings of males and females are shown separately.

COMPARISON OF AVERAGE HOURLY EARNINGS IN DIFFERENT OCCUPATIONS IN SEPTEMBER, 1914 AND 1918, AND MARCH, 1919.

Occupations.	Piece or time workers.	Average hourly earnings.		
		September, 1914.	September, 1918.	March, 1919.
<i>Males.</i>				
1. Stitchers (boot and shoe).....	Piece.....	\$0.365	\$0.628	\$0.687
2. Coremakers (metal).....	do.....	.304	.688	.651
3. Molders (metal).....	do.....	.309	.666	.642
4. Finishers (boot and shoe).....	do.....	.330	.540	.638
5. Patternmakers (metal).....	Time.....	.380	.603	.638
6. Bottomers (boot and shoe).....	Piece.....	.340	.570	.626
7. Molders (metal).....	Time.....	.363	.606	.621
8. Lasters (boot and shoe).....	Piece.....	.315	.562	.612
9. Assemblers (metal).....	do.....	.307	.558	.603
10. Toolmakers (metal).....	Time.....	.356	.557	.594
11. Blacksmiths (metal).....	do.....	.328	.567	.592
12. Upper leather cutters (boot and shoe).....	Piece.....	.331	.559	.591
13. Machinists (metal).....	Time.....	.324	.572	.587
14. Makers (boot and shoe).....	Piece.....	.324	.555	.586
15. Machine operators (metal).....	do.....	.325	.551	.577
16. Skilled labor (chemicals).....	Time.....	.300	.526	.574
17. Sole leather cutters (boot and shoe).....	Piece.....	.271	.469	.552
18. Sorters (wool).....	do.....	.296	.586	.552
19. Coremakers (metal).....	Time.....	.297	.518	.541
20. Upper leather cutters (boot and shoe).....	do.....	.289	.499	.539
21. Assemblers (metal).....	do.....	.307	.502	.530
22. Machine tenders (paper).....	do.....	.309	.530	.520
23. Loom-fixers (cotton).....	do.....	.262	.514	.505
24. Fitters (boot and shoe).....	Piece.....	.274	.482	.486
25. Unskilled labor (silk).....	Time.....	.251	.472	.477
26. Weavers (wool).....	do.....	.252	.521	.471
27. Weavers (silk).....	Piece.....	.216	.441	.467
28. Machine operators (metal).....	Time.....	.265	.454	.461
29. Weavers (wool).....	Piece.....	.225	.472	.457
30. Unskilled labor (chemicals).....	Time.....	.210	.408	.446
31. Beatermen (paper).....	do.....	.232	.440	.440
32. Sole leather cutters (boot and shoe).....	do.....	.254	.405	.428
33. Unskilled labor (metal).....	do.....	.216	.438	.426
34. Foundry labor (metal).....	do.....	.218	.431	.425
35. Finishers and cuttermen (paper).....	do.....	.227	.407	.420
36. Weavers (silk).....	do.....	.302	.433	.419
37. Reelers, winders, and spoolers (wool).....	do.....	.201	.418	.417
38. Calendermen (paper).....	do.....	.204	.403	.414
39. Calendermen (rubber).....	do.....	.225	.375	.409
40. Unskilled labor (rubber).....	do.....	.205	.388	.409
41. Unskilled labor (wool).....	do.....	.201	.384	.406
42. Warpors (silk).....	do.....	.226	.375	.406
43. Miscellaneous labor (paper).....	do.....	.202	.465	.406
44. Spinners (cotton).....	Piece.....	.190	.422	.401
45. Makers (rubber).....	Time.....	.191	.361	.398
46. Spinners (wool).....	do.....	.182	.407	.394
47. Rag sorters (paper).....	do.....	.206	.405	.392
48. Weavers (cotton).....	Piece.....	.198	.417	.389
49. Weavers (cotton).....	Time.....	.186	.377	.389
50. Finishers (wool).....	do.....	.215	.391	.385
51. Carders (wool).....	do.....	.177	.376	.384
52. Finishers (boot and shoe).....	do.....	.217	.357	.383
53. Carders (cotton).....	Piece.....	.187	.437	.380

COMPARISON OF AVERAGE HOURLY EARNINGS IN DIFFERENT OCCUPATIONS IN SEPTEMBER, 1914 AND 1918, AND MARCH, 1919—Concluded.

Occupations.	Piece or time worker.	Average hourly earnings.		
		September, 1914.	September, 1918.	March, 1919.
<i>Males—Concluded.</i>				
54. Lasters (boot and shoe).....	Time....	\$0.226	\$0.368	\$0.373
55. Spoolers, warpers, twisters (cotton).....	do.....	.176	.349	.361
56. Dyers (wool).....	do.....	.175	.351	.356
57. Miscellaneous labor (boot and shoe).....	do.....	.215	.317	.352
58. Carders (cotton).....	do.....	.172	.377	.352
59. Unskilled labor (cotton).....	do.....	.177	.340	.351
60. Openers and pickers (cotton).....	do.....	.158	.339	.349
61. Spinners (cotton).....	do.....	.166	.339	.343
62. Spinners (wool).....	Piece....	.162	.345	.329
<i>Females.</i>				
1. Finishers (wool).....	Piece....	.215	.421	.442
2. Weavers (wool).....	do.....	.201	.392	.418
3. Weavers (silk).....	do.....	.154	.322	.353
4. Weavers (cotton).....	do.....	.155	.364	.352
5. Fitters (boot and shoe).....	do.....	.195	.336	.350
6. Weavers (cotton).....	Time....	.190	.347	.342
7. Reelers, winders, and spoolers (wool).....	Piece....	.172	.314	.331
8. Spinners (cotton).....	do.....	.141	.306	.323
9. Spinners (wool).....	do.....	.157	.320	.315
10. Carders (cotton).....	do.....	.161	.303	.310
11. Spoolers, warpers, and twisters (cotton).....	do.....	.150	.288	.302
12. Upper leather cutters (boot and shoe).....	Time....	.173	.271	.296
13. Drawers (wool).....	do.....	.146	.286	.296
14. Warpers (silk).....	Piece....	.146	.262	.294
15. Carders (wool).....	Time....	.137	.296	.291
16. Spinners (cotton).....	do.....	.135	.278	.289
17. Reelers, winders, and spoolers (wool).....	do.....	.129	.277	.283
18. Spinners (wool).....	do.....	.136	.295	.281
19. Finishers (wool).....	do.....	.176	.274	.280
20. Finishers and cuttermen (paper).....	do.....	.142	.271	.276
21. Fitters (boot and shoe).....	do.....	.181	.233	.272
22. Rag sorters (paper).....	do.....	.131	.274	.270
23. Drawers (cotton).....	do.....	.139	.276	.269
24. Spoolers (cotton).....	do.....	.134	.233	.268
25. Winders (silk).....	Piece....	.129	.229	.268
26. Rag sorters (paper).....	do.....	.142	.318	.257
27. Winders (silk).....	Time....	.154	.230	.248
28. Unskilled laborers (cotton).....	do.....	.130	.254	.237
29. Carders (cotton).....	do.....	.117	.218	.237
30. Quillers (silk).....	do.....	.112	.200	.221

Wages of Women in Hotels and Restaurants in the District of Columbia.¹

A SURVEY of the wages paid to women in hotels and restaurants, apartment houses, and hospitals in the District of Columbia, was made during the months of June, July, and August, 1919, by agents of the District Minimum Wage Board. Transcripts of the pay rolls were obtained, for the week or half month or month preceding the visit, from 193 establishments, including 50 hotels, 135 restaurants, 5 apartment houses, and 3 hospitals. A total of 2,209 women were employed in these establishments, distributed as follows: 1,010, or 46 per cent, in hotels; 1,055, or 48 per cent, in res-

¹ Wages of women in hotels and restaurants in the District of Columbia. District of Columbia Minimum Wage Board, Washington, Oct. 10, 1919. 23 pp. Bulletin No. 3.

taurants; 130, or 6 per cent, in hospitals; 14, or 0.6 per cent, in apartment houses. Employees in practically all the manual and clerical positions open to women, except those in the laundry, were included in the survey.

Three important characteristics of the hotel and restaurant business were found to influence the money wage received by women employees. First among these is the unsteadiness of employment. Of the 153 women on the pay rolls of three hotels, 68, or 44 per cent, worked less than a full month. Of the 127 women on the pay rolls of two other hotels, 49, or 39 per cent, worked less than a full half month. Assuming that the same number in this latter group would have failed to work the full pay period in the other half month, 98, or 77 per cent of this group would have worked less than a full month. Such irregular attendance and constant shifting from job to job makes earnings considerably less than rates of pay and this difference must be borne in mind in considering the analysis of the wage rates.

The second factor influencing wages is the tips received by maids, elevator operators, and waitresses. Reports as to the amount received in tips were secured by the board from women in these occupations. Tips reported to be received by elevator operators—averaging about 35 cents a week—are too small to affect earnings. Eight maids stated that they received no tips, seven stated the amount to be “very little,” and the average for those giving actual figures was \$1.22 a week. This again is too small an amount to make any appreciable addition to wages. Very few waitresses are employed in hotels other than in the help’s dining room, where practically no tips are given. The average tips received by waitresses in restaurants was \$4.62 a week. As the waitresses were found to be among the best paid employees, the generally low wages of the women are not offset by the value of tips.

The third factor influencing wages is the prevalence in this industry of other than money compensation. Of the 2,209 women, 6 per cent received room and meals, 65 per cent received three meals a day, 9 per cent received two meals a day, 3 per cent received one meal a day, and 17 per cent received only a money wage. For the purpose of ascertaining the value in money of the total wage, including such additional compensation, the Board assumed the cost of board as \$6 a week and of room as \$3 a week. These figures were arrived at from the minimum cost of board and room for a self-supporting woman in the mercantile trades set by the recent Mercantile Wage Conference. These figures are considerably higher than the estimated cost of furnishing such board and room, as given

by the hotel managers. They are higher than the actual value of the room or board, or both, tendered the employee in lieu of wages, because the employee's hours may be so arranged that only two meals instead of the three allowed can be secured conveniently, or she may have to provide her own meals on the seventh day each week, if she works a six-day week, or she may, as several stated they did, find the meals provided by the hotel unpalatable. As these figures are the only actual figures available, however, the report allows as the money value of room and meals \$9 a week for room and board, \$6 for three meals a day, and a proportionate amount where less than three meals per day were received.

Analysis of the Wage Situation.

All wage material is presented in the report separately for groups of employees according to the amount allowed them in room and meals, so that the total money value of the wages received by all groups may be compared with exactness. Wages in hotels are usually based on a monthly rate. In order to make these rates comparable to those paid by the week in restaurants and other industries, these monthly rates have been reduced to weekly rates by multiplying them by 12 and then dividing by 52.

The wage situation in the hotel industry is summed up in the following table:

NUMBER AND PER CENT OF WOMEN EMPLOYED IN HOTELS CLASSIFIED BY RATE OF WAGES PER WEEK AND BY ROOM AND MEALS ALLOWED PER DAY.

Number.

Compensation in addition to wages.	Woman employees whose rates of wages per week were—											Total.
	Under \$7.	\$7 and under \$8.	\$8 and under \$9.	\$9 and under \$10.	\$10 and under \$11.	\$11 and under \$12.	\$12 and under \$13.	\$13 and under \$14.	\$14 and under \$15.	\$15 and under \$16.	\$16 and over.	
Room and three meals.....	66	4	9	5	2	1	1	6	.....	1	6	101
Three meals.....	132	7	46	155	59	42	14	29	.....	14	25	524
One meal.....	8	.....	4	.....	.....	2	.....	.....	.....	1	4	19
Nothing.....	15	8	57	169	23	11	4	15	.....	8	56	366
Total.....	221	19	116	329	84	56	19	50	1	24	91	1,010

Per cent.

Room and three meals.....	65.3	4.0	8.9	5.0	2.0	1.0	1.0	5.9	.....	1.0	5.9	100
Three meals.....	25.2	1.3	8.8	29.6	11.2	8.0	2.7	5.5	0.2	2.7	4.8	100
One meal.....	42.1	.....	21.1	.....	.....	10.5	.....	.....	.....	5.2	21.1	100
Nothing.....	4.1	2.2	15.6	46.2	6.3	3.0	1.1	4.1	.....	2.1	15.3	100
Total.....	21.9	1.9	11.5	32.6	8.3	5.5	1.9	4.9	.1	2.4	9.0	100

This table shows that 65 per cent of the women receiving room and board in addition to wages were paid less than \$7 a week; 65 per cent of those receiving three meals a day were paid less than \$10 a week; 68 per cent of those receiving only a money wage were paid less than \$10 a week, 77 per cent less than \$12 a week, and only 15 per cent \$16 or over.

The next table shows wage conditions among restaurant employees.

NUMBER AND PER CENT OF WOMEN EMPLOYED IN RESTAURANTS, CLASSIFIED BY RATE OF WAGES PER WEEK AND BY MEALS ALLOWED PER DAY.

Number.

Compensation in addition to wages.	Woman employees whose rates of wages per week were—											Total.
	Under \$7.	\$7 and under \$8.	\$8 and under \$9.	\$9 and under \$10.	\$10 and under \$11.	\$11 and under \$12.	\$12 and under \$13.	\$13 and under \$14.	\$14 and under \$15.	\$15 and under \$16.	\$16 and over.	
Three meals.....	13	37	142	72	158	18	224	14	69	35	43	825
Two meals.....	42	26	44	14	10	16	23	5	5	2	9	196
One meal.....	18	5	7	2	1				1			34
Total.....	73	68	193	88	169	34	247	19	75	37	52	1,055

Per cent.

Three meals.....	1.6	4.5	17.2	8.7	19.1	2.2	27.1	1.7	8.3	4.2	5.2	100
Two meals.....	21.4	13.3	22.4	7.1	5.1	8.2	11.7	2.5	2.5	1.0	4.6	100
One meal.....	52.9	14.7	20.6	5.9	2.9				2.9			100
Total.....	6.9	6.5	18.3	8.4	16.0	3.2	23.4	1.8	7.1	3.5	4.9	100

The wage situation in the restaurant industry may be summarized as follows: Of the women receiving three meals a day 32 per cent were paid less than \$10 a week, and 78 per cent of those receiving two meals a day were paid less than \$12 a week. The one-meal figures are not comparable, since most of the women in that group work only part time.

Comparing these figures with those presented for the hotel industry, it will be seen that the wage rates prevailing in the restaurants of the District were considerably higher than those found in the hotels.

Hospitals were classed with hotels and restaurants in this study, because the women employed in hospitals, exclusive of the nurses, perform work very similar to that performed by women employed in hotels. Of the 130 women working in hospitals, 28 per cent received room and three meals, 69 per cent received three meals, and 2 per cent one meal a day in addition to their money wage. Over

half, 54 per cent, of the women receiving room and meals were paid less than \$7 a week, and of those receiving board alone, 97 per cent were paid less than \$10 a week.

It was found that the average apartment house employs few women, the most general occupations being telephone and elevator operating. The 14 women for whom data were collected received a straight money wage and all of them were paid less than \$14 a week. Wage conditions were, therefore, found to be worse in hospitals and apartment houses than in hotels and restaurants.

Using the estimates of the value of room and board accepted as a working basis, it is found that of the 2,209 women employed in this industry 72 per cent of those employed in hotels, 43 per cent in restaurants, 82 per cent in hospitals, and 100 per cent in apartment houses were receiving less than \$16 a week or its equivalent. A further analysis of the wages of all the women reveals striking differences between the wages of those receiving a straight money wage and those receiving a money wage supplemented by room and meals. Those who received only a money wage were the poorest paid, 85 per cent of them receiving less than \$16 a week. On the other hand, the best paid women were those in the three-meal group, only 48 per cent of them receiving less than the \$10, which, when board is provided, has been considered as equivalent to \$16 a week. The women receiving both room and board were between these two groups, 62 per cent being paid less than \$7 per week, the figure estimated as the equivalent of a \$16 money wage. This difference between the real wages of the group receiving only a money wage and of the groups receiving room or meals or both can not be accounted for on an occupational basis, for it applies within each occupation as well as to the whole industry.

It seems evident from the figures presented in the report that a "substantial number of woman employees" in hotels, restaurants, hospitals, and apartment houses "are receiving wages inadequate to supply them with the necessary cost of living and maintain them in health and protect their morals."

Cost of Living in Relation to Wage Adjustments.

THE adjustment of wages to the cost of living has been effected in some instances in a somewhat haphazard way by applying to local conditions the results of surveys of cost of living covering communities far distant or giving a composite of the country as a whole. In comparatively few instances have wages been increased as the result of the careful and scientific study of prices and living costs in the immediate vicinity of the plant, which after all

determine the expenditures of the employees whose wage scales are to be adjusted.

How one firm employing more than 1,000 people set about to determine the increase in the cost of living as affecting its own employees immediately and then to make a wage adjustment that should adequately compensate for the increase, is described in some detail in an article on cost of living in relation to wage adjustments published in the Bulletin of the Taylor Society (New York) for October, 1919 (pp. 29 to 46). The purpose of the investigation was to set up and adopt a standard method for readily making comparisons in the cost of living from year to year and to determine the relative percentage of increase, with this percentage as a guide, to ascertain whether or not the advance in the daily earnings of the various classes of workers has shown the same relative per cent of increase as has the cost of living, and then, if classes have not been advanced proportionately, to adjust the rates for such classes to the extent due them as determined by the findings.

The management took the position that an educational campaign was necessary to bring employees to realize that production is the only possible remedy for scarcity of goods, which in turn is the reason for high prices, and that any interference with production by strike or otherwise merely aggravates the trouble and results in intensifying the very condition against which they protest. To quote from the report:

There is no better place to begin such a campaign than in our own factories and among our own workmen, and it is plainly up to the management to take the initiative. This means a careful analysis of the wage conditions, due regard being given to the current purchasing power of the dollar, and practical application of our findings to the solution of our own problem. We believe it fair and practical to "give more in order to get more," and in the recognition of the relative increase in living cost, as compared with the relative increase in wages in any given period, we are only laying the foundation for better conditions and better relations between men and management, which in turn will lead to the ultimate end of maximum production from any given set of conditions or facilities; and for the coincident results, such as maximum wages, minimum costs, low labor turnover, equitable profits on capital invested, and mutual success and satisfaction to all concerned, viz, the worker, the manager, the owner, and the community of which these three are members.

If we do not recognize this factor in our wage relations, then we are bound to pay for it one way or another. Briefly, when an individual finds his income does not permit him to maintain the standards of living to which he has been accustomed (to say nothing of reaching the higher standards which human nature inherently desires as men advance in years) he soon gets into a frame of mind where he is torn between (a) lowering his standards of living by omitting certain articles of diet—making the old suit last another year, moving to cheaper quarters, or practicing other economies or substitutions—and (b) "hitting the boss for a raise."

It seems that the individual does not let himself be "torn" very far in either direction. He quickly acts in the direction of (b), and if the answer is not favorable or not promptly given, individual dissatisfaction soon arises, and like the proverbial bad apple in a barrel of otherwise good ones, he soon contaminates the others. The manager soon sees an element of unrest increasing; strikes may, and in fact do follow, as witnessed by the hundreds of them occurring of late, all of which have had as their motive, or at least a part of that motive, the "recognition in wages of the increasing cost of living." Why then, should we overlook the obvious, or dodge the inevitable? Should we not expect to meet the increasing cost of labor as we do the increasing cost of raw materials by providing in the selling price of our respective products a suitable margin for increased labor costs, which in the main will, and do result, more from increased cost of living than from any other cause?

The questionnaire prepared for the purpose of obtaining from the employees their actual standard of living was sent to 280 workers equally divided among unskilled, skilled, and highly skilled. Only 15 per cent were returned completely filled out, and 33.4 partially filled out. The computations are based on the average family of five—father, mother, two boys aged 15 and 9, respectively, and a girl aged 7—this family consisting of 3.6 adult males as measured by well-known dietary standards.¹

The report goes into considerable detail in presenting the results of the survey. It is stated that an examination of the questionnaire showed that the same articles used in the same quantity by the standard family of five in the years 1913, 1915, 1917, 1918, and 1919 could be purchased in 1913 for \$4.06 per day and in May, 1919, for \$7.39 per day, an increase of 81.6 per cent in daily living cost. This per cent of increase was accordingly adopted as the basis upon which to make the wage adjustment. The following table is compiled from the tabulations in the report. It shows the relative daily living costs for 1913, 1915, 1917, 1918, and to May, 1919, with per cent of increase in 1919 over 1913.

RELATIVE DAILY LIVING COSTS IN 1913, 1915, 1917, 1918, AND TO MAY, 1919.

Item.	1913	1915	1917	1918	1919 ²	
					Daily cost.	Per cent increase over 1913.
Food.....	\$1.9534	\$2.2538	\$3.1025	\$3.5164	\$3.8939	99.3
Clothing.....	1.205	1.328	1.65	2.125	2.336	93.9
Fuel.....	.353	.364	.363	.483	.463	31.2
Shelter.....	.555	.556	.597	.659	.691	24.5
Total.....	4.0664	4.5018	5.7125	6.7835	7.3839	81.6

¹ See 18th annual report of the U. S. Commissioner of Labor, 1903, p. 102.

² To May, 1919.

In compiling the data on actual wages paid, the management included only factory departments and classified these into productive and nonproductive labor. The daily wages for each department were obtained by going through the pay roll for each year and securing the daily earnings for each representative class or group of work in that department. In this manner wages were found for both productive and nonproductive labor and the per cent increase computed for each year concerned. The two classes of labor were then combined and the average daily earnings computed for the years 1913, 1915, 1917, 1918, and to May 28, 1919. Percentage increases for these years were then computed and used in the comparisons with the increased cost of living in the same years. As a result it was found that the average wages in all departments rose from \$2.48 in 1913 to \$4.15 in 1919 prior to May 28, or 67.1 per cent.

RELATIVE DAILY RATES OF WAGES IN 1913, 1915, 1917, 1918, BEFORE AND AFTER THE WAGE ADJUSTMENT OF MAY 28, 1919.

Item.	1913	1915	1917	1918	1919		
					Before adjustment of May 28.	After adjustment of May 28.	
						Amount.	Per cent of increase over 1913.
Productive labor.....	\$2.44	\$2.53	\$3.03	\$3.27	\$1.00	\$4.37	79.1
Nonproductive labor.....	2.53	2.49	3.07	3.35	4.31	4.46	76.3
Both classes.....	2.48	2.51	3.05	3.31	4.15	4.41	77.7

Governed thus by an increase in the cost of living of 81.6 per cent and an increase in wages of 67.1 per cent, it was apparent that an adjustment was due which would bring the current daily wages into the same relation with the daily cost of living in 1919 as prevailed in 1913. The management thereupon decided to put through a wage advance in recognition of this discrepancy as shown by 81.6 per cent increase in the cost of living and 67.1 per cent increase in wages for the same period.

Although it developed that some classes of labor had advanced more than others during the period since 1913, it was decided to make no discrimination, and a wage advance varying from 2½ cents to 8 cents per hour on all classes of labor was put into effect.

The report states that in the adjustment the margin of difference between 81.6 per cent and 67.1 per cent, namely, 14.5 per cent, was cut to 3.9 per cent. That is, the increase in the wages after adjustment was 77.7 per cent as against 67.1 per cent before the adjustment. This difference of even 3.9 per cent was not intentional, it is

declared, for all classes of labor were brought up 81 per cent or better from the prevailing 1913 daily wage.

But when averaging the individual rates for each man in a department, and then averaging these composite rates for all departments, the new scale ranging from \$3.60 (or $\$0.45 \times 8$ hours) minimum, to \$7.20 (or $\$0.90 \times 8$ hours) maximum, gave, when weighted by the number of men receiving these rates (or those in between a new average of \$4.41, and this is 77.7 per cent higher than the average of \$2.48 for all classes in 1913. The next wage adjustment involving recognition of cost of living will, we intend, make up for this slight deficiency, for we will have the benefit of this research to increase the accuracy of our aim. Further, there was not the same number of men in each department in 1913 as in 1919, and this variation further accounts for the variation in the weighted average of daily earnings for the two years 1913 and 1919, respectively, i. e., there was a proportionately greater number of low-rated men in the 1919 average than in the 1913 average, and that has had its effect in reducing the average wage for 1919, although all classes of labor have as "classes" the same relative increase of 81.6 per cent over their 1913 average daily wages.

The result of this voluntary action on the part of the management is briefly summed up in the report in the following words:

(1) The majority of our men when they received this raise, and knew the circumstances under which it was given, were highly pleased with the company's attitude. Many of them expressed their personal satisfaction to their foremen, to their fellow workers, and to their friends in neighboring plants.

(2) It further established their faith in the watchfulness of the management over the conditions affecting the workers, and showed the workers that it was not necessary for them to resort to the prevalent methods of securing attention or recognition.

(3) It paved the way for further action on the part of the management in its work of installing scientific management principles to the operation of the business, and through this practical demonstration of the interpretation of Taylor's statement that the "principal object of management should be to secure the maximum prosperity for the employer, coupled with the maximum prosperity for each employee," our men have taken hold in a hearty manner and are assisting in many ways to achieve the ideals so admirably set forth in Taylor's Principles of Scientific Management.

* * * * *

The cost of this increase, as distributed over our annual production, will be relatively insignificant, for while this wage increase averaged 0.0364 cents per hour applied to each of 1,184 men, or, expressed otherwise, it was approximately 10 per cent increase in its net effect on our annual pay roll, we can see wherein the reduction of wasted effort and the practice of other economies as the result of improved methods of management will more than compensate for this increase.

But this is not the end of it all! By standardizing our method, and by semiannual or quarterly review of the changing prices, we will continue to make adjustments in recognition of the cost of living whenever conditions warrant such action. In other words, it will be treated as a perfectly proper and legitimate factor in our business affairs.

Increases in Pay of Policemen in the District of Columbia.

EARLY in December, 1919, Congress passed a bill granting the policemen of the District of Columbia an increase in their basic compensation. This bill was approved and became law on December 5. The act (Public No. 94) is the final result of much investigating and discussion by Congress and is of special interest by reason of the circumstances which surrounded its passage.

For a considerable length of time an agitation had been going on to increase the salaries of the policemen of the District of Columbia. Owing to the delay of Congress to act, the policemen, who were organized, affiliated their organization with the American Federation of Labor. The policemen's organization had a constitution prohibiting them from striking. A controversy immediately arose between the policemen and the District of Columbia Commissioners, who were opposed to this affiliation. This controversy attracted little attention in Congress until the police of Boston, who were similarly organized and affiliated, went on a strike in spite of their constitutional prohibition and left that city defenseless against looting mobs. This, bringing the matter to the attention of Congress, hastened action on the bill and also led finally to the amendment of paragraph No. 9. By this paragraph, as amended, the policemen are forbidden to become members of, or affiliated with, any organization that uses the strike as a means of settling controversies. This section, as amended, reads as follows:

PAR. 9. No member of the Metropolitan police of the District of Columbia shall be or become a member of any organization, or of an organization affiliated with another organization, which itself, or any subordinate, component, or affiliated organization of which holds, or claims, or uses the strike to enforce its demands. Upon sufficient proof to the Commissioners of the District of Columbia that any member of the Metropolitan police of the District of Columbia has violated the provisions of this section it shall be the duty of the Commissioners of the District of Columbia to immediately discharge such member from the service.

Any member of the Metropolitan police who enters into a conspiracy, combination, or agreement with the purpose of substantially interfering with or obstructing the efficient conduct or operation of the police force in the District of Columbia by a strike or other disturbance shall be guilty of a misdemeanor and upon conviction shall be punished by a fine of not more than \$300 or by imprisonment of not more than six months, or by both.

No officer or member of the said police force, under penalty of forfeiting the salary or pay which may be due him, shall withdraw or resign, except by permission of the Commissioners of the District of Columbia, unless he shall have given the major and superintendent one month's notice in writing of such intention.

In the Senate it was sought by the so-called Meyer's amendment to extend the provisions of this paragraph to all organizations of Government employees, but this failed to secure the approval of the House, and the measure was finally passed without the amendment.

The act is an amendatory act, amending chapter 623 of the Acts of 1901 as amended by chapter 3056 of the Acts of 1906. Paragraph 2 of the original act is amended so as to place the policemen under the provisions of the civil-service laws. The provisions having to do with the classification of privates were also altered. There will be three classes for privates as formerly, but the periods of service in the respective classes are changed so that after one year's efficient service privates in class 1 are automatically promoted to class 2, and, after two years' efficient service in class 2, they are automatically promoted to class 3, which is the highest class for privates.

Paragraph 8 of the original act fixes the basic salaries of the members of the entire police force. This paragraph was amended by the new act, increasing the salaries of all the policemen from privates of the first or lowest class to the major and superintendent. One of the features of this paragraph is that its provisions are made retroactive from August 1, 1919. In the appropriation bill (Public No. 6), of July 11, 1919, making appropriations for the District of Columbia, temporary increases were made in the salaries of the members of the police force, so that the present increases are not so great as they appear to be when compared with the basic salaries as fixed in 1906. In addition to the increased salaries allowed by this act the policemen also receive the \$240 annual bonus allowed to District and Federal employees. The basic salaries of 1906, the temporary salaries of the appropriation act of July 11, 1919, and the new basic salaries as fixed by the present act, together with the present salaries plus the bonus, and the accumulated retroactive pay figured on a basis of 4½ months are shown in the following table, which also shows the changes made by this law in the salaries of the park watchmen who are henceforth to be known as the park police. The park police are Federal employees as distinguished from District of Columbia employees and constitute no part of the Metropolitan police force of the District of Columbia.

COMPENSATION OF THE METROPOLITAN POLICE AND PARK POLICE OF THE DISTRICT OF COLUMBIA.

Position.	Salary under law of—				
	1906 ¹	July 11, 1919. ²	December 5, 1919.		
			Basic salary. ³	Including bonus of \$240.	Retroactive accruals in pay. ⁴
Major and superintendent	\$4,000	\$4,000	\$4,500	⁵ \$4,500	\$173.61
Assistant superintendents	2,500	2,500	3,000	⁵ 3,000	173.61
Inspectors	1,800	2,000	2,400	2,640	138.89
Police surgeons	600	840	1,600	1,840	263.89
Captains	1,500	2,000	2,400	2,640	138.89
Lieutenants	1,320	1,600	2,000	2,240	138.89
Sergeants	1,250	1,400	1,800	2,040	190.97
Privates, Class 3	1,200	1,320	1,660	1,900	118.05
Privates, Class 2	1,080	1,200	1,560	1,800	125.00
Privates, Class 1	900	1,080	1,460	1,700	131.94
Park police:					
Lieutenant		⁶ 1,200	1,900	2,140	243.05
First sergeant		⁶ 950	1,700	1,940	260.42
Sergeants		⁶ 900	1,580	1,820	236.11
Privates		⁶ 840	1,360	1,600	180.55

- ¹ Chapter 3056, Acts of 1906.
- ² Public No. 6, July 11, 1919.
- ³ Public No. 94, Dec. 5, 1919.
- ⁴ On basis of 4½ months, Aug. 1 to Dec. 5, 1919.
- ⁵ Employees receiving more than \$2,500 per year are not allowed the bonus.
- ⁶ Under Public No. 314, Mar. 1, 1919.

The extra allowances made to policemen of the Metropolitan police force who are mounted on horses, motor vehicles, or bicycles are also increased. The following table gives the amount of these increases:

EXTRA ALLOWANCES FOR SPECIAL SERVICE OF METROPOLITAN POLICE OF THE DISTRICT OF COLUMBIA.

Service.	Allowance under law of—			
	1906 ¹	July 11, 1919. ²	Dec. 5, 1919. ³	Retroactive accrual in pay. ⁴
Mounted on own horse	\$240	\$480	\$540	\$20.83
Mounted on own motor vehicle	(⁵)	360	480	41.67
Mounted on bicycle	50	60	70	3.47

- ¹ Chapter 3056, Acts of 1906.
- ² Public No. 6, July 11, 1919.
- ³ Public No. 94, Dec. 5, 1919.
- ⁴ On basis of 4½ months, Aug. 1 to Dec. 5, 1919.
- ⁵ None.

Increases in British Army Pay.¹

UNDER the provisions of two royal warrants issued as army orders on September 13, new rates of pay, half pay, and retired pay for officers, and increases in the pay and pension of soldiers are established.

In the case of officers the new rates of pay, which operate as from July 1, 1919, are granted in consideration of the present high cost of living and will be subject, after five years, to revision, either upward or downward, to an extent not exceeding 20 per cent, according as the cost of living rises or falls. After July 1, 1924, a further revision may take place every three years. These provisions do not apply to other ranks.

During the war increases in rates of pay were granted at various dates. In the following table, however, the rates in force at August, 1914, and immediately prior to the operation of the new scales only are given for comparative purposes. It should be noted, however, in considering the comparison, that prior to the recent changes, captains, lieutenants, and second lieutenants received allowances of £2 [\$9.73] a month for each child (up to a maximum of four) and majors received a similar allowance of £1 [\$4.87] a month. These allowances were not in operation at August, 1914, and they will cease as from January 1, 1920.

RATES OF PAY AND AMOUNT OF ALLOWANCES OF CERTAIN OFFICERS IN THE BRITISH ARMY AT AUGUST, 1914, JUNE, 1919, AND JULY, 1919.²

Rank and date. ³	Regimental pay (per day) ⁴ .	Lodging, light, and fuel allowance (per day).	Ration and messing allowance (per day).	Total, including command pay for lieutenant colonel (per day).
Lieutenant colonel:				
August, 1914.....	\$5.60	\$1.26	.....	\$8.07
June, 1919.....	6.93	\$1.28-.55	\$0.51	\$9.94-.55
July, 1919.....	11.56	2.07-1.30	.51	16.57 or 15.67
Major:				
August, 1914.....	3.89	.91-.30	.08	4.89-.30
June, 1919.....	5.60	.95	.59	7.14
July, 1919.....	7.66	2.07 or .95	.51	10.24 or 9.12
Captain:				
August, 1914.....	2.82	.65	.08	3.55
June, 1919.....	4.38	.67	.59	5.64
July, 1919.....	5.72	2.07 or .67	.51	8.29 or 6.89
Lieutenant:				
August, 1914.....	1.58	.59	.08	2.25
June, 1919.....	3.77	.61	.59	4.97
July, 1919.....	3.89	1.58 or .61	.51	5.98 or 5.01
Second lieutenant:				
August, 1914.....	1.28	.59	.08	1.95
June, 1919.....	3.41	.61	.59	4.60
July, 1919.....	3.16	1.58 or .61	.51	5.25 or 4.28

¹ From The Labour Gazette (London), October, 1919, p. 420.

² Conversions in this and the following table are made on the basis of £1=\$4.867.

³ The rates quoted are the initial rates for each rank. In most cases officers received higher rates after certain periods of service.

⁴ Including, at June, 1919, the bonus paid to all officers who had not been released by 1st May.

The new warrant provides for lodging, light, and fuel allowances for married officers at higher rates than for those unmarried, and also grants furniture allowance to married men. In the above table, where two rates are quoted for July, 1919, the higher rate applies to married men and includes furniture allowance; the lower rate applies to unmarried men. As regards ration and messing allowances, no ration allowance was paid at August, 1914, but rations were allowed to those serving abroad; a messing allowance was paid, but this has been discontinued as from July, 1919.

The revised rates of pay for warrant officers, noncommissioned officers, and men also date from July 1, 1919, and it is provided that, where transfer to the new rates involves a loss of emoluments, the soldier may continue to receive his old rates until circumstances render them equal to or less than the new rates.

The following table shows a comparison between the new rates of pay for certain ranks in infantry regiments and those at the outbreak of war and at June, 1919:

RATES OF PAY FOR CERTAIN RANKS IN INFANTRY REGIMENTS IN THE BRITISH ARMY AT AUGUST, 1914, JUNE, 1919, AND JULY, 1919.

Rank.	Regimental pay per day.			Proficiency pay per day (if qualified).		
	Aug., 1914.	June, 1919. ¹	July, 1919.	Aug., 1914. ²	June, 1919. ³	July, 1919. ⁴
Regimental sergeant major . . .	\$1.22	\$2.01	\$3.41	\$0.12	\$0.12	.....
Regimental quartermaster ser- geant . . . . .	.97	1.64	2.92	.12	.12	.....
Company sergeant major . . . .	.97	1.64	2.43	.12	.12	.....
Company quartermaster ser- geant . . . . .	.85	1.52	2.31	.12	.12	.....
Sergeant . . . . .	.57	1.12	1.70	.12	.12	.....
Corporal . . . . .	.41	5.91	1.22	\$0.06 or .12	\$0.06 or .12	\$0.12
Private . . . . .	.24	5.73	6.67	.06 or .12	.06 or .12	.12

¹ Including bonus paid to all soldiers who had not been released by 1st of May, but excluding war pay of 1d. (2 cents) per day for each year's service since Aug. 4, 1914.

² After 2 years' total service.

³ After 6 months' total service.

⁴ After 1 year's total service.

⁵ The nominal rates at June, 1919, were 3s. 8d. (89 cents) for corporals and 2s. 9d. (67 cents) for privates; but it was provided that no corporal should actually receive less than 3s. 9d. (91 cents), and no private less than 3s. (73 cents). Where proficiency pay was earned, 1d. or 3d. (2 or 6 cents), respectively, of this pay was merged into the rates of 3s. 9d. (91 cents) and 3s. (73 cents).

⁶ 3s. 6d. (85 cents) after 2 years' service.

In addition to the increases in pay, there have also been additions to the separation allowances. In August, 1914, the allowance for a wife for sergeants, corporals and privates was 7s. 7d. (\$1.85) per week with an additional 1s. 2d. (28 cents) per week for each child. In June, 1919, the allowance for a wife was 15s. (\$3.65) for sergeants, and 12s. 6d. (\$3.04) for corporals and privates, with extra allowances of 10s. 6d. (\$2.56) for the first child, 8s. (\$1.95) for the second, 5s. 6d. (\$1.34) for the third, and 4s. (\$0.97) for each additional child. This scale remains in operation under the new warrant, but it is subject to revision on January 1, 1920.

Standard Rates of Pay of Officers and Crews of Italian Merchant Marine.

Translated by ALFRED MAYLANDER.

LA Vita Marittima e Commerciale¹ reports the results of a collective agreement concluded by Italian shipowners and the Seamen's Federation (*Federazione dei Lavoratori del Mare*). The agreement which became effective July 1, 1919, fixes standard rates of pay, hours of labor, and working conditions of the navigating and engineer officers, surgeons, pursers, petty officers, seamen, carpenters, cooks, bakers, stewards, etc., of the Italian merchant marine. The principal results of the agreement are reproduced below in the tables and annotations to the tables.

Steamships.

Officers.

The following two tables show the standard monthly rates of the basic pay, bonuses, clothing, entertainment, and active sea service allowances, pension-fund contributions, and wage increases of officers in the passenger and cargo service of transatlantic and subsidized steamship lines and of those in the cargo service of independent ship-owners.

¹ La Vita Marittima e Commerciale, August, September, and October, 1919. Genoa.

STANDARD MONTHLY RATES OF PAY (IN LIRE¹) OF OFFICERS OF ITALIAN TRANSATLANTIC AND SUBSIDIZED STEAMSHIP COMPANIES, AND OF OFFICERS IN THE CARGO SERVICE OF INDEPENDENT SHIPOWNERS, EFFECTIVE JULY 1, 1919.

Transatlantic Companies.

Class of vessel and occupation.	Gross tonnage.	Basic salary.	Contribution to pension fund.	Clothing and entertainment allowance.	Bonuses.				Increase granted by the Royal Maritime Commission, effective July 1, 1919.	Total.	Active sea-service allowance.	Grand total.
					Borne by the ship-owner.	Borne by the Government on requisitioned vessels, on others by the ship-owners.						
						Cost of living.	War risk.	Cost of living.					Forfeiture of shore leave.
<i>Passenger liners.</i>												
Captain, chief engineer	Over 10,000	1,000	75.00	20	150	50	50	150.00	120	1615.00	120	1735.00
	Under 10,000	800	60.00	20	150	50	50	120.00	120	1370.00	120	1490.00
First mate, first engineer, surgeon.	Over 10,000	600	45.00	20	130	50	40	90.00	120	1095.00	100	1195.00
	Under 10,000	500	37.50	20	130	50	40	75.00	120	972.50	100	1072.50
Second mate, second engineer.	Over 10,000	400	30.00	20	130	50	40	60.00	120	850.00	100	950.00
	Under 10,000	350	26.25	20	130	50	40	52.50	120	788.75	100	888.75
Third mate, third engineer.	Over 10,000	250	18.75	20	130	50	40	37.50	120	666.25	100	766.25
	Under 10,000	250	18.75	20	130	50	40	37.50	120	666.25	100	766.25
Chief purser	Over 10,000	500	37.50	20	130	50	40	75.00	120	972.00	100	1072.00
	Under 10,000	425	31.87	20	130	50	40	63.75	120	880.62	100	980.62
Second purser	Under 10,000	200	15.00	20	130	50	40	30.00	120	605.00	100	705.00
<i>Cargo liners.</i>												
Captain, chief engineer	.....	650	48.75	20	150	50	50	97.50	120	1186.25	120	1306.25
First mate, first engineer	.....	450	33.75	20	130	50	40	67.50	120	911.25	100	1011.25
Second mate, second engineer	.....	300	22.50	20	130	50	40	45.00	120	727.50	100	827.50
Third mate, third engineer	.....	200	15.00	20	130	50	40	30.00	120	605.00	100	705.00

Subsidized Companies.

<i>Passenger and cargo liners in the Mediterranean service.</i>												
<i>Italiana and Sicilia:</i>												
Captain—												
Group 1	.....	575	43.12	30	120	100	50	86.25	120	1124.37	120	1244.37
Group 2	.....	475	35.62	30	120	100	50	71.25	120	1001.87	120	1121.87
Chief engineer—												
Group 1	.....	575	43.12	.....	120	100	50	86.25	120	1094.37	120	1214.37
Group 2	.....	475	35.62	.....	120	100	50	71.25	120	971.87	120	1091.87
First mate, first engineer—												
Group 1	.....	350	26.25	.....	100	100	40	52.50	120	788.75	100	888.75
Group 2	.....	300	22.50	.....	100	100	40	45.00	120	727.50	100	827.50
Second mate, second engineer.	.....	250	18.75	.....	100	100	40	37.50	120	666.25	100	766.25
Third mate, third engineer.	.....	200	15.00	.....	100	100	40	30.00	120	605.00	100	705.00
<i>Marittima:</i>												
Captain—												
Group 1	.....	575	43.12	30	120	100	50	86.25	120	1124.37	90	1214.37
Group 2	.....	475	35.62	30	120	100	50	71.25	120	1001.87	90	1091.87

¹ Normally the value of the lira is 19.3 cents.

STANDARD MONTHLY RATES OF PAY (IN LIRE) OF OFFICERS OF ITALIAN TRANSATLANTIC AND SUBSIDIZED STEAMSHIP COMPANIES, ETC.—Concl'd.

Subsidized Companies—Concluded.

Class of vessel and occupation.	Gross tonnage.	Basic salary.		Contribution to pension fund.	Clothing and entertainment allowance.	Bonuses.				Increase granted by the Royal Maritime Commission, effective July 1, 1919.	Total.	Active sea-service allowance.	Grand total.	
						Borne by the ship-owner.	Borne by the Government on requisitioned vessels, on others by the ship-owners.							
							Cost of living.	War risk.	Cost of living.					Forfeiture of shore leave.
<i>Passenger and cargo lines in the Mediterranean service—Continued.</i>														
Chief engineer—														
Group 1.....		575	43.12			120	100	50	86.25	120	1094.37	90	1184.37	
Group 2.....		475	35.62			120	100	50	71.25	120	971.87	90	1061.87	
First mate, first engineer—														
Group 1.....		350	26.25			100	100	40	52.50	120	788.75	75	863.75	
Group 2.....		300	22.50			100	100	40	45.00	120	727.50	75	802.50	
Second mate, second engineer.		250	18.75			100	100	40	37.50	120	666.25	75	741.25	
Third mate, third engineer.		200	15.00			100	100	40	30.00	120	605.00	75	680.00	

Independent Owners.

<i>Ocean cargo service.</i>														
Captain, first engineer.....	Up to 4,500....	580				120	50	50	87.00	120	1007.00	120	1127.00	
	4,501 to 7,000...	615				120	50	50	92.25	120	1047.25	120	1167.25	
	Over 7,000.....	655				120	50	50	98.25	120	1093.25	120	1213.25	
First mate, second engineer.	Up to 4,500.....	350				100	50	40	52.50	120	712.50	100	812.50	
	4,501 to 7,000....	380				100	50	40	57.00	120	747.00	100	847.00	
	Over 7,000.....	415				100	50	40	62.25	120	787.25	100	887.25	
Second mate, third engineer.	Up to 4,500.....	220				100	50	40	33.00	120	563.00	100	663.00	
	4,501 to 7,000...	250				100	50	40	37.5	120	597.50	100	697.50	
	Over 7,000.....	275				100	50	40	41.25	120	626.25	100	726.25	
<i>Coastwise cargo service.</i>														
Captain, first engineer.....	Up to 4,500.....	505				120	50	50	75.75	120	920.75	120	1040.75	
	4,501 to 7,000....	535				120	50	50	80.25	120	955.25	120	1075.25	
	Over 7,000.....	570				120	50	50	85.50	120	995.50	120	1115.50	
First mate, second engineer.	Up to 4,500.....	305				100	50	40	45.75	120	660.75	100	760.75	
	4,501 to 7,000....	330				100	50	40	49.50	120	689.50	100	789.50	
	Over 7,000.....	360				100	50	40	54.00	120	724.00	100	824.00	
Second mate, third engineer.	Up to 4,500.....	190				100	50	40	28.50	120	528.50	100	628.50	
	4,501 to 7,000...	215				100	50	40	32.25	120	557.25	100	657.25	
	Over 7,000.....	240				100	50	40	36.00	120	586.00	100	686.00	
<i>Mediterranean cargo service.</i>														
Captain, first engineer.....	Up to 1,500....	340				120	50	50	51.00	120	731.00	120	851.00	
	1,501 to 3,000....	355				120	50	50	53.25	120	748.25	120	868.25	
	Over 3,000.....	365				120	50	50	54.75	120	759.75	120	879.75	
First mate, second engineer.	Up to 1,500.....	165				100	50	40	24.75	120	499.75	100	599.75	
	1,501 to 3,000....	195				100	50	40	29.25	120	534.25	100	634.25	
	Over 3,000.....	220				100	50	40	33.00	120	563.00	100	663.00	
Second mate, third engineer.	Up to 1,500.....	(1)				100	50	40	.....	120	.....	100	.....
	1,501 to 3,000....	(1)				100	50	40	.....	120	.....	100	.....
	Over 3,000.....	(1)				100	50	40	.....	120	.....	100	.....

¹ The basic salary for these grades is fixed by individual contract.

Notes Relating to All Shipping Lines.

War bonus for active sea service.—Officers are granted a daily war bonus amounting to 6 lire in the case of captains and chief engineers and to 5 lire in that of officers of lower rank for each day of actual navigation in all seas and while stopping in ports of the Adriatic and Ionic Seas and in those of the Aegean coast, Libya, the Red Sea, and of Italian Somaliland. The computation of this bonus is based on the assumption that under normal conditions a steamer navigates on an average of 20 days per month, with the exception of steamers of the subsidized companies Marittima and Italiana in the Mediterranean service, in the case of which 15 days is assumed to be the average number of days of actual navigation.

Infected ports.—If a steamer sails for ports officially pronounced infected and does not go into quarantine, its officers and crew are entitled to a bonus for the period beginning with the departure from the last port preceding the infected port and ending with the arrival in the next port. In the case of transatlantic and subsidized lines this bonus is to amount to 15 per cent of the basic pay and in the case of steamers of independent owners to 10 per cent.

Notes Relating to Transatlantic and Subsidized Lines.

Pension fund.—These companies contribute to the pension fund of each officer a sum equal to 7.5 per cent of his basic pay.

Profit sharing.—The navigating officers, engineers, and surgeons of passenger steamers are to receive a share of the steamer's receipts of every voyage and of the savings in the consumption of coal and lubricants. This share may not be less than 10 per cent of their basic pay. The pursers are to share in a somewhat greater measure in the savings in the commissary department.

Service premiums.—Ships' officers shall be entitled to a service premium of 10 per cent of their monthly basic pay for each five years of continuous service in the same grade. This provision shall be applicable to not more than four quinquennia. If in case of promotion the new salary, owing to the formerly drawn service premiums, is inferior to the salary received before promotion the promoted officer shall be entitled to the difference between the two salaries.

Service in a higher grade.—An officer intrusted with the duties of a higher grade than his own shall be entitled to the pay of the higher grade if he is employed on steamers of transatlantic companies, and to a bonus equivalent to three-fourths of the difference between his own pay and that of the higher grade if he is employed on steamers of subsidized companies.

Hours of service in port and at sea.—The hours of actual service of ships' officers shall be eight hours per day in offices on land as well as on board in port and at sea.

Overtime.—Work performed beyond the normal hours of service on Sundays, May 1, and all legal holidays shall be compensated at the rate of 1 lira per hour. Work performed in anchoring a ship or in weighing anchor on arrival and departure, in moving the ship while in port, in the loading and unloading of mail and baggage, in calculations of navigation, as well as all work performed in the interest of the safety of the ship, passengers, and cargo, shall not be considered as overtime work.

Night watch in port.—One navigating officer and one engineer must alternate in remaining on board nights and on holidays in case of possible emergency. These officers shall be entitled to 24 hours' leave, beginning at 8 a. m. of the day following the night watch, unless the commanding officer disposes differently for very serious reasons of service.

Annual leave.—If compatible with the exigencies of the service ships' officers shall be granted 20 days of annual leave. In case that for unforeseen service reasons the company should not be able to grant such leave the officer shall be entitled to extra pay for the days of leave lost. Extraordinary leave not in excess of three days shall not be deducted from the annual leave.

Disembarkment owing to disarmament.—Officers disembarked owing to the putting out of commission of their ship or for any other service reason shall hold themselves at the disposal of the company and shall be entitled to full pay and sustenance for the entire duration of their disembarkment. They shall, however, be obligated to render service on board or on land and in the localities determined by the company.

Sickness.—In case of sickness officers shall be entitled to full pay for the first six months, half pay for the next six months, and to one-third of their pay for further six months. If the sickness has been caused by the service, the officer shall in addition to full pay be entitled to sustenance up to his full recovery, but not for a period in excess of 18 months.

Industrial accidents.—If an officer becomes the victim of an industrial accident while in service, and consequent to such accident is discharged by the company he shall receive as compensation of all his claims arising from the accident a sum equal to four years' pay in case of permanent total disability and to two years' pay in case of permanent partial disability. If the accident is fatal, his surviving heirs (wife, descendants, ascendants, and collaterals up to the third

degree) shall receive a sum equivalent to four years of his pay as full compensation of all their claims.

First-class sustenance.—Captains, chief engineers, and surgeons shall be entitled to first-class sustenance.

Notes Relating to Transatlantic Companies Only.

Clothing allowance.—These companies grant to their officers a monthly clothing allowance of 20 lire.

Bonus for compilation of the pay roll.—The officer charged with the compilation of the pay roll and the paying of the crew receives a monthly bonus of 25 lire.

Notes Relating to Subsidized Companies Only.

Entertainment.—The captains of the subsidized companies Italiana, Marittima, and Sicilia receive a monthly allowance of 30 lire for entertainment.

Bonus for electric light service.—An allowance of 30 lire per month granted for electric light service shall be divided by the two engineer officers of lower grade.

Voyages beyond the Straits.—The following monthly bonuses are to be paid to officers of cargo steamers of the companies Italiana and Sicilia for voyages beyond the Straits:

Captain, chief engineer.....	125 lire.
First mate, first engineer.....	75 lire.
Second and third mate, second and third engineer.....	60 lire.

Officers of passenger and cargo steamers of the company Marittima are to receive the following bonuses for each voyage beyond the Straits:

	To Bombay.	To Benadir.
Captain, chief engineer.....	200 lire.	250 lire.
First mate, first engineer.....	100 lire.	140 lire.
Second mate, second engineer.....	50 lire.	90 lire.
Third mate, third engineer.....	40 lire.	60 lire.

As each steamer on an average makes four such voyages, the officers of steamers sailing beyond the Straits receive monthly about one-third of the bonus specified above.

Steamers stationed abroad.—On steamers stationed abroad officers are to receive the following monthly bonuses:

Captain, chief engineer.....	50 lire
First mate, first engineer.....	30 lire
Second mate, second engineer.....	20 lire
Third mate, third engineer.....	15 lire

Notes Relating to Independently Owned Steamers.

General.—The rates of pay shown in the table relate exclusively to officers with certificate of master of ocean steam vessels or of first engineer and are to remain in force as long as the standard freight rate from Cardiff to Genoa remains higher than 12 shillings in gold. The rate of pay of officers not possessing such certificates is to be fixed by individual agreement with the shipowner.

Hours of service in port.—The actual hours of service in port shall be eight hours per day during winter and nine hours during summer for deck officers as well as engineer officers.

Division of the watch.—During navigation the watch of the deck officers shall be divided into two turns and that of the engineer officers into three (4 and 8).

The watch of the deck officers shall begin after the vessel has left port and is in a condition satisfactory to the captain. That of the engineer officers shall begin with the firing of the boilers preparatory to departure.

Maintenance of auxiliary machinery.—During navigation the engineer officers shall perform the usual maintenance and repair work on winches and other auxiliary machinery.

Night watch.—One deck officer and one engineer officer shall alternate in staying on board nights and on holidays in case of possible emergencies.

Crew.

In the following tables are shown the standard rates of basic pay and all bonuses and allowances of all members of the crews of transatlantic and subsidized steamship lines and of those in the service of independent shipowners.

STANDARD MONTHLY RATES OF PAY (IN LIRE ¹) OF MEMBERS OF THE CREWS OF ITALIAN MERCHANT STEAMERS, EFFECTIVE JULY 1, 1919.

Transatlantic Companies.

Occupation.	Basic pay.	Bonuses.				In-crease granted by the Royal Maritime Commission, effective July 1, 1919.	Total.	Active sea-service allowance.	Grand total.
		Borne by the shipowner.		Borne by the Government on requisitioned vessels, on others by the shipowners.					
		Cost of living.	War risk.	Cost of living.	Forfeiture of shore leave.				
Boatswain.....	160	90	40	30	40.00	110	470.00	50	520.00
Boatswain's mate.....	140	90	40	30	35.00	110	445.00	50	495.00
Carpenter ²	150	90	40	30	37.50	110	457.50	50	507.50
Carpenter's mate ²	130	90	40	30	32.50	110	432.50	50	482.50
Brazier.....	150	90	40	30	37.50	110	457.50	50	507.50
Quartermaster.....	125	90	40	30	31.25	110	426.25	50	476.25
Able seaman ³	110	90	40	30	27.50	100	397.50	20	417.50
Ordinary seaman:									
First class ³	75	90	40	30	18.75	70	323.75	20	343.75
Second class ³	70	90	40	30	17.50	70	317.50	20	337.50
Apprentice ³	50	90	40	30	12.50	70	292.50	20	312.50
Nurse, male:									
First class.....	110	90	40	30	27.50	100	397.50	20	417.50
Second class.....	100	90	40	30	25.00	100	385.00	20	405.00
Nurse, female:									
First class.....	100	90	40	30	25.00	100	385.00	20	405.00
Second class.....	90	90	40	30	22.50	100	372.50	20	392.50
Fireman, first leading.....	160	90	40	30	40.00	110	470.00	50	520.00
Fireman, leading.....	140	90	40	30	35.00	110	445.00	50	495.00
Machinist.....	150	90	40	30	37.50	110	457.50	50	507.50
Chief electrician.....	150	90	40	30	37.50	110	457.50	50	507.50
Electrician.....	130	90	40	30	32.50	110	432.50	50	482.50
Fireman ³	130	90	40	30	32.50	100	422.50	20	442.50
Trimmer.....	100	90	40	30	25.00	100	385.00	20	405.00
Chief steward.....	160	90	40	30	40.00	110	470.00	50	520.00
Second steward.....	100	90	40	30	25.00	100	385.00	20	405.00
Linen-room steward ⁴	100	90	40	30	25.00	100	385.00	20	405.00
Steward (cabin).....	85	90	40	30	21.25	100	366.25	20	386.25
Stewardess (cabin).....	80	90	40	30	20.00	100	360.00	20	380.00
Steward (dining room):									
First class.....	65	90	40	30	16.25	70	311.25	20	331.25
Second class.....	60	90	40	30	15.00	70	305.00	20	325.00
Cabin boy.....	50	90	40	30	12.50	70	292.50	20	312.50
Pantrymen:									
First class.....	120	90	40	30	30.00	100	410.00	20	430.00
Second class.....	85	90	40	30	21.25	100	366.25	20	386.25
Sales clerk.....	80	90	40	30	20.00	100	360.00	20	380.00
Second cook ⁵	140	90	40	30	35.00	100	435.00	20	455.00
Third cook.....	120	90	40	30	30.00	100	410.00	20	430.00
Chief baker.....	120	90	40	30	30.00	100	410.00	20	430.00
Second baker.....	110	90	40	30	27.50	100	397.50	20	417.50
Second pastry cook ⁶	100	90	40	30	25.00	100	385.00	20	405.00
Butcher.....	110	90	40	30	27.50	100	397.50	20	417.50
Chief storekeeper.....	120	90	40	30	30.00	100	410.00	20	430.00
Second storekeeper.....	100	90	40	30	25.00	100	385.00	20	405.00
Third storekeeper.....	85	90	40	30	21.25	100	366.25	20	386.25
Storekeeper for the crew.....	120	90	40	30	30.00	100	410.00	20	430.00

¹ Normally the value of the lira is 19.3 cents.

² Carpenters are entitled to a monthly allowance of 3 lire as compensation for the use of their own tools, which are to be insured for 300 lire at the expense of the shipping company.

³ Able seamen rated as steersmen, cargo watchmen, captain of the hold, as well as firemen, oilers, chief guards, and seamen and apprentices assigned to winches are entitled to a monthly bonus of 5 lire.

⁴ A linen-room steward is carried only on steamers with accommodations for more than 100 cabin passengers.

⁵ The wages of the chief cook and chief pastry cook are to be regulated by individual contract.

STANDARD MONTHLY RATES OF PAY (IN LIRE) OF MEMBERS OF THE CREWS OF ITALIAN MERCHANT STEAMERS, EFFECTIVE JULY 1, 1919—Continued.

Subsidized Companies.

Occupation.	Basic pay.	Bonuses.				In-crease granted by the Royal Maritime Commission effective July 1, 1919.	Total.	Active sea-service allowance.		Grand total in the Mediterranean Sea.	
		Borne by the ship-owner.		Borne by the Government on requisitioned vessels, on others by the ship-owners.				Italiana and Sicilia.	Maritima in the Mediterranean Sea.	Italiana.	Maritima.
		Cost of living.	War risk.	Cost of living.	Forfeiture of shore leave.						
Boatswain ¹	150	90	40	30	37.50	110	457.50	50.00	37.50	507.50	495.00
Do. ²	140	90	40	30	35.00	110	445.00	50.00	37.50	495.00	482.50
Boatswain's mate.....	135	90	40	30	33.75	110	438.75	50.00	37.50	488.75	476.25
Carpenter ³	140	90	40	30	35.00	110	445.00	50.00	37.50	495.00	482.50
Do. ⁴	130	90	40	30	32.50	110	432.50	50.00	37.50	482.50	470.00
Able seaman ⁵	100	90	40	30	25.00	100	385.00	20.00	15.00	405.00	400.00
Ordinary seaman:											
First class ⁶	70	90	40	30	17.50	70	317.50	20.00	15.00	337.50	332.50
Second class ⁶	60	90	40	30	15.00	70	305.00	20.00	15.00	325.00	320.00
Apprentice ⁶	50	90	40	30	12.50	70	292.50	20.00	15.00	312.50	307.50
Nurse, male:											
First class.....	110	90	40	30	27.50	100	397.50	20.00	.....	417.50	417.50
Second class.....	100	90	40	30	25.00	100	385.00	20.00	.....	405.00	405.00
Nurse, female.....	100	90	40	30	25.00	100	385.00	20.00	.....	405.00	405.00
Fireman:											
First leading ¹	150	90	40	30	37.50	110	457.50	50.00	37.50	507.50	495.00
Do. ²	140	90	40	30	35.00	110	445.00	50.00	37.50	495.00	482.50
Machinist.....	140	90	40	30	35.00	110	445.00	50.00	37.50	495.00	482.50
Chief electrician.....	140	90	40	30	35.00	110	445.00	50.00	37.50	495.00	482.50
Electrician.....	125	90	40	30	31.25	110	426.25	50.00	37.50	476.25	463.75
Fireman, donkey boiler.....	130	90	40	30	32.50	100	422.50	20.00	15.00	442.50	437.50
Fireman ⁵	120	90	40	30	30.00	100	410.00	20.00	15.00	430.00	425.00
Trimmer.....	90	90	40	30	22.50	100	372.50	20.00	15.00	392.50	387.50
Chief steward ⁶	150	90	40	30	37.50	110	457.50	50.00	37.50	507.50	495.00
Do. ⁷	145	90	40	30	36.25	110	451.25	50.00	37.50	501.25	488.75
Do. ⁸	130	90	40	30	32.50	110	432.50	50.00	37.50	482.50	470.00
Second steward.....	90	90	40	30	22.50	100	372.50	20.00	15.00	392.50	387.50
Steward (cabin).....	75	90	40	30	18.75	100	353.75	20.00	15.00	373.75	368.75
Stewardess (cabin).....	70	90	40	30	17.50	100	347.50	20.00	15.00	367.50	362.50
Steward (dining room).....	60	90	40	30	15.00	70	305.00	20.00	15.00	325.00	320.00
Cabin boy.....	45	90	40	30	11.25	70	286.25	20.00	15.00	306.25	301.25
Chief cook ⁶	175	90	40	30	43.75	110	488.75	50.00	37.50	538.75	528.25
Do. ⁷	145	90	40	30	36.25	110	451.25	50.00	37.50	501.25	488.75
Do. ⁸	125	90	40	30	31.25	100	416.25	20.00	15.00	436.25	431.25
Second cook ⁶	120	90	40	30	30.00	100	410.00	20.00	15.00	430.00	425.00
Do. ⁸	100	90	40	30	25.00	100	385.00	20.00	15.00	405.00	400.00
Third cook.....	85	90	40	30	21.25	100	366.25	20.00	15.00	386.25	381.25
Kitchen attendant.....	65	90	40	30	16.25	70	311.25	20.00	15.00	331.25	326.25
Baker.....	95	90	40	30	23.75	100	378.75	20.00	15.00	398.75	393.75
Pastry cook.....	95	90	40	30	23.75	100	378.75	20.00	15.00	398.75	393.75
Pantryman:											
First class.....	95	90	40	30	23.75	100	378.75	20.00	15.00	398.75	393.75
Second class.....	70	90	40	30	17.50	100	347.50	20.00	15.00	367.50	362.50
Storekeeper.....	85	90	40	30	21.25	100	366.25	20.00	15.00	386.25	381.25

¹ On all lines of the Italiana, all lines of the Sicilia with the exception of that Naples-Cagliari, and on the Bombay, Somalia, Benadir, Massaua, Red Sea, Alexandria, and Saloniki lines of the Marittima.² On the less important lines of the Marittima and on the line Naples-Cagliari of the Sicilia.³ See footnote ¹ of this section of this table and footnote ² of preceding section.⁴ See footnote ² of this section of this table and footnote ² of preceding section.⁵ See footnote ³ of preceding section of this table.⁶ On the Bombay and Somalia lines of the Marittima and on the Alexandria line of the Italiana.⁷ On all lines of the Italiana, on all lines of the Sicilia with the exception of the Naples-Cagliari line, and on the Benadir, Massaua, Red Sea, Alexandria, and Saloniki lines of the Marittima.⁸ On all lines.

STANDARD MONTHLY RATES OF PAY (IN LIRE) OF MEMBERS OF THE CREWS OF ITALIAN MERCHANT STEAMERS, EFFECTIVE JULY 1, 1919—Concluded.

Independent Owners.

Occupation.	Basic pay.	Gratuity.	Bonuses.				Increase granted by the Royal Maritime Commission, effective July 1, 1919.	Total.	Active sea-service allowance.	Grand total.
			Borne by the ship-owner.		Borne by the Government on requisitioned vessels, on others by the ship-owners.					
			Cost of living.	War risk.	Cost of living.	Forfeiture of shore leave.				
Boatswain ¹	170	5	90	25	30	42.50	110	472.50	50	522.50
Provision master.....	130	5	90	25	30	32.50	100	412.50	20	432.50
Able seaman (steersman).....	120	5	90	25	30	30.00	100	400.00	20	420.00
Seaman.....	60	5	90	25	30	15.00	70	295.00	20	315.00
Do.....	80	5	90	25	30	20.00	70	320.00	20	340.00
Apprentice ²	30	5	90	25	30	7.50	70	257.50	20	277.50
Do.....	40	5	90	25	30	10.00	70	270.00	20	290.00
Do.....	60	5	90	25	30	15.00	100	295.00	20	315.00
Fireman, first leading ⁴	170	5	90	25	30	42.50	110	472.50	50	522.50
Fireman.....	140	5	90	25	30	35.00	100	425.00	20	445.00
Trimmer.....	110	5	90	25	30	27.50	100	387.50	20	407.50
Cook.....	155	5	90	25	30	38.75	100	443.75	20	463.75
Steward.....	109	5	90	25	30	25.00	100	375.00	20	395.00
Cabin boy:										
Under 21 years.....	80	5	90	25	30	20.00	70	320.00	20	340.00
21 years or over.....	100	5	90	25	30	25.00	70	345.00	20	365.00

¹ Optional.² For the first 6 months of service the basic pay is from 30 to 40 lire (\$5.79 to \$7.72), after 6 months from 40 to 60 lire (\$7.72 to \$11.58).

Notes Relating to All Shipping Lines.

War bonus for active sea service.—What has been said about this bonus in the notes relating to rates of pay of ships' officers is also applicable to crews, with the sole difference that in the case of crews this bonus amounts to 2.50 lire per day for petty officers, and to 1 lira for all other members of the crew.

Infected ports.—The note relating to officers is also applicable to crews.

Monthly leave.—Provided that the captain thinks it compatible with the exigencies of the service, each member of the crew shall be granted 24 hours leave per month of service. Such leave is to be taken in the home port, and if not used each month may be accumulated during the same year. Accumulated leave which can not be used owing to service exigencies is to be compensated with one day's pay for each day of leave lost. On steamers of independent owners such compensation of lost leave is only compulsory if the member of the crew has served continuously for at least one year on steamers of the same owner.

Donkey boiler fireman.—The fireman assigned to the donkey boiler is to receive a monthly bonus for the maintenance, heating, and operation of this boiler. On steamers of the transatlantic and subsidized lines this bonus shall amount to 10 lire, and on steamers of independent owners to 15 lire.

Notes Relating to Transatlantic and Subsidized Lines.

Profit sharing.—The deck and engine crew of transatlantic companies receive a share of the traffic receipts of each voyage and of the savings in fuel and lubricants; the cooks, stewards, storekeepers, etc., share in the receipts from the sale of food. The subsidized companies grant only to the engine crew a share of the savings in fuel and lubricants.

Linen and bedding.—Petty officers, mechanics, electricians, and stewards are furnished linen and bedding by the companies.

Uniforms.—These companies furnish two uniforms per year to the deck and cabin crews. The trans-Atlantic companies pay one-half of the cost of the uniforms and the subsidized companies one-third.

Hours of labor at sea.—At sea the watch of the deck crew shall be divided into two turns, four hours of watch alternating with four hours of rest, with relief from 4 to 6 p. m., and from 6 to 8 p. m. during the watch below.

The watch of the engine crew shall under normal conditions be divided into three turns, four hours of watch and eight hours of rest.

In no case shall a fireman attend more than three furnaces or handle more than 4 tons of coal during 24 hours.

Work performed in excess of these hours shall be considered overtime work, unless performed in the interest of the safety of the ship, passengers, or cargo.

Apprentices under 16 years of age shall be excluded from night watch service and may not work more than 10 hours per day with a two-hour intermediate rest.

The hours of labor of the cabin and kitchen crew and captains of the hold shall be regulated according to the exigencies of the service.

Watch at sea.—The watch at sea begins for the engine crew: (a) With the firing of the boilers if this takes place before noon of the day previous to departure; (b) at noon of the day previous to departure if the boilers are being fired within the 24 hours of the day previous to departure; and (c) at noon of the day of departure, if the boilers are being fired on the day of departure. The first watch shall be given four hours off duty before it begins its turn.

On arrival in port and after termination of the watch the crew shall be given eight hours off duty before being called upon to do

port service. The watches off duty must also be given eight hours off before being called upon for service.

For the deck crew the watch at sea begins at noon of the day of departure. On departure and on arrival of the vessel each member of the deck crew must be at his post and remain there until the vessel has settled into its course or anchored. On the arrival in port and after the vessel has been anchored the crew on duty must, after termination of the watch, be given four hours off before being called upon for port service, nor may the watch which on arrival was off duty be called upon for service until it has had four hours off.

Hours of labor in port.—The normal daily hours of labor in port of the entire crew shall be eight, distributed as follows: During the summer from 7 to 8 a. m., 9 to 12 noon, and 2 to 6 p. m. During the winter from 8 a. m. to 12 noon, and from 1 to 5 p. m. When traffic or special local conditions require it, the captain of the vessel may order a differing arrangement of the hours of labor. The total daily hours of labor may, however, not exceed eight.

Stewards and cabin boys assigned to waiting on ships' officers shall with the exception of days of departure be given shore leave after supper, but must return on board by 10 a. m. of the following day.

Overtime.—The notes on this subject relating to officers apply also to the crew. Compensation for overtime to be made at the following rates per hour: Petty officers, 0.60 lira; able seamen, 0.50 lira; ordinary seamen, cabin and mess stewards, and boys, 0.40 lira.

On arrival in the home port or in an Italian port of final destination the crew off watch duty may not be compelled to work overtime unless this is required for the safety of the ship, passengers, and cargo.

Loading and unloading.—With the exception of captains of the hold assigned to watching the cargo, the deck crew assigned at whatever hour to the loading or unloading of cargo shall be entitled to extra pay at the rate of 0.50 lira per ton, 0.05 lira per empty barrel, 0.25 lira per head of large animals, and 0.10 lira per head of small animals, if the work is performed on a piecework basis. Otherwise the crew shall receive regular overtime pay for such work.

Night watch in port.—Nights and on holidays one-half of the deck crew and one-third of the engine, cabin, and kitchen crew must stay on board against possible exigencies. On steamers of subsidized companies on which the deck crew numbers 15 or more men and on those of transatlantic companies on which the deck crew numbers 24 or more men the deck crew shall also be divided into three turns.

Members of the crew on actual night watch duty are on the following day entitled to a continuous rest equal in duration to that spent on night watch duty and in any case of not less than six hours.

Mechanics, electricians, and members of the cabin and kitchen crew, who have remained on board for night watch duty, are entitled to leave beginning at noon on the following day.

Notes Relating to Independently Owned Steamers.

General.—The rates of pay shown in the preceding tables are to remain in force as long as the standard freight rate from Cardiff to Genoa remains at 23 shillings in gold.

Hours of labor at sea.—At sea the watch of the deck crew shall be divided into two turns alternating every four hours with relief from 4 to 6 p. m. and from 6 to 8 p. m. during the watch below.

The watch of the engine crew shall under normal conditions be divided into three turns, four hours of watch and eight hours of rest.

The work of firemen shall be so regulated that as a rule each fireman shall handle from 4 to 5 tons of coal per day.

On steamers which can turn around to the right and left firemen shall receive a supplemental monthly bonus of 19 lire and trimmers one of 12.50 lire.

In case of sickness of firemen and trimmers the other firemen and trimmers must divide the turn of the watch in the most convenient manner, subject to approval by the chief engineer and without claim to extra pay.

Members of the crew who have not completed the fourteenth year of age are exempt from night work and may not work more than 10 hours of every 24 hours.

Watch at sea.—The watch at sea begins for the engine crew with the firing of the boilers preparatory to departure.

On arrival in ports in which the steamer stops more than 24 hours and the watch at sea is discontinued the deck watch must wipe and clean the engine aided by the fatigue watch. After this work has been finished these two watches are entitled to six hours' rest before doing port service.

The watch below deck resumes port service after having had its leave.

For the deck crew the watch at sea begins after the vessel has left port and after the deck is in a condition satisfactory to the captain.

At sea the deck crew in addition to navigating service must also attend to the cleaning and maintenance of the steamer from 6 a. m. to 6 p. m. during summer and from 7 a. m. to 5 p. m. during winter.

Hours of labor in port.—The normal daily hours of labor for the entire crew (deck and engine) shall be eight hours during the winter and nine hours during the summer, distributed as follows: During the summer from 6.30 to 8 a. m.; from 8.30 a. m. to 12 noon; from 2 to 6 p. m. During the winter from 8 a. m. to 12 noon, and from 1 to 5 p. m.

The hours of labor of the cabin, mess-room, and kitchen crew will be determined by the captain in accordance with the exigencies of the service.

Overtime.—Overtime work on Sundays, May 1 (where this holiday is observed by other classes of workers), and on holidays considered legal holidays in the various ports in which the vessel is stopping shall be compensated at the rate of 0.70 lira per hour in the case of petty officers, of 0.60 lira in the case of able seamen, and of 0.50 lira in that of ordinary seamen and apprentices. On the above holidays the crew must perform two hours' service in cleaning quarters.

The kitchen and cabin crew shall not be entitled to extra compensation for the discharge of its duties nor shall extra compensation be paid to any member of the crew for work performed in the interest of the safety of ship, passengers, and cargo.

Night watch in port.—Nights and on holidays one-half of the crew must remain on board against possible exigencies. Unless otherwise provided, the captain shall designate one or more persons for active watch service, who on the following day shall be entitled to as many hours of rest as were spent by them on night watch duty.

On holidays half of the crew not on watch shall be excused from presenting themselves on board, unless for service reasons all or part of them were previously requested to be present.

Sailing Vessels.

A tentative collective agreement as to the rates of pay and working conditions of officers and crews of sailing vessels has been submitted by the Italian Seamen's Federation (Federazione dei Lavoratori del Mare) to the shipowners. The latter have agreed to pay the wages stipulated in the schedule shown below, but have not consented to the working conditions laid down in the tentative agreement, which are still under discussion by the two parties. The rates of pay agreed upon are the following:

STANDARD MONTHLY RATES OF PAY (IN LIRE¹) OF OFFICERS AND CREW ON ITALIAN SAILING VESSELS, EFFECTIVE JULY 1, 1919.

Occupation.	Rate of pay.		Occupation.	Rate of pay.	
	With board.	Without board.		With board.	Without board.
Captain.....	540	700	Able seaman.....	300	400
Mate.....	400	500	Ordinary seaman.....	250	350
Boatswain.....	350	450	Boy.....	200	300
Steward.....	315	415	Apprentice.....	150	250

¹ Normally the value of a lira is 19.3 cents.

Notes.

Cost-of-living bonus.—In addition to the monthly rates of pay shown in the preceding table the officers and crew are entitled to receive a cost-of-living bonus. Shipowners are to pay this bonus to the Seamen's Federation for the purpose of establishing the cooperative society Garibaldi. The monthly bonus of captains has been fixed at 60 lire, that of the mate at 50 lire, and that of the crew at 45 lire.

Captains with certificate.—If the captain or mates are in possession of certificates as masters of ocean vessels or of long coastwise trade (*Gran Cabotaggio*), the monthly rate of pay, with board, of the captain shall be 1,100 lire, of the first mate 800 lire, and of the second mate 500 lire. In such a case, however, the captain and the ships' officers shall not be entitled to compensation in case of shortage of the crew, nor shall the captain receive 2 per cent of the freight receipts.

Voyages beyond the Straits.—On voyages beyond the Straits the entire personnel of the ship shall be entitled to a bonus of 100 lire per month.

Shortage of crew.—If for any reason whatever the crew is short one or more persons and these can not be replaced, their pay and board shall be distributed among the crew, inclusive of the captain.

Share of the freight receipts.—In addition to his contractual pay the captain shall receive 2 per cent of the freight receipts of each voyage.

Infected ports.—Whenever a vessel undertakes voyages to infected or malarious ports, the crew shall be entitled to a bonus of 20 per cent of the basic pay from the day of the departure of the vessel for the infected port up to the date of arrival at this port and from the day of departure from the infected port up to the day of arrival in the port of destination.

Extension of enrollment.—If on expiration of the enrollment the vessel is in a foreign port and the crew ships for the home voyage, it shall be entitled to a bonus of 15 per cent of the basic pay for the entire period of extension of the enrollment.

Changes in wage rates.—If during the period of enrollment the pay rates shown in the preceding table are increased or decreased by order of the Seamen's Federation, such increases or decreases shall be applicable to the crew.

Monthly leave.—Members of the crew shall, if in the opinion of the captain this is compatible with the exigencies of the service, be entitled to 24 hours' leave for each month of service, such leave to be granted during sojourn in ports. If for service reasons such

leave can not be granted the leave lost shall be compensated for with double pay.

Hours of labor at sea.—Watch service at sea shall be performed according to usage. The watch below may, however, not be called upon for service except in the interest of the safety of ship and cargo in cases of force majeure.

If during a voyage the crew is ordered to throw the ballast overboard, such work shall be considered extra work and be compensated at the rate of 1 lira per ton, unless the throwing overboard of the ballast is done for reasons of safety of the vessel and cargo.

Hours of labor in port.—In port the hours of labor shall be the same as those observed by the customhouse. Sundays, May 1, and legal State holidays shall be considered holidays.

Overtime.—Work performed on week days beyond the regular hours of labor shall be compensated at the rate of 1 lira per hour, and overtime work on holidays at 1.5 lire per hour.

Accidents.—All members of the crew shall be insured by and at the cost of the shipowner against industrial accidents for the period and on the basis of the monthly rates provided for in the accident insurance law. Any member of the crew who has not been or can not be insured shall be compensated by the shipowner in the same manner as if he had been insured.

Shorter Working Day in German Coal Mines.

COAL miners of the Ruhr district in Germany having made demands for a six-hour shift, the minister of labor, in accordance with a decree of June 18, 1919, appointed a commission to investigate the question of working hours in the Ruhr mining industry. The mine owners' associations, the three great miners' associations, and the salaried employees' associations were represented on this commission. There were in addition medical representatives and experts from other mining districts. The commission, with Dr. Ernst Francke presiding, sat 18 times and thoroughly examined the question of the reduction of working hours in the hard-coal mines of the Ruhr district. Experts named by the commission were called to give evidence, and mines, specified by mine owners as well as by miners, were visited for inspection. An article in *Soziale Praxis*¹ reports the results of the inquiry as follows:

The commission divided the field of inquiry into two parts. First, the socio-political aspect was considered, particularly from the point of view of health considerations. Then the economic and technical side of the problem was discussed.

¹ *Soziale Praxis und Archiv für Volkswohlfahrt.* Berlin, August 28, 1919.

The commission was unanimous in stating that from the point of view of health a shorter shift would be advantageous. Already the shortening of the shift by $1\frac{1}{2}$ hours, taken in conjunction with other factors, showed unmistakable results. It was not possible to supply a statistical statement showing the exact extent to which the improvement was the result of shorter hours or was produced by the other factors. It is certain, however, that the shorter shift played a very important part, and it is to be expected that the full effects of the shortening of the shift by $1\frac{1}{2}$ hours will be seen in the better state of health of the workers. It has not been possible to reach the position which had been attained before the outbreak of the war, but taking all conditions into consideration, this position has almost been reached. The miners' representatives and the mine owners' representatives draw opposite inferences from this ascertained fact.

The miners' representatives held that a further reduction of working hours would serve a good purpose. The mine owners' representatives considered such a reduction unnecessary. The improvement in the food supply played an important part, and an increase of rations—particularly of fats—was recommended by all members of the commission.

It was no easy task to make an international comparison, because of varying customs. A long discussion took place on this point. In the opinion of the miners' representatives the German miner is worse off than the British miner. The mine owners' representatives were of the opinion that he is better off. Both sides agreed that miners have a longer shift in Belgium and France than in Germany. A great deal of time was spent in dealing with the question of the effects of the reduction of working time by one and one-half hours—(1) on the working time; (2) on the time for hauling coal; and (3) on the output.

The parties were unable to arrive at an agreement. The employers declared that in any event they feared a further reduction of output as a result of shorter hours. The workers, however, while admitting a slight reduction during the transition period, regarded the shortening of working hours as the best means in the long run of encouraging a man to take pleasure in his work and thus increase his output. It would also have the effect of encouraging men to take to mining as an occupation and thus increase the supply of labor. In this way the total output would be increased.

The employers regard the diminished output since the reduction of hours as a proof of their contention. The percentage of diminution is attributable to the reduction of hours and is, to say the least, in proportion to the reduction of hours. A further proportionate diminution must be anticipated as the result of a further reduction of hours. Probably a still further diminution even will result, because with diminished production almost the same amount of nonproductive work is involved, with the result that the final effect will be more adverse. The fact that any reduction of hours affected not the nonproductive part of the shift but the actual work of production brought about still worse results.

On the last point the workers had other views. They regarded it as practicable that, by means of arrangements which were to be discussed later, the reduction of hours might affect the nonproductive part of the shift and not the time spent in actually getting the coal.

The nonproductive part of the shift can (in the opinion of the workers) be shortened if the men be conveyed to and from the coal face. Some of the

workers' representatives were of the opinion that a regular service by means of a cable railway would have this effect. The employers and the other workers' representatives, however, were of the opinion that it would not be advantageously practicable and that previous experience in transporting the workers to and from the actual place of work did not justify the hope that this method would be a success. Furthermore, the employers pointed out that the technical preparations for such a transport would take a long time. Nevertheless, they made a general recommendation that improvements should be made in this direction after the miners' representatives had expressed their willingness to cooperate.

The workers' representatives maintained, moreover, that the feared diminution of output would be avoided if various technical improvements were introduced. Special mention was made of an increased number of trucks and tubs for use in the pit and improvements in the use of compressed air. The employers, however, replied that everything possible had been done along these lines; that only a slow and slight increase in production could be anticipated; and that such measures would only slightly reduce the unfavorable effects of shorter shifts.

"More miners" was unanimously agreed upon to be the most effective means of compensating for shorter hours. A larger supply of labor is dependent in turn on more housing accommodation and on the general condition of the labor market, and last, but not least, on an amendment of the unemployment grant. Improvement along these lines would require time.

But if it be calculated that the former level of output could be attained by these means there still remains the technical difficulty that if the "double hauling shift" is maintained this haulage is crowded into such a brief space of time that it could not be dealt with except by completely changing the methods of haulage. It was unanimously agreed that such a change would involve a long period and heavy cost. The workers' representatives therefore suggested that hauling should be done during three shifts. The employers objected that this would mean a disproportionate increase in the number of workers, and that the repair work would be seriously affected, because though the few available hours under a triple haulage shift system might be sufficient for repair work in the headings they would be utterly inadequate for repair work in the shafts, main haulage ways, self-acting inclined planes, and the establishments above ground. Therefore a technical limit is set which is insurmountable. The miners, however, considered that there would be sufficient time for repair work in the shafts, main haulage ways, and pitheads. The workers, basing their arguments on the above-mentioned views as to technical and economic problems, have come to the conclusion that a shortening of the shift might perhaps result in a slight temporary reduction of output, but that this would soon be changed into a considerable increase in total output. The employers, on the other hand, are convinced that a shortening of the shift would inevitably result in a substantial diminution of output and that only a partial compensation would be possible even if a long period were allowed to secure an increased supply of labor, to build dwellings and to transform the plant and machinery. The scientific members of the commission supported this view.

The effect on the economic side of the matter would be seen in increased cost of production for mining enterprises. This, in turn, would bring about increased prices for coal and increased prices generally, and it would inevitably

cause a further drop in the value of the mark. The three sections of the commission were of one mind on these points. The workers, however, maintained that the effects of a four-shift system on output would bear such fruitful results throughout the whole of the industry, trade, and commerce of the country as to compensate for the expected unfavorable results.

There was perfect agreement in regard to the severe shortage of coal which is to be expected during the coming autumn and winter. This was realized after the coal commissioner's representative had made his report. A comparison of this year's conditions with last year's shows that no stocks have been laid in; output has dropped to two-thirds of the normal; the Entente demands many millions of tons of coal. Truly, a disconsolate picture.

With due consideration of the socio-political questions involved, particularly questions of health, also technical and economic questions and the situation with regard to the coal supply, the various sections of the commission tabled the motions which follow. In order to render agreement easier of attainment the miners' representatives postponed the date for introduction of the six-hour shift to four months from the date fixed in their original motion, and the mine owners' representatives dropped a part of their own original motion in favor of the wording of a motion as drawn up by the scientific representatives.

Miners' Motion.

1. That the National Government be asked by the commission to approach the other Powers with the proposal that the six-hour shift be introduced for work below ground in coal mines by means of an international convention. (Vote: 6 for; 12 against.)

2. That the commission should be declared a permanent institution by the minister of labor, in order that he may be in a position to investigate all technical and other preparations for the introduction of the six-hour shift, which shall become effective not later than February 1, 1920. (Vote: 6 for; 12 against.)

Scientific Representatives' Motion.

1. The same as (1) above. (Vote: See paragraph 1 above.)

2. That the commission be declared permanent—retaining its present powers and authority—by the minister of labor. It shall continue to investigate by means of expert equipartisan committees whether all technical and other preparations to render possible the introduction of the six-hour shift are being carried out in the individual mines and by all authorities concerned. The commission shall meet again at the end of November in order to examine the evidence and decide whether or not the six-hour shift can be introduced on February 1, 1920, without endangering the coal supply of Germany. (Vote: 6 for; 12 against.)

Mine Owners' Motion.

1. That the commission request the National Government to approach other Powers forthwith through diplomatic channels for the purpose of bringing about an international convention with respect to the introduction of the six-hour shift in hard-coal mines. (Vote: 6 for; 12 against.)

2. That the commission be declared permanent—retaining its present powers and authority—by the minister of labor. It shall continue to investigate by means of expert equipartisan committees from among its midst whether all technical and other preparations for the purpose of increasing the output are being carried out in the individual mines and by all authorities concerned. The commission shall meet again at the end of November in order to examine evidence and decide whether a further reduction of the hours of labor of workers below ground in mines be feasible without endangering the coal supply of Germany. (Vote: 6 for; 12 against.)

Possible Harmful Effects of a Shorter Shift.

In this connection an article in the *Deutsche Tages-Zeitung* on possible harmful effects of a shorter shift deserves mention. The Essen correspondent of this paper writes as follows:¹

The considerable reduction of working hours obtained by the miners as a result of their determined action appears to the great bulk of the miners to go not nearly far enough, so that they are pressing for a six-hour shift. At miners' meetings the impression is always given that the shortened hours are necessary on account of undernutrition. But the attentive observer in the Rhenish-Westphalian mining district will discover that the free time resulting from the seven-hour shift is not devoted to recreation, but to subsidiary work done for money. This practice has increased to such an extent that it endangers the employment of others. Thus the building workers make an appeal in the *Westfälische Allgemeine Zeitung* to the local miners not to take the bread out of the mouths of the bricklayers by working seven to eight hours a day in addition to their mining shift. Similar complaints have been made from Bochum and Recklinghausen. This abuse not only contributes to keep the coal output down, but it also increases unemployment in many trades and makes it permanent. In every town there are thousands of unemployed obtaining relief at a high cost to the State. This supplementary work of the miners robs these men of the possibility of earning their own living. Of the 5,000 unemployed in Essen, more than 2,000 could find work if no supplementary work were being done.

¹ Quoted in *Die Konjunktur*, Berlin, July 10, 1919.

Have Wage Increases Improved the Economic Condition of German Workers?

THE question as to whether wage increases have improved the economic condition of German workers is discussed in the *Metallarbeiter-Zeitung*,¹ the official organ of the German Metal Workers' Federation, which is one of the largest and most influential of German trade-union organizations. The question is answered in the negative, and the salient points in this discussion are here quoted in full:

Before the war it was obvious that only a part of the rise in wages wrung from the employers by the workers was a gain, as the greater part was swallowed up by the ever-increasing rise in the cost of commodities. The workers are seeking a net improvement of their living conditions, which finds some expression in the fact that the national wealth has risen in value by about 98,000,000,000 marks yearly, and the struggle for the distribution of this increase between employers and employed goes on. Had it not been for the trade-unions, almost the whole of it would have gone into the pockets of the employers. The struggle by the trade-unions was for the raising of the status of the workers, and the justice of it was acknowledged by all but the most selfish and overreaching of the employers. The revolution has done much to enlarge the political freedom of Germany, but the economic position resulting from the war presses heavily on the people and threatens to crush them. The workers, manual and nonmanual, do not always find the rise in wages and salary enough to make ends meet. The war has reduced the purchasing power of money and it is still falling. The prices of all necessities of life have risen very seriously for various reasons; shortage and the fact that demand exceeds supply is a principal cause, but the substitution of a paper for a gold currency and the loss of the war itself are important factors. The result has been a widespread demand for higher wages, and since November, 1918, the wages have risen considerably, but no one can assert that the conditions of living have improved; it is impossible that they should, because the prerequisites are wanting.

If all wages and salaries were doubled to-morrow this would not necessarily represent improvement of the condition of manual and nonmanual workers, but rather an opposite tendency. This may be illustrated by the following example: Before the war the daily milk supply of Düsseldorf was 130,000 liters [34,342.8 gallons], and this was equivalent to one-third of a liter [0.352 quart] per capita based on a population of 400,000. The daily supply at present is 20,000 liters [5,283.5 gallons], or one-twentieth of a liter [0.0528 quart] per capita. Were the income of Düsseldorf multiplied by three the milk supply would not be increased, and a similar line of argument applies throughout the whole country. Taking milk only, there is no more to be had; there is a great shortage of milch cows, and those there are get bad food and too little of it. One of the results is that a portion of the milk is held up by profiteers for higher prices. Throughout the whole country there is only one-half of the foodstuffs that it contained before the war. This condition can not be remedied by raising wages and salaries or by the issue of paper money. In-

¹ *Metallarbeiter-Zeitung*, Stuttgart, August 9, 1919.

crease of production at home and increase of import from abroad is the only cure. There is food enough abroad if we can pay for it, but we have not the means. Foreigners will have nothing to do with German paper money, and we must pay either in gold or goods. Since the revolution the gold reserve of the national bank has fallen from 2,500,000,000 to 1,000,000,000 marks,¹ and the difference has been used to purchase foodstuffs. This high road to bankruptcy can not be followed for long; we must export goods, and to improve the conditions of life we must produce. If goods produced in Germany are too dear—and high wages and feeble effort may have this result—we are at once faced by foreign competition; no one will buy our goods; our conditions of living will be made worse; and any person who advises the workers otherwise is only fooling them. Socialization will not alter the state of affairs unless it affects the quantity and kind of goods produced. It will come, however, and whether sooner or later depends on a variety of circumstances, not the least of which will be the attitude of the Entente toward us. But socialization will do no good unless it brings with it a great increase in production of goods, and the mere raising of wages and salaries is purely illusory. Every increase of wages entails an equivalent rise in price; for wages plus the employer's profit determine the price of goods. At present, however, profits are not on the up grade. Hence the mere rise of wages has effects analogous to the injection of morphine.

The need of the hour is a fall in prices and a rise in production. The Government, by paying out 1,500,000,000 marks for foodstuffs, has undoubtedly taken a right step, but the results of this step will be jeopardized if it is followed by further demands for an increase in wages and if production is checked by constant strikes. The strike to-day is a two-edged weapon; the workers need not renounce it as a weapon, but it should only be used after full and serious consideration of the evil conditions under which we are living and in no case without the fullest regard for trade-union principles.

¹ Owing to the fluctuating value of the German mark conversions are not made. The par value of the mark is normally 23.8 cents.

MINIMUM WAGE.

American Minimum Wage Laws at Work.

AMERICAN Minimum Wage Laws at Work is the title of an article by Dorothy W. Douglas of Seattle, Wash., appearing in the December, 1919, issue of the American Economic Review. The writer sketches briefly the historical development of legislation on this subject in Australia and Great Britain and, somewhat more fully, in the United States. Two general types of laws are represented by the acts of Massachusetts and Oregon, respectively, the former not being actually enforceable, while the latter, developing under circumstances somewhat different, provides penalties for non-compliance.

The conflict of interest between the success of the business and the welfare of the worker was formally recognized in some of the earlier laws, and is in evidence in the attitude and action of employer representatives on wage boards. Actual cost of living as shown by weekly budgets is not fully persuasive; "usually the wage finally agreed upon lags about a dollar behind the original budget," which is itself commonly too low.

There is also found to be a lack of flexibility in administration, especially in the face of such rapid industrial changes as have been experienced in the past two or three years. Another weakness is held to exist in the lack of centralized authority in the commissions, whose hands are tied too closely by the requirements of dependence on the action of advisory boards. These latter are likely to be partisan, and inclined to debate, while the employee representatives are probably neither able nor courageous enough to stand up against those of the employers.

Recommendations are made under three heads: First, the need for a real living standard; second, the need for a more flexible standard; third, the need for centralization of administrative responsibility. Under the first, the findings of such an agency as the United States Bureau of Labor Statistics would furnish a basis, while the same data would afford a standard for adjustments from time to time. To meet the ends of the third suggestion it is proposed that minimum wage laws be enforced by a bureau in the department of labor of the State, with a special deputy commissioner of labor at its head.

It is also strongly urged that there be a campaign to secure public interest and confidence in the work of the commissions and adequate appropriations to carry on their work.

COOPERATION.

Activities of British Cooperative Societies During 1917.¹

THE following particulars relating to industrial cooperative societies in the United Kingdom are based upon returns made direct to the Ministry of Labor, supplemented by information supplied by the Cooperative Union and the chief registrar of friendly societies.

At the end of 1917 there were in the United Kingdom 1,465 industrial cooperative societies, with an aggregate membership of 3,831,896; a total share, loan, and reserve capital of £81,770,273;² a total trade (distributive and productive) of £272,746,849;³ and a total profit—before deduction of interest on share capital—of £18,023,879.

Excepting for decreases in the number of societies—due mainly to amalgamation—and in the amount of profit, these figures show considerable growth as compared with 1916, there being an increase in membership of 268,127, or 7.5 per cent; in capital of £3,832,537, or 4.9 per cent; and in trade of £35,221,714, or 14.8 per cent. The profit, on the other hand, showed a decrease of £934,509, or 4.9 per cent. As regards the increase in trade, it should be remembered that the higher level of prices has had an important bearing on the increased value of sales.

The total number of persons directly employed by the societies was 156,945,³ and the total wages paid during the year amounted to £11,611,976,³ compared with 154,622 employees and £10,391,245 in wages in 1916.

Distribution.

At the end of 1917, 1,339 retail and two wholesale industrial societies were engaged in distribution. These societies had an aggregate membership of 3,790,448; a total share, loan, and reserve capital of £73,010,227; sales amounting to £216,951,643, and a profit on distribution—before deducting interest on share capital—of £17,114,849; while the total number of persons employed in distribution by the societies was 100,756, and the total wages paid £7,042,322.

Of the total profit of £17,114,849, a sum of £15,922,596 was made by the retail societies, and £1,192,253 by the two wholesale societies.

¹ Labour Gazette, London, November, 1919, pp. 465-467.

² The par value of the British pound sterling is \$4.8665, of the shilling 24.33 cents and of the penny 2.03 cents. Owing to the fluctuating exchange rate no attempt is made in this article to make conversions into United States money.

³ These figures are exclusive of the number and wages of persons employed in agriculture by industrial societies, and of the sales and transfers of agricultural produce by these societies.

In the case of the retail societies the greater part of the profit was distributed to the members as a dividend on purchases at an average rate of 1s. 8½d. in the pound sterling in England and Wales, 2s. 5¼d. in Scotland, and 1s. 1d. in Ireland, the average for the United Kingdom being 1s. 9¾d. Compared with 1916, these rates of dividend showed a decrease of 5½d. in England and Wales, 4¾d. in Scotland, 2¼d. in Ireland, and 5¼d. for the United Kingdom. Nonmembers usually receive dividends at one-half these rates.

The English and Scottish wholesale societies paid to members a dividend on purchases of 3d. and 5½d. in the pound sterling, respectively. This was a decrease of 2d. in the case of the English Wholesale Society and of 2½d. in the case of the Scottish Wholesale Society.

Profit-sharing with employees.—Of the total 1,339 retail societies, 132, employing 15,255 persons and paying wages amounting to £1,096,565 in their distributive departments, allotted out of the profits a total of £43,425 to their employees as a bonus on wages, this being equal to 4 per cent.

Production.

In 1917, there were 1,108 industrial cooperative societies of various types engaged in production, consisting of 985 retail and 2 wholesale distributive societies having productive departments, and of 121 associations for production only; these consisting of 4 corn-milling societies, 39 breadmaking and other consumers' societies, and 78 associations of workers.

The following table shows by industry groups the number of persons employed, the amount of wages paid and the amount of sales, during 1917:

NUMBER OF PERSONS EMPLOYED, AMOUNT PAID IN WAGES, AMOUNT OF SALES DURING 1917 BY CONSUMERS' AND WORKERS' COOPERATIVE PRODUCTIVE SOCIETIES, BY INDUSTRY GROUP.

Industry group.	Consumers' societies.			Workers' societies.		
	Number of employees.	Amount paid in wages.	Amount of sales.	Number of employees.	Amount paid in wages.	Amount of sales.
		£	£		£	£
Food and tobacco.....	15,435	1,535,310	42,864,120	167	15,010	192,816
Clothing.....	21,233	1,455,994	4,620,108	4,036	289,595	1,621,474
Soap, candles, and starch.....	1,701	135,578	2,122,604	.....	.....	.....
Textiles.....	2,641	157,237	1,029,119	1,623	129,672	971,269
Building, quarrying, and woodworking.....	2,940	356,533	778,888	144	17,021	53,779
Printing.....	1,853	143,791	543,422	941	87,453	312,486
Metal, engineering, and shipbuilding.....	563	59,560	214,144	391	32,428	86,159
Other industries.....	2,453	147,427	360,180	48	4,679	15,863
Total, 1917.....	48,819	3,991,430	52,532,585	7,350	575,858	3,253,846
Total, 1916.....	50,498	3,771,285	46,340,593	7,625	518,942	2,592,210
Per cent of increase (+) or decrease (-).....	-3.3	+5.8	-13.4	-3.6	+11.0	+25.5

Profit-sharing with employees.—Of the 1,108 societies engaged in industrial production, 126, employing 10,432 persons in production, with wages amounting to £823,689, allotted a sum of £51,110 to these employees as a bonus on wages, this being equal to 6.2 per cent. Of the total amount £10,162 was allotted by 81 retail distributive societies, £7,533 by 3 consumers' productive societies, and £33,415 by 42 associations of workers.

Share of employees in management.—Sixty-nine of the 78 associations of workers for production, with sales amounting to £3,227,210, or 99.2 per cent of the total sales of the associations at work in 1917, made returns showing the extent to which their employees and others shared in the membership, capital, and management of the associations. The returns showed that the total membership of the 69 associations was 25,279, of whom 4,819, or 19.1 per cent, consisted of employees; 15,884, or 62.8 per cent, of other individuals; and 4,576, or 18.1 per cent, of other societies. Of the 7,254 persons employed by the associations, 4,819, or 66.4 per cent, were members of the associations employing them.

Of the £889,839 share and loan capital, £157,124, or 17.7 per cent, belonged to employees; £340,505, or 38.3 per cent, to other individual members; and £321,597, or 36.1 per cent, to other societies. The remaining £70,613, or 7.9 per cent, consisted of loans from nonmembers, including bank overdrafts.

The total number of directors or committeemen of the associations was 660, of whom 274, or 41.5 per cent, were employees of the associations; 255, or 38.6 per cent, were other individual members; and 131, or 19.9 per cent, were representatives of other (shareholding) societies.

VOCATIONAL EDUCATION.

Minnesota Plan for the Reeducation and Placement of Cripples.

By OSCAR M. SULLIVAN.¹

CORRECT systems and correct methods for the rehabilitation of cripples bid fair to be the subject of as much interchange and conflict of views in the years just ahead as has been the case for some time with similar topics in the field of workmen's compensation. It is the purpose of this article to call attention to the Minnesota plan for the reeducation and placement of cripples in the belief that it has many features which might well be considered by other States when casting around for standards for such legislation. In language the reeducation act is almost identical with the Massachusetts act, pioneer in the field. The chief essentials in which it differs are that authority is placed under the State board for vocational education instead of the industrial accident commission, and that the scope includes all cripples. For the phraseology, the combination of conciseness of expression with comprehensiveness, due acknowledgment is made of indebtedness to the Bay State framers of social legislation.

The Minnesota act has been in force since July 1, 1919; hence the interpretation that has been given it and the system that is being built around it are now fairly clear. In brief, it can be characterized as a phase of the State's activities in industrial education, administered by the case-work method, and recognizing fully the special relation to the State's other activities on behalf of labor. All these characteristics we believe are significant and mark what is destined to become a distinct type of rehabilitation work.

An Activity of the Department of Education.

To begin with, the assignment of the work to the department of education is not fortuitous or due to local reasons. In any State there are likely to be two other departments of government which could be given consideration as proper sponsors for it. They are

¹ Director of reeducation, Minnesota Department of Education.

the department of public welfare or charities and the industrial accident commission or labor department. To assign it to the former would mean that the State considered it as something undertaken out of sympathy in order to alleviate distress. The handicapped man would join the "three d's—dependents, defectives, and delinquents." To give it to the industrial agencies would not be objectionable, since it would be connecting it closely with the compensation system. It would, however, be illogical to divert to another branch of the government something which is predominantly a matter of education and vocational guidance. By placing the work with the department of education it is recognized as akin to the other educational activities of the State, an opportunity offered the individual because it is for the public good.

From the standpoint of administration it places the work in close touch with the other parts of the State's educational system and makes easy of reference the data which the State has in connection with industrial education. This perhaps would not make up for lack of correlation with the compensation system, if such were a necessary result. But it is not. The Minnesota act requires a plan of cooperation between the board for vocational education and the department of labor and industries, subject to the approval of the governor. The two departments have chosen to make the connection an organic one by giving the same person the direction of the compensation division and the division of reeducation. Correlation of work is, therefore, assured. This plan is, of course, not the only feasible one for securing effective cooperation. The essential thing is that the connection between the two activities should be genuine and continuous rather than formal and perfunctory.

The case-work method implies individual treatment for each case. The division is without funds or authority to start a central institution for the care and training of cripples and has not as yet found any need for such an institution. The policy of the division is to let a contract for instruction in each case with a suitable institution, teacher, or industrial establishment. This has been found perfectly feasible so far, and much more immediately practical than the organization of a new school. Should subsidized workshops for certain types, such as the blind, the paralytic, or the tubercular prove to be necessary, it is expected that these will be launched by private agencies and a subsidy covering the cost of the training given by the division for each new person trained. This would permit the workshop to be on a business basis, which is desirable, and still avoid the objection always advanced against the entrance by the State into the business field.

Two features in the qualification part of our law seem to us to have particular merit. One is that there is no poverty test. This is a corollary of the assignment of the division to the department of education. The training is given as a public duty, not as a charitable need. The other feature is that only bona fide residence in the State at the time the disability was incurred is required of the beneficiary. There is no one-year settlement harking back to the old poor laws. It is possible for the State, therefore, to undertake the reeducation of a man, for instance, who has just moved to the State intending to remain and who suffers an accident while engaged in one of the State's industries. The legal possibility squares with the moral obligation.

Public Relief not a Function Under the Law.

Perhaps the greatest difference of opinion in regard to the rehabilitation of cripples centers around the question whether certain things of a public-relief nature should be provided by the State. Included under this head would be occupational therapy and other special medical treatment, artificial limbs, and, greatest of them all, maintenance during training. Our act neither enjoins nor prohibits any of these. The question has been definitely faced by the State board for vocational education, however, and a rule adopted which holds none of them to be within the province of the division. We believe the decision is based upon sound public policy. In the compensation cases who form a large per cent of the disabled persons, all of the items above referred to are covered by the provisions of the law. They are cared for through a sound social insurance method, and could only be harmed by being offered public charity besides. Many of the railroad cases, another class, receive in damages under the liability acts greater amounts even than the workers under compensation, hence for these also a public relief scheme is inapplicable. For the other cases, the victims of private accidents and disease, the ideal method would be another resort to the social insurance idea, namely, to provide in a universal health-insurance act limited specific indemnities for such cases. Creation of a public relief fund now would only serve to put off the day when the question would be met properly, and prolong treatment by public charity of a problem that should be cured by social insurance. For the present many cases without means can be handled by securing temporary positions and giving them night-school training. Others can be cared for through existing public and private relief agencies. The Minnesota division has already entered into definite arrangements for co-operation in such cases with the central councils of social agencies in Minneapolis and St. Paul and the Social Service Club of Duluth.

The position taken by the board for vocational education does not mean that the division will not be of all the service possible in an advisory way as regards medical treatment, prosthesis, etc. Excellent results have already been secured in this line in the compensation cases and should eventually be secured in the others also. It is not the policy of the division to wait for an application, but on the first word of a serious accident, through the department of labor, the hospitals, the clipping service, or otherwise, steps are immediately taken to get in touch with the injured person and from that time on contact with the case is continuous.

The cases that have already come before the division present a wide variety. They include compensation accidents and railroad accidents, farm accidents, hunting accidents, street accidents, and impairments due to disease. It seems probable that the estimate made in 1918 by the governor's commission which studied the subject will be fully borne out. They reported that the probable number of cripples in Minnesota in any one year was between 900 and 1,000. This, of course, applies only to those seriously enough impaired to need rehabilitation.

The advisability of including all cripples under the law, not merely those which are the result of industrial accident, appears when the administrative problems of the work are disclosed. If the other cripples are not included in the provisions of the reeducation law some other agency, public or private, must take care of them. There will thus be a duplication of effort and a scattering of energies, when the situation calls for a most decided and effective concentration of energies. In addition, there is the fact that the social reasons for solving the problem in the one case are the same as in the other.

The Minnesota division has not inaugurated its work by launching a survey. The reasons for this are several. It was felt that the appropriation was so limited that it would be best to spend it all on direct work for cripples, especially as the general size of the field and the principles which should govern the work were known. In the second place, employers have been rather overworked with surveys of recent years, and it was felt best not to begin this new activity with something which might irritate them. Finally, it was felt that very satisfactory information could be gathered by the division as it handles each case, and that when this is supplemented by a gradual canvass made by the factory inspectors of the State department of labor as they make their regular inspections, it would give practically a complete survey without the expense and disadvantage of a formal undertaking of this character.

Placement of Cripples.

Another feature of the act which is important is that the placement is directly under the division of reeducation and not a cooperative activity of the State employment bureau. The division has its own placement officer, and in order to keep him in touch with the regular employment work it is arranged so that his headquarters are in the State headquarters of the free employment service. In this manner it is possible to give more specialized attention to the placement of handicapped persons than could be secured in any other way. Another consideration also makes this arrangement essential. One of the biggest tasks ahead of the division is to educate employers to give disabled persons a chance. The division can and will undertake this, while a regular employment service would probably be unwilling or unable to do so. Many employers still have an idea that insurance companies will raise their rates if they hire handicapped persons. Such an act was made illegal in Minnesota by the 1919 legislature, but it takes time for the information to spread. It is felt, however, that the bulk of the indisposition to hire impaired persons is due to an underestimate of their capacity. Only a prolonged and vigorous campaign of education will overcome this.

Text of the Reeducation Act.

Such, therefore, are the principles embodied in the Minnesota plan for reeducation and placement of cripples. Its enabling act is not so long as to frighten a body of legislators or to make them feel that they are plunging into a gigantic experiment involving unknown financial liabilities. Yet it makes a full grant of power and meets the situation in a manner to accomplish a large amount of good without preliminary delay. To those States which have been reluctant to take action because they feel that a new public institution or a new experiment in public relief was involved, the enabling act and the plan it stands for are offered for consideration. The text of the act, which was approved April 26, 1919, is as follows:¹

AN ACT Empowering the State board for vocational education to establish a division for the reeducation and placement of persons disabled in industry or otherwise, permitting cooperation with the Federal Government, and making an appropriation.

Be it enacted by the Legislature of the State of Minnesota:

SECTION 1. There is hereby established, under the direction and control of the State board for vocational education, a division for the training and instruction of persons whose capacity to earn a living has in any way been destroyed or impaired through industrial accident or otherwise: *Provided*, That at the time when the accident or disability was incurred they were residents or citizens of the State of Minnesota. The said board shall in its

¹ Chapter 365, Laws 1919.

regular reports to the legislature describe in detail the work of the division and may from time to time issue bulletins containing information relative thereto.

SEC. 2. The employees of the said division shall be appointed and their salaries determined by the said board. The division shall be furnished with suitable quarters in the State capitol, and the board may expend for salaries and other necessary expenses of such division such amounts as shall be appropriated by the legislature.

SEC. 3. The State board for vocational education and the department of labor and industries or any agency which may succeed it in the administration or supervision of the workmen's compensation act, shall formulate a plan of cooperation with reference to the work of said division. Such plan, shall be effective only when approved by the governor of the State.

SEC. 4. The said division shall aid persons who are incapacitated as described in section 1 in obtaining such education, training, and employment as will tend to restore their capacity to earn a livelihood. The division may cooperate with the United States Government, and as a part of such cooperation may extend the benefits of this act to any civil employee of the United States disabled while in the performance of his duty, without regard to the residence or citizenship of such employee, if in the judgment of the board the benefits offered by the Federal Government are sufficient to compensate for the cost. The division may of its own accord establish or maintain, or in cooperation with local boards of education assist in establishing or maintaining, such courses as it may deem expedient, and otherwise may act in such manner as it may deem necessary to accomplish the purposes of this act.

SEC. 5. This act shall take effect and be in force from and after its passage.

Agreement Providing Part-Time Instruction for Textile Workers.¹

WITH the rapid increase in the number of part-time trade-extension classes being organized, an instruction agreement between the employer, employee, and the public school becomes more and more desirable. At a recent conference in Sylacauga, Ala., of representatives of the State board for vocational education, employers in textile mills, and the Federal agent for industrial education for southern region, the following written agreement was entered into by a mill and State officials:

It is proposed to organize a scheme of textile manufacturing instruction under the following conditions:

(a) *Type of school.*—The type to be employed is the part-time trade extension, combined with an evening school. (This combination is explained below.)

(b) *Board of control.*—The school is under the direction and control of the Mignon board of education.

(c) *Length of term.*—Instruction is to be given for 48 weeks of 3 hours per week, aggregating 144 hours under the part-time system; and 48 weeks of one hour per week, aggregating 48 hours, under the evening system.

¹ From Vocational Summary, October, 1919, p. 109. Washington.

(d) *Plan of organization.*—The hour of part-time instruction is to be the closing hour of the working day on employer's time¹ classified as part-time instruction, followed immediately by one-half hour, in continuous session, for the first two meetings per week on employee's time, classified as evening instruction. Assuming two groups operating under the above plan, one group is to meet Monday, Wednesday, and Friday, known as group A, and the other group Tuesday, Thursday, and Saturday of each week, known as Group B.

(e) *Time of meeting.*—Group A is to meet Monday and Wednesday, from 5 to 6.30 p. m.; and Friday, 5 to 6 p. m. B is to meet Tuesday and Thursday, 5 to 6.30 p. m.; and Saturday, 7 to 8 a. m.²

(f) *Financial.*—Fixing \$1.50 per hour as the rate of compensation for teachers employed, local funds must provide 37½ cents per hour for one-fourth of the salaries of teachers; State funds 37½ cents per hour for one-fourth of the salaries of teachers; and Federal funds 75 cents per hour, or one-half of the salaries of teachers. All other expenditures are to be provided for by the local board.

(g) *Supervision.*—The State board for vocational education through its fund for teacher training and supervision is to provide adequate assistance to local teachers in organizing material for teaching purposes without cost to the local board.

(h) *Course of study.*—A general mill course in textile instruction is to be offered. The course is divided into three main groups under the respective headings of carding, weaving, and spinning. Group A recites as follows: Monday, carding; Wednesday, weaving; Friday, spinning. Group B—Tuesday, carding; Thursday, weaving; Saturday, spinning.

(i) *Students.*—Fifteen operatives regularly employed in the Sylacauga Mills who are 16 years of age or over are to be selected for each group. If the demand for the course exceeds 30, a waiting list is to be established and enrolled in the order of application and selection.

(j) *Teachers.*—Three teachers for each group, one for carding, one for weaving, and one for spinning, are to be provided. The teaching group is to be made up of second hands, overseers, or higher officials. Teachers are to be paid at the rate of \$1.50 per hour for the first year's work, \$1.75 for the second year, and \$2 for the third and succeeding years.

(k) *Plant and equipment.*—Plant, equipment, and supplies are to be furnished by the local board of education. Instruction will be given in the mill, community building, or school building. Well lighted, heated, and ventilated rooms, with adequate blackboard, seating, and writing facilities, with ready access to the entire mill equipment, is to be considered the minimum requirement.

¹ By continuing the class for one-half hour on employees' time it is thought that disinterested pupils will be eliminated from the class. This is the company's method of avoiding "deadheads" on company time.

² The change was made at the Saturday session on account of the plant being in operation only one-half day and to avoid the difficulties arising from pay day.

EMPLOYEES' REPRESENTATION.

Works Councils and Shop Committees in the United States.

A RECENT study on works councils in the United States,¹ by the National Industrial Conference Board, furnishing another evidence of the widespread interest in plans for representation of employees in industry, covers 176 companies or corporations having works councils in 225 different industrial plants, affecting approximately 500,000 workers. In addition to those plans created as a result of awards of the National War Labor Board, the Shipbuilding Labor Adjustment Board, and other Government agencies, there are 105 which were voluntarily put in operation by employers. The term "works council," which has not been generally adopted in this country, was determined upon, the report states, as being more definite and exact than that of "shop committee" which has been commonly used.

Owing to the comparatively brief experience of nearly all the existing committees, no recommendation as to the establishment of works councils is made in the report, which gives a brief account of their development from the comparatively recent date of 1904, when the first known example of a works committee was formed at the plant of the Nernst Lamp Co., in Pittsburgh. The report makes a distinction between the principle of collective dealing by employees of individual establishments with their employers and collective bargaining which involves recognition of labor unions as organizations, and states that the institution of works councils includes acceptance of the former principle only.

A tabulation of works councils by industries shows that 144 were found in the metal trades, while 81 were distributed over other industries, and that in the distribution by size of establishment the majority were found in plants having over 500 workers. Of particular interest was the distribution according to the extent of trade-unionism. There were 81 plants from which information was received on this subject, and but 2 of these were "closed nonunion shops" and one other nominally so. Out of about 60 firms reporting the

¹ National Industrial Conference Board. Works councils in the United States. Boston, October, 1919. 135 pp. Research report No. 21.

percentage of union labor in their employ only 8 had no union members, while the number of trade-unionists in the majority of the establishments ranged from 20 to 90 per cent of the force.

The details of organization, the scope of the plans, and the functions and activities of the works committees are dealt with in considerable detail, but it is in the chapter on "Experience with works councils" that the main interest lies, since heretofore, owing to their brief existence, there has been little information collected as to the results attained by the committees. There are various factors which affect the success of such attempts which must be taken into consideration, the report states, such as "the individual circumstances under which they were formed, differences in type of organization, the character of relations between employer and employees, the personality of the management, the type of employees, the size of establishment, and industrial conditions prevailing at the time of their introduction."

It is stated that only a small minority of the councils have been entirely given up or have failed to work satisfactorily, and in most of these cases the committees were established by governmental agencies to meet war emergencies. In general, it is said that the committees have had a beneficial effect on labor conditions, although in a few instances they seem to have aggravated labor troubles. They evidently have been of some effect in reducing labor turnover, but there seems to be only a small amount of evidence of an increase in productive efficiency through their influence or of reduction of tardiness or absenteeism. There was evidence in most cases reporting that a conservative type of employee had been elected to membership, although approval of the ones selected was by no means unanimous. In general it was found that the committees have been instrumental in improving the relations between management and employees, and 23 establishments reported that labor difficulties have decreased or been entirely eliminated through the agency of the committees.

Definite testimony of the effect of the councils on the spread of unionism was given in 13 cases, 7 of which reported an increase in union membership, while among the remainder it decreased. The report as a whole seems to show such a diversified experience that it is difficult to generalize as to the effect of the councils, although the conclusion was reached as a result of the investigation that they are "worthy of unprejudiced consideration on the part of American industry."

Shop Committees and Industrial Councils.¹

AN INVESTIGATION has recently been made under the direction of the New Jersey State Chamber of Commerce having for its purpose the consideration of the problem of labor adjustment, through the medium of shop committee systems, particularly as it might relate to the development of such plans in industrial plants in New Jersey.

Preceding this study a series of conferences were held in Newark by the chamber of commerce to which several large industrial establishments were invited to send both employer and employee representatives. At the second meeting a committee, with representatives of organized labor and of capital, employees and employers of plants having shop committees, and the public, was appointed to study the systems and make recommendations. This committee after a third conference recommended that a national conference should be called and also that the chamber of commerce should authorize a thorough investigation of the question.

With this as a background a special study was made of the systems in 13 establishments which were decided upon as embodying practically all the features to be found in any of the systems now in force.

In speaking of the various types of shop committee plans the writer of the report of the investigation says:

Whatever name or form a shop committee may assume, it may be, broadly speaking, described and distinguished by three features: It involves the election of delegates by the workers of the shop; the constitution of these delegates into one or several committees; the dealings between such committee or committees and the management either in a joint committee session or through individual delegates or delegations and interviews.

The writer does not cover any new ground in the discussion of the objects and functions of shop committees, the subjects mentioned as being within the province of shop committees being practically the same as those which have been advocated by the majority of writers on the subject. The analysis of the relation of shop committees to labor unions, however, is both comprehensive and illuminating. The discussion covers the possibility of substituting shop committees for unionism, the dangers to be found in a destructive rivalry, recognition of the unions, centralization of power in union organization, the shop committee as a means toward filling the breach within the

¹ New Jersey State Chamber of Commerce. Bureau of State Research. Shop committees and industrial councils. Pts. I and II. Prepared by Paul Studensky, supervisor of staff on industrial relations. Newark, July, 1919, 63 pp. "New Jersey," Consecutive No. 18.

union organization, and shop committees in union shops. The opinion is expressed that owing to the possibility of rapid organization of workers in individual establishments it is becoming increasingly difficult for employers to adopt a neutral attitude toward the labor unions, and that "only the development of an appreciation on the part of the employers of the need of labor organization and on the part of the latter of the value of shop committees can prevent an undesirable conflict." "Company unions," the writer believes, present little opportunity for the establishment of amicable relations, but this must be secured through recognition of the unions and participation by them in the development of shop committees, and through this utilization of the shop committee the evils connected with centralization of power in the hands of a few labor officials may be corrected. Without this he considers there is danger of a destructive rivalry between the two types of organization which will inevitably result in the destruction of one or the other of them.

The failure of the unions to keep the organization democratic enough to suit the rank and file of the workers may be remedied, in the writer's opinion, by utilizing the workshop committees to give a larger amount of authority to the average member while thus leaving the leaders opportunity to devote their attention to the broader problems of the labor movement.

Industrial councils are advocated as a means of stabilizing conditions throughout whole industries or over all the industries of certain areas—local, State, national, and international. Councils have now been agreed upon by representatives of employers and employed in six industries: Clothing, electrical, harbor marine, long-shore, ocean marine, and printing, while plans for councils covering a certain area include the International Labor Conference, National (United States) Industrial Conference, Canadian National Industrial Conference, New Jersey Industrial Council, New York State Labor Board, and industrial community councils. The question has been raised as to whether industrial councils combined with shop committee systems will supersede labor unions. To the writer this does not seem probable, since in a measure there will always be a conflict of interests.

The 13 shop committee systems considered in the report are divided into 5 groups representing the following types: The War Labor Board plan; the combination of a shop committee system with unionism; the Rockefeller plan; the Federal plan, and the cooperative plan with representation on the board of directors.

Application of Industrial Council Plan to British Civil Service.

THE subcommittee of the Interdepartmental Committee of the British Government, appointed to draw up a plan by which the Whitley industrial council scheme might be applied to the administrative branches of the civil service, submitted its report in March, 1919, which was approved by the War Cabinet and was considered on April 8 at a conference of representatives of associations covering practically the whole of the administrative, clerical, manipulative, and manual civil services and officials of the Government departments concerned. This report was noted somewhat at length in the MONTHLY LABOR REVIEW for July, 1919 (pp. 123-126). The matter was subsequently referred to a committee of 30 representing, in equal numbers, the Government departments and the civil-service associations, and its report was on July 3 submitted to a joint conference of official representatives and representatives of the staff associations presided over by the Chancellor of the Exchequer, and was adopted with certain modifications. This report of the national provisional joint committee was noted in the MONTHLY LABOR REVIEW for August (p. 132).

Following the adoption of this latter report a national council for the administrative and the legal departments of the Government was established, and on July 23 a committee of five official representatives and five staff representatives was appointed to draw up a model constitution.¹ This has been done and has been circulated by the Treasury, together with a letter recommending that steps be taken to form departmental councils on the lines indicated. The model constitution consists of 26 paragraphs dealing with membership, officers, objects and functions, committees, etc. Paragraphs 13 to 16, covering objects and functions, are as follows:

13. *General objects.*—The general objects of the council shall be to secure the greatest measure of cooperation between the administration, in its capacity as employer, and the general body of the staff, in matters affecting the department, with a view to increased efficiency in the department combined with the well-being of those employed; to provide machinery for dealing with grievances; and generally to bring together the experience and different points of view respecting conditions of service within the department.

14. *Functions.*—The scope of the council shall comprise all matters which affect the conditions of service of the staff in the department, and its functions shall include the following:

(1) Provision of the best means for utilizing the ideas and experience of the staff.

¹ Data taken from the Labour Gazette, London, September, 1919 (p. 371).

(II) Means for securing to the staff a greater share in and responsibility for the determination and observance of the conditions under which their duties are carried out.

(III) Determination of the general principles governing conditions of service, e. g., recruitment, hours, tenure, and remuneration, in so far as these matters are peculiar to members of the staff of the department.

(IV) The encouragement of the further education of the staff, and their training in higher administration and organization.

(V) Improvement of office machinery and organization, and the provision of opportunities for the full consideration of suggestions by the staff on this subject.

(VI) The consideration of proposed legislation so far as it has a bearing upon the position of members of the staff in relation to their employment in the department.

(VII) The discussion of the general principles governing superannuation and their application to the members of the staff in the department.

15. *Promotion and discipline.*—Without prejudice to the responsibility of the head of the department for making promotions and maintaining discipline, it shall be within the competence of the council (1) to discuss any promotion in regard to which it is represented by the staff side that the principles of promotion accepted by or with the sanction of the national council have been violated; and (2) to discuss any case in which disciplinary action has been taken if it is represented by the staff side that such a course is desirable.

16. Questions common to two or more departments (including the * * * department), not being general questions, shall be reported to the national council. The council may request the national council to appoint a chairman for interdepartmental meetings for the consideration of such questions.

EMPLOYMENT AND UNEMPLOYMENT.

Employment in Selected Industries in November, 1919.

THE Bureau of Labor Statistics received and tabulated reports concerning the volume of employment in November, 1919, from representative establishments in 13 manufacturing industries. Comparing the figures of November, 1919, with those of identical establishments for November, 1918, it appears that in 10 industries there was an increase in the number of persons employed, while in 3 there was a decrease. The largest increase, 29.8 per cent, is shown in automobile manufacturing, and the greatest decreases—33.7 and 26.9 per cent—appear in iron and steel and in car building and repairing, respectively.

Eleven of the 13 industries show an increase in the total amount of the pay roll for November, 1919, as compared with November, 1918, and two show a decrease. The most important percentage increases—68.4, 67.4, 59.5, and 52.1—appear in men's ready-made clothing, silk, automobile manufacturing, and boots and shoes, respectively. Decreases of 33.5 and 25.3 per cent are found in iron and steel and car building and repairing. The large increases over last year are due to the fact that the figures for last year were affected by the signing of the armistice and the epidemic of influenza.

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS IN NOVEMBER, 1918, AND NOVEMBER, 1919.

Industry.	Estab-lishments reporting for Novem-ber, both years.	Period of pay roll.	Number on pay roll in No- vember—		Per cent of increase (+) or de- crease (-).	Amount of pay roll in November—		Per cent of increase (+) or de- crease (-).
			1918	1919		1918	1919	
Automobile manufacturing...	46	1 week..	121,491	157,661	+29.8	\$3,119,036	\$4,974,783	+59.5
Boots and shoes.....	71	..do....	56,621	63,569	+12.3	922,484	1,403,470	+52.1
Car building and repairing...	56	½ month	76,992	56,307	-26.9	4,818,950	3,597,519	-25.3
Cigar manufacturing.....	53	1 week..	18,848	17,525	-7.0	287,626	367,317	+27.7
Men's ready-made clothing...	36	..do....	18,782	20,569	+9.5	347,899	586,009	+68.4
Cotton finishing.....	18	..do....	13,730	15,684	+14.2	249,532	340,517	+36.5
Cotton manufacturing.....	53	..do....	48,227	53,953	+11.9	714,700	911,189	+27.5
Hosiery and underwear.....	64	..do....	33,291	34,139	+2.5	445,013	585,280	+31.5
Iron and steel.....	99	½ month	174,320	115,601	-33.7	11,598,124	7,714,218	-33.5
Leather manufacturing.....	34	1 week..	16,159	17,624	+9.1	314,337	426,873	+35.8
Paper making.....	53	..do....	28,934	30,216	+4.4	602,938	737,943	+22.4
Silk.....	50	2 weeks.	14,197	16,901	+19.0	416,816	697,689	+67.4
Woolen.....	50	1 week..	43,432	47,474	+9.3	694,792	986,447	+42.0

The table following shows the number of persons actually working on the last full day of the reported pay period in November, 1918, and November, 1919. The number of establishments reporting on this question is small, and this fact should be taken into consideration when studying these figures.

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS ON THE LAST FULL DAY'S OPERATION IN NOVEMBER, 1918, AND NOVEMBER, 1919.

Industry.	Establishments reporting for November, both years.	Period of pay roll.	Number actually working on last full day of reported pay period in November—		Per cent of increase (+) or decrease (-).
			1918	1919	
Automobile manufacturing.....	26	1 week....	73,243	106,541	+45.5
Boots and shoes.....	27	..do.....	11,904	14,058	+18.1
Car building and repairing.....	53	½ month....	66,453	50,817	-23.5
Cigar manufacturing.....	12	1 week....	3,895	4,136	+ 6.2
Men's ready-made clothing.....	5	..do.....	4,006	4,360	+ 8.8
Cotton finishing.....	14	..do.....	9,442	10,603	+12.3
Cotton manufacturing.....	33	..do.....	23,194	26,734	+15.3
Hosiery and underwear.....	24	..do.....	14,177	15,397	+ 8.6
Iron and steel.....	77	½ month....	125,897	87,664	-30.4
Leather manufacturing.....	20	1 week....	12,357	13,092	+ 5.9
Paper making.....	23	..do.....	16,046	15,884	- 1.0
Silk.....	26	2 weeks....	8,803	10,715	+21.7
Woolen.....	41	1 week....	32,621	37,055	+13.6

Comparative data for November, 1919, and October, 1919, appear in the following table. The figures show that in 12 industries there was an increase in the number of persons on the pay roll in November as compared with October and in one a decrease.

The largest increases in the number of people employed appear in iron and steel, 17.3 per cent; cigar manufacturing, 12.6 per cent; men's ready-made clothing, 5.6 per cent; and silk, 5.1 per cent. A decrease of 1.5 per cent is shown in cotton manufacturing.

In comparing November, 1919, with October of this year, eight industries show an increase in the amount of money paid to employees and five a decrease. The most important increase is one of 20.9 per cent in cigar manufacturing, while iron and steel, men's ready-made clothing, and silk show percentage increases of 17.4, 11.9, and 11.2, respectively. The most important decreases are 4.2 per cent in cotton manufacturing and 2 per cent in automobile manufacturing.

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS IN OCTOBER AND NOVEMBER, 1919.

Industry.	Estab-lish-ments reporting for October and November.	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 (-).
			October, 1919.	November, 1919.		October, 1919.	November, 1919.	
Automobile manufactur- ing.....	47	1 week.	156,758	157,513	+ 0.5	5,077,859	4,973,797	- 2.0
Boots and shoes.....	71	...do....	62,332	63,569	+ 2.0	1,386,625	1,403,470	+ 1.2
Car building and repair- ing.....	57	½ month	56,251	56,633	+ .7	3,304,840	3,620,650	+ 9.6
Cigar manufacturing.....	51	1 week.	15,488	17,441	+12.6	301,069	364,042	+20.9
Men's ready-made cloth- ing.....	46	...do....	19,964	21,087	+ 5.6	543,177	605,314	+11.9
Cotton finishing.....	17	...do....	14,794	15,192	+ 2.7	321,872	331,921	+ 3.1
Cotton manufacturing.....	56	...do....	56,165	55,307	- 1.5	974,032	933,185	- 4.2
Hosiery and underwear.....	64	...do....	33,896	33,914	+ .1	582,666	580,683	- .3
Iron and steel.....	100	½ month	113,026	132,576	+17.3	7,573,544	8,888,311	+17.4
Leather manufacturing.....	33	1 week.	17,246	17,380	+ .8	424,765	423,466	- .3
Paper making.....	53	...do....	29,602	30,216	+ 2.1	742,997	737,943	- .7
Silk.....	47	2 weeks.	15,513	16,300	+ 5.1	606,272	674,398	+11.2
Woolen.....	48	1 week.	46,470	46,816	+ .7	936,082	970,100	+ 3.6

A comparatively small number of establishments reported as to the number of persons working on the last full day of the reported pay periods. The following table gives in comparable form the figures for October and November, 1919. The small number of establishments represented should be noted when using these figures.

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS ON THE LAST FULL DAY'S OPERATION IN OCTOBER AND NOVEMBER, 1919.

Industry.	Estab-lish-ments reporting for October and November.	Period of pay roll.	Number actually work- ing on last full day of reported pay pe- riod in—		Per cent of increase (+) or de- crease (-)
			October, 1919.	November, 1919.	
Automobile manufacturing.....	27	1 week....	108,386	106,744	- 1.5
Boots and shoes.....	27	...do....	12,473	13,491	+ 8.2
Car building and repairing.....	54	½ month...	51,480	51,129	- .7
Cigar manufacturing.....	13	1 week....	4,642	4,676	+ .7
Men's ready-made clothing.....	4	...do....	3,820	3,825	+ .1
Cotton finishing.....	14	...do....	10,862	11,012	+ 1.4
Cotton manufacturing.....	34	...do....	26,921	27,090	+ .6
Hosiery and underwear.....	23	...do....	15,329	15,421	+ .6
Iron and steel.....	82	½ month...	88,343	103,958	+17.7
Leather manufacturing.....	18	1 week....	12,672	12,839	+ 1.3
Paper making.....	25	...do....	16,527	16,434	- .6
Silk.....	30	2 weeks...	11,093	12,507	+12.7
Woolen.....	45	1 week....	37,645	37,900	+ .7

Changes in Wage Rates.

During the period October 15 to November 15, 1919, there were increases in all of the 13 industries. Of the establishments report-

ing, many did not answer the inquiry relative to this item, but in such cases it is not likely that changes were made.

Automobile manufacturing: One plant reported an increase of approximately 10 per cent, but made no other statement. In one firm 1.8 per cent of the people received 8.3 per cent increase in wages. Five per cent of the men in one establishment received an increase of 6 per cent. One concern granted a 4 per cent increase to 9 per cent of the employees, and another shop gave an increase of 1.89 per cent to 43.3 per cent of the force. All of the men in one plant received an increase of 1 per cent. Two concerns reported a few individual increases.

Boots and shoes: One concern gave an increase of 29 per cent to 5 per cent of the pieceworkers and 12 per cent to 14 per cent of day help. About 25 per cent of the employees in one plant received a 25 per cent of the pieceworkers and 12 per cent to 14 per cent of day affecting 15 per cent of the men in one, and 10 per cent in the other. An increase of 23 per cent to $8\frac{1}{2}$ per cent of the force was granted by one firm. Twelve per cent of the employees in one concern received an increase of 18 per cent, while one establishment gave an increase of $12\frac{1}{2}$ per cent to 20 per cent of the force. Two plants reported a 2 per cent increase affecting 3 per cent of the men in each. One firm reported an increase but gave no further data.

Car building and repairing: One car building shop granted a $12\frac{1}{2}$ per cent increase to $16\frac{2}{3}$ per cent of its employees. Several increases were reported by the railroads in accordance with the national agreement made valid by the Director General of Railroads.

Cigar manufacturing: One establishment reported a 33 per cent increase to 90 per cent of the force. Increases ranging from $4\frac{1}{2}$ to $27\frac{1}{4}$ per cent affecting 70 per cent of the employees were given by one firm. All of the men in one concern received an increase of 25 per cent. Two factories reported a 20 per cent increase, affecting all of the employees in one firm and 90 per cent of the men in the other; this second firm also gave an increase of 10 per cent to 10 per cent of its employees. Four concerns gave an increase of 10 per cent, affecting all of the force in two plants, 95 per cent of the men in the third, and 40 per cent of the employees in the fourth. Sixty per cent of the help in one factory received a 5 per cent increase. One concern reported an increase to all of its men but made no statement concerning the percentage of the increase.

Men's ready-made clothing: One establishment reported increases ranging from 10 to 25 per cent affecting 75 per cent of the force. All of the employees in one concern received an increase of about 15 per cent. One plant granted a \$6 per week increase to all of the force. One establishment that reported an average increase of \$5 per week

gave no further data, and four other concerns granted an increase of \$5 per week, affecting all of the men in two establishments, 90 per cent of the employees in the third establishment, while the fourth failed to mention the proportion of the force affected.

Cotton finishing: One concern reported an increase of 10 per cent affecting 5 per cent of the employees.

Cotton manufacturing: All of the men in one establishment received an increase of 12½ per cent and all of the force in another plant were increased about 10 per cent.

Hosiery and underwear: One mill gave a 75 per cent increase to 15 per cent of the force, while another concern granted an increase of 5 per cent, but failed to state the number affected. One plant reported an increase but made no other statement.

Iron and steel: One plant granted a 10 per cent increase to 40 per cent of the force, while another concern gave increases ranging from 5 to 10 per cent which affected 5 per cent of the employees. One mill increased the 40 per cent bonus to 55 per cent, affecting all employees except bar mill rollers, heaters, and brick masons, and also gave a 9 per cent increase to 98.1 per cent of the force. Twenty per cent of the men in one plant received an increase of 6 per cent.

Leather manufacturing: An increase of 10 per cent affecting 1½ per cent of the men was reported by one establishment and another firm gave a 7 per cent increase to 80 per cent of all female employees.

Paper making: One establishment granted an 8 per cent increase to 97 per cent of the force. One firm reported increases of 10 to 25 cents per day affecting 10 per cent of the force. One concern gave several individual increases.

Silk: An increase of 20 per cent to 66⅔ per cent of the employees was reported by one firm. Three concerns gave 10 per cent increases affecting all of the men in one, 10 per cent of the force in the second, but the third failed to state the per cent of the employees affected. All of the men in one establishment received an increase of about 10 per cent. Eighty-two per cent of the force in one firm received a 9 per cent increase and about 18 per cent of the men in another mill received an increase of approximately 9 per cent. Two factories granted an increase of 7 per cent to 30 per cent of their force. One concern gave 90 per cent of the force a 5 per cent increase, and in another mill all hands were increased \$1 per week.

Woolen: One firm reported a 10 per cent increase to 10 per cent of the employees.

Report of Employment Exchanges in the United Kingdom.

AS REPORTED by the British Labor Gazette for November, 1919, the operations of the employment exchanges for the five weeks ending October 10, 1919, are summarized as follows:

The average daily number of registrations, of vacancies notified, and of vacancies filled during the five weeks was 15,781, 5,376, and 3,628, respectively.

Compared with the previous month, the daily average of registrations showed an increase of 11 per cent, while the daily average of vacancies notified and vacancies filled showed decreases of 13.6 per cent and 14.3 per cent, respectively. The marked increase in the number of registrations was due to the unemployment caused by the railway strike and the molders' dispute. Concurrently with an increase in applications for work there were decreases in the daily average number of vacancies notified and vacancies filled.

In the principal occupational groups the daily average number of applications from adults was 13,867—10,298 men and 3,569 women. There were 4,396 vacancies reported—2,340 men and 2,056 women. The average daily number of positions filled was 3,628. When compared with the previous month there was a decline of 16 per cent among men and 5 per cent among women.

The occupational groups in which there were the largest number of positions filled by men were: Engineering, shipbuilding, and construction of vehicles, 21 per cent; building, 20 per cent; and transport, 10 per cent. Sixteen per cent were general laborers. Over 50 per cent of the women were placed in domestic service, 9 per cent in agriculture, and 6 per cent in textiles.

As regards juveniles, the daily average of registrations was 1,914, while that of vacancies notified was 980. The daily average number of vacancies filled during the month as compared with the previous month showed a decrease of 24 per cent.

Volume of Employment in the United Kingdom in October, 1919.

THE following figures as to the condition of employment in Great Britain and Ireland in October, 1919, as compared with September, 1919, and October, 1918, have been compiled from figures appearing in the British Labor Gazette for November, 1919. Similar information for July was published in the October LABOR REVIEW.

In comparing October, 1919, with September, 1919, relative to the number of employees, respective increases of 4, 3.2, 3.1, and 3 per cent are shown in glass, cement, corset, and lace trades. The largest decreases—5.7 and 4.8 per cent—appear in iron and steel and seamen.

The aggregate earnings of employees in October, 1919, as compared with September, 1919, show increases in every industry. The worsted, glass, pottery, and woolen trades show respective percentage increases of 8.2, 7.9, 6.7 and 6.6.

In October, 1919, as compared with October, 1918, as to the number of persons employed, dock and riverside labor shows an increase of 72.4 per cent; the cement trade, an increase of 69.7 per cent; the food preparation trades, an increase of 40.1 per cent; quarrying, an increase of 38.6 per cent; and the printing trade, an increase of 38.4 per cent. The largest decrease—5.6 per cent—appears in iron and steel.

Comparing October, 1919, with October, 1918, on the question of earnings of employees, increases of 71.6, 71.2, 68.2, 65.6, and 63.5 per cent are shown in cement, cotton, food preparation, printing, and brick trades, respectively. Fourteen trades show increases ranging from 26.6 to 60.6 per cent, while linen shows an increase of 6.8 per cent, and the tailoring trade, an increase of 1 per cent. There were no decreases during the period mentioned.

VOLUME OF EMPLOYMENT IN THE UNITED KINGDOM (GREAT BRITAIN AND IRELAND) IN OCTOBER, 1919, AS COMPARED WITH SEPTEMBER, 1919, AND OCTOBER, 1918.

[Compiled from figures in the Labour Gazette, London, November, 1919.]

Industries and basis of comparison.	Per cent of increase (+) or decrease (-) in October, 1919, as compared with—		Industries and basis of comparison.	Per cent of increase (+) or decrease (-) in October, 1919, as compared with—	
	Sept., 1919.	October, 1918.		Sept., 1919.	October, 1918.
Coal mining:			Other clothing trades:		
Average number of days worked.....	-0.4	- 1.4	Dressmaking and millinery—Number of employees.....	+1.6	+28.2
Number of employees.....	+ .9	+23.0	Wholesale mantle, costume, blouses, etc.—Number of employees—		
Iron mining:			London.....	-1.3	+ 2.6
Average number of days worked.....	-1.7	- .5	Manchester.....	+2.2	+ 2.6
Number of employees.....	+2.1	+ 4.0	Glasgow.....	(²)	+ 5.6
Quarrying:			Corset trade—Number of employees.....	+3.1	+19.5
Average number of days worked.....	-5.4	- 2.2	Woodworking and furnishing:		
Number of employees.....	+ .2	+38.6	Number of employees ²	+ .3	(¹)
Pig iron: Number of furnaces in blast.....	(¹)	-20.5	Brick trade:		
Iron and steel works:			Number of employees.....	+ .4	+36.1
Number of employees.....	-5.7	- 5.6	Earnings of employees.....	+1.4	+63.5
Number of shifts worked.....	-5.5	- 9.3	Cement trade:		
Tin plate, steel, and galvanized sheet trades: Number of mills in operation.....	+5.5	+44.9	Number of employees.....	+3.2	+69.7
Cotton trade:			Earnings of employees.....	+4.0	+71.6
Number of employees.....	+1.5	+20.1	Paper, printing, and bookbinding trades:		
Earnings of employees.....	+2.4	+71.2	Paper trades—		
Woolen trade:			Number of employees reported by trade-unions.....	(¹)	(¹)
Number of employees.....	+ .8	+ 9.8	Number of employees reported by employers.....	+1.5	+18.9
Earnings of employees.....	+6.6	+39.7	Earnings of employees reported by employers.....	+2.2	+55.0
Worsted trade:			Printing trades—		
Number of employees.....	+1.4	+10.7	Number of employees reported by trade-unions ²	- .3	- 1.2
Earnings of employees.....	+8.2	+46.4	Number of employees reported by employers.....	+2.4	+38.4
Hosiery trade:			Earnings of employees reported by employers.....	+4.3	+65.6
Number of employees.....	+ .7	+ 5.1	Bookbinding trades—		
Earnings of employees.....	+3.2	+26.6	Number of employees reported by trade-unions ²	+ .3	- 1.9
Jute trade:			Number of employees reported by employers.....	+1.2	+25.1
Number of employees.....	- .6	+ 3.2	Earnings of employees reported by employers.....	+1.4	+40.9
Earnings of employees.....	+ .5	+31.9	Pottery trades:		
Linen trade:			Number of employees.....	+1.9	+12.1
Number of employees.....	+ .4	- 2.1	Earnings of employees.....	+6.7	+32.5
Earnings of employees.....	+ .8	+ 6.8	Glass trades:		
Silk trade:			Number of employees.....	+4.0	+34.8
Number of employees.....	+1.0	+ 8.9	Earnings of employees.....	+7.9	+60.6
Earnings of employees.....	+ .9	+34.1	Food-preparation trades:		
Carpet trade:			Number of employees.....	+ .8	+40.1
Number of employees.....	+2.7	+28.9	Earnings of employees.....	+2.1	+68.2
Earnings of employees.....	+2.7	+52.1	Dock and riverside labor: Number of employees.....	-2.0	+72.4
Lace trade:			Seamen: Number of employees.....	-4.8	+20.5
Number of employees.....	+3.0	+21.3			
Earnings of employees.....	+4.6	+47.3			
Bleaching, printing, dyeing, and finishing:					
Number of employees.....	+1.7	+13.3			
Earnings of employees.....	+2.8	+44.2			
Boot and shoe trade:					
Number of employees.....	+1.2	+17.2			
Earnings of employees.....	+3.0	+40.5			
Leather trades: Number of employees ²	(²)	- 0.6			
Tailoring trade:					
Number of employees.....	+1.7	+ .7			
Earnings of employees.....	+ .4	+ 1.0			
Shirt and collar trade:					
Number of employees.....	+1.9	+14.5			
Earnings of employees.....	+2.9	+29.8			

¹No report.²Based on unemployment.³No change.

Employment of Disabled ex-Service Men in Great Britain.

THROUGH a royal proclamation the British Government recently launched a new scheme for the employment of disabled ex-service men having for its primary object a more rapid absorption into industry of men disabled in the war by means of a closer cooperation of employers. Any employer who engages to adopt this plan will have his name enrolled upon a national list called the "King's National Roll" and is entitled to use upon his correspondence an official device "indicating that he recognizes the national obligation to the disabled and that his share therein is gladly undertaken." The scheme, which is reminiscent of the citation awarded by the United States War and Navy Departments to employers guaranteeing to reemploy 100 per cent of their former employees who had entered the service, is said to be an application of the "Rothband scheme" and "Rotherham scheme," from the former of which it derives the "National Roll" and the royal appeal; from the latter the 5 per cent limit and the correspondence device.

Briefly summarized the scheme as adopted is as follows:

Every employer in the United Kingdom who employs 10 or more workers is asked to undertake to employ as many disabled ex-service men as possible, with a minimum of 5 per cent of his total establishment. Those employers who can absorb more than 5 per cent are strongly urged to do so. Employers may count toward their percentage any disabled men already in their employ or in training in their premises, and also any vacancies they have guaranteed to the Ministry of Labor to leave open for disabled men in training elsewhere. The special percentages to be adopted for particular trades have been indicated by the advisory central bodies, but where such action has not yet been taken, or where the recommendation issued does not fit local circumstances, local technical advisory committees will prescribe the percentage.¹

As indicated in the summarization of the scheme, the plan has been discussed with a majority of the staple trades in Great Britain. By some it has been adopted as it stands, while others have accepted it with modifications.

No dilution of skilled labor is contemplated by the adoption of this scheme, nor does it vitiate any arrangements regarding training already existing between the Ministry of Labor and the trade advisory committees. It is suggested that the eligibility of disabled men for training be decided upon through agreements between employers and trade-unions. In case the training given in institutions for this purpose is insufficient to meet the requirements of any trade the Min-

¹ The Labour Gazette, London, September, 1919, p. 371.

ister of Labor may require the employer to furnish training in his own establishment for the positions guaranteed by him.

In order that there shall be no detrimental effect upon existing rates of wages "the wages of trained disabled men will," according to the royal proclamation, "be fixed according to agreements made on their behalf with the trade advisory committee. With regard to untrained disabled men on work not normally performed by skilled men, wages will be fixed by the special arrangements in operation for the settling of wages questions in trades where such arrangements exist, and in other trades disabled men should, generally speaking, receive the district rate of wages. Exceptional cases in which the earning capacity of the disabled man is abnormally reduced may, in the last resort, be referred to the local technical advisory committee, the local employment committee, or the appropriate trade body. In no case must the possession of a disability pension be taken into account in computing the rate of wages."¹

The proclamation further points out that "a 'disabled man' is, technically speaking, (a) any man in possession of a disablement pension, (b) any man who has received from the Ministry of Pensions a gratuity for a minor disablement or aggravation of a complaint, and who is adjudged by the local employment committee to be incapacitated, either wholly or in part, from following his normal occupation."²

Since the publication of the royal proclamation the scheme has been extended to undertakings in which fewer than 10 workers are employed, thus reaching every employer of labor in the United Kingdom. From the last report—November 4, 1919—5,088³ firms have adopted the scheme, interest in which is rapidly increasing. These firms employ 725,000 workers and have agreed to give positions to 46,000 disabled men.

Among the important branches of industry in which this method of placing disabled soldiers is being tried out are: 24 municipalities; 6 electrical works; 5 tramways; 12 gas companies; 4 newspapers; 6 shipping companies; 7 engineering firms; 6 provision firms; 5 clothing and boot manufacturers; and 4 printing establishments. Some of the firms are now establishing training centers for the men they wish to employ.

In the civil service, apart from the industrial departments, the number of disabled men employed on October 27, 1919, had passed the established 5 per cent, and Sir Robert Horne, the minister of

¹ Manchester (England) Guardian, Sept. 15, 1919, p. 7.

² Idem.

³ Great Britain. Ministry of Labor. Month's Work, November, 1919, p. 83.

labor, estimated that by December 1 it would be at least 8 per cent of the total number employed. In the industrial departments of the Government the number of disabled men employed is not definitely known, but available information indicates that it is over 5 per cent. The railways have not been able to guarantee employing a definite percentage of disabled men, but they have taken on from 3 to 4 per cent of them in addition to the number of their own men who are being reabsorbed into the service.

WOMEN IN INDUSTRY.

Women in the Government Service.¹

FOR many years people interested in securing equality of opportunity for woman workers have felt that this equality did not exist in the Government service, the place above all others where every citizen of the country should be assured of equal opportunity. Because of the tremendous influx of women into new occupations during the war, and the consequent general recognition of their abilities along many different lines, it was felt that the time was ripe for discovering to what extent the new attitude toward woman workers had penetrated the various branches of the Government service. With this object in view the Women's Bureau of the United States Department of Labor arranged to make a study of positions in the Government service open by examination to women as compared with those closed to women. The study was begun in September, 1919. Part I, which emphasizes the fact that women were excluded from 60 per cent of the examinations held from January 1, 1919, to June 30, 1919, was completed on October 16, and submitted to the Civil Service Commission on October 27.

On November 5, 10 days after receiving the report, the Civil Service Commission passed a ruling opening all examinations to both women and men, leaving it to the discretion of the appointing officers to specify the sex desired when requesting certification of eligibles.

On November 19, a bill was introduced in the Senate by Senator McLean, of Connecticut, amending the statute now in force which dates back to 1870 and provides that at the discretion of the head of any department women may be appointed to any clerkship in the Government service. The amendment provides that in requesting a register of eligibles for appointment the nominating and appointing officials shall not specify sex unless sex is a physical barrier to the proper performance of the duties to be fulfilled.

Thus one of the ends desired has already been almost completely accomplished. Once the facts were assembled the rapidity with

¹ This summary of the report on women in the Government service by the Women's Bureau of the United States Department of Labor was prepared by that bureau.

which the remedy was supplied gives rise to a hope that Part II of the report, showing an equally serious discrimination in the matter of appointments and entrance salaries, may have as satisfactory a result.

The entire report was submitted both to the Civil Service Commission and to the Joint Commission on Reclassification of Salaries. A subcommittee of the latter on the employment conditions of women in the civil service has incorporated the material in its report to the committee on employment policies which has been adopted and passed on to the commission.¹

Exclusion of Women from Examinations.

The largest employer of labor in the country and the employer of the greatest variety of labor, the United States Government, has as its employment agent the Civil Service Commission. This commission is responsible for securing the proper person for almost every position in the Government service except those of unskilled labor, in some States, and those filled by presidential appointment. The appointment of women to any Government position is still regulated by a statute written in 1870 which declared that women may in the discretion of the head of any department be appointed to any of the clerkships therein authorized by law. From this statute has sprung the custom of opening examinations to both sexes or closing them to either sex at the discretion of the head of any department, regardless of the fact that neither rule nor law covers the examination itself. When a vacancy occurs for which the Civil Service Commission has no register of eligible persons, the head of the bureau in which the vacancy occurs informs the Civil Service Commission of its needs, indicating whether a man or a woman is desired for the position or whether no discrimination will be made. The decision in this matter is based upon the needs of the particular bureau. Barring women or men from any examination, however, bars them not only from the special occupation for which the examination is given but from all kindred occupations. All other bureaus which may require services of the same or like quality as those specified in the examination are confined to a register made up exclusively of one sex when the opposite sex might be as acceptable or preferable; or they must ask for a special examination in which no sex line is drawn; or they must seek the woman or man desired among those already in the Government service. The bureau asking for the examination in the first instance may, without question, require the services of men only or

¹ This article summarizes the report of conditions as found during the period covered and, of course, takes no account of the recent ruling of the Civil Service Commission.

women only, but by closing the examination to either sex, all other bureaus are restricted in the choice of service or forced to call for special examinations entailing an additional expenditure of time and money.

From January 1, 1919, to June 30, 1919, the Civil Service Commission held examinations to obtain eligible people for vacancies in 260 different types of positions, exclusive of manufacturing and mechanical positions in the ordnance factories, quartermaster depots, and navy yards, and exclusive of unskilled labor positions.¹ Women were excluded from examinations for 59.6 per cent of these occupations, tests for 155 of the occupations being open to men only. In the scientific and professional positions women were excluded from examination for over 64 per cent of the positions. In the mechanical and manufacturing services 87 per cent of the occupations were closed to women. Tests for clerical services of all kinds, however, except seven (15.9 per cent) were open to women. Of the 260 occupational examinations, the per cent closed to women, distributed according to service for which examinations were held, was found to be as follows: Biological science, 61.5; physical science, 64.5; medical science, 75; engineering, 67.5; economic and sociological, 100; miscellaneous professional (editorial work, teaching, and nursing), 30; managerial and other expert office service, 25; clerical, 15.9; mechanical and manufacturing, 87; domestic, reformatory, and rural, 83.3. Nearly 38 per cent of the examinations were open to men and women; 2.7 per cent to women only; and 59.6 per cent to men only.

Character of Examinations Closed to Women.

With more than 800,000 women in scientific or professional pursuits outside the Government service, with more than 2,000,000 women working in private manufacturing and mechanical establishments, with over 600,000 in clerical occupations in private employ, the question naturally arises as to what is the character of the Government work in which women are not allowed to participate.

During the first six months of 1919, examinations were held for 33 occupations involving field and laboratory experimentation. Women were permitted to take examination to conduct or assist in the conduct of experiments in food preparation in materials requisite to the home, in fertilizers and soils, in horticulture, plant diseases, cereal diseases, injurious and beneficial plant worms, fiber production, paper fibers, and for the conduct of experiments on materials

¹ The number of examinations held always outnumbers the different kinds of positions for which examinations are given, because it is often necessary to repeat tests at intervals in order to secure the necessary number of qualified people.

and devices suitable for naval uses. But they were not permitted to take tests for the conduct of investigations relating to animal parasites, to the mechanical properties of wood, to drug and oil plant cultivating, to tobacco breeding, to the introduction of new plants, to the relation of climates to agriculture, to aeronautics, to oil and gas field conditions, to colors and dyes, or to study the physiology of gas poisoning.

Women are permitted to study human diseases and plant diseases, but the Bureau of Animal Industry excludes them from its 1919 examinations for investigating animal parasites and performing administrative work in that connection.

The Navy Department was willing to use either men's or women's knowledge to secure materials and devices most suitable for naval uses, but the Forest Service wanted only men to determine the physical and mechanical properties of wood, and women were therefore excluded from the examination.

Women are acting as assistant weather observers for the Weather Bureau, and assistant horticulturists for the Department of Agriculture, but they are not permitted to take tests in climatology in its relation to agriculture. They are testing foods and drugs to determine their nutritive and medical quantities, but they are barred from examination in the testing of dyes.

The Harvard Medical School has recognized the value of one woman doctor's studies in industrial poisoning by appointing her assistant professor of industrial medicine. But our Government delegates to men only the study of the effects of gas poisoning.

As to the work of collecting information from original sources, out of examinations in the first half of 1919 for 16 different kinds of positions, 4 were open to women. If qualified, a woman may collect and compile information concerning shipments, receipts, and prices of food products in producing centers and large markets or may investigate methods and costs of marketing food products; she may collect or aid in collecting statistics on the production, consumption, and movement of mineral commodities in world trade; or she may assist in making surveys to determine the prevalence, causation, and prevention of human diseases. But the examinations bar her from securing the latter information if the position calls for a graduate of a medical college and carries with it the responsibility of recommending preventive and controlling measures. By the same policy she is kept from collecting information on the acreage conditions and yields of the various crops, or data regarding farm animals, nor may she investigate the volume and movement, the marketing and distribution, the supply and consumptive demand of foreign trade in farm

and nonmanufactured food products as long as the 1919 register of eligible men is still good. Investigating matters relating to the organization and operating of cooperative food producers' associations is also a closed field for women's service. The Bureau of Efficiency, by calling for men only in its 1919 examination, excludes women from conducting any of its investigation into the organization and procedure of Government departments. Less unusual is the Bureau of Mines' exclusion of women from investigating causes of accidents.

Women have acted and are acting as aids in restoring our handicapped and disabled sailors and soldiers to a normal frame of mind; they have taught and are teaching boys how to do mechanical tasks with their dismembered hands and arms; they are being employed as well as men for private and public employment offices. The Federal Board for Vocational Education, however, has believed that men are best able to learn of the desires and latent capabilities of our boys; that men only can advise and assist them in securing suitable training and employment; that men only have a knowledge of trades and systems of vocational education. All the examinations for such important service, are, therefore, open only to men.

All but two of the examinations given in the first six months of 1919 for inspection and law enforcement positions were closed to women. The food and drug inspection station at San Francisco permitted women to take the test for examining official samples of food and drugs, but in 1919 the Bureau of Chemistry at Washington excluded women from the tests for inspecting proprietary medicines or foods and drugs in general. Meat and live-stock inspection, disinfection of foreign seeds and plants, inspection of wood warehouses, and enforcement of our horticultural and game laws can only be done by men while the present register of eligibles holds good. Women may, if qualified, examine requests for patents in our Patent Office along with men, but they may not search or examine patents for the Purchase, Storage, and Traffic Division of the War Department if they must take an entrance examination for the position.

The Navy Department has recognized the value of women as draftsmen, since all its examinations, whether for general engineering work or for specific lines of aeronautical, ordnance, ship, electrical, radio, or buildings drafting, may be taken by either men or women. Other divisions, as the Engineers' Department and Patent Section of the War Department, the National Advisory Committee for Aeronautics, and the Bureau of Public Roads, did not admit women to draftsman examinations.

Some of the positions listed above from which women were excluded in the examinations given in the first six months of this year are undoubtedly such that their duties can be performed more satisfactorily by men than by women; for other positions there may be no women with sufficient experience to qualify. But a careful study of the exclusions indicates very clearly that the majority of scientific and professional positions which women were not permitted to enter in some departments are very similar in character to work women are doing and have done in other Government departments or in private establishments.

As long as it remains customary to permit any examination to be closed to one or the other sex because of the needs of one bureau the Civil Service Commission will not be able to marshal all available ability before the department appointment officials for choice.

With all examinations opened to persons of either sex, the country would know what storehouses of training and experience it had to draw from, the appointment officials would have a wider field from which to choose, and the women of the country would have their opportunities for service immeasurably increased.

Entrance Salaries of Women Compared With Those of Men.

The discriminating policy that prevailed in examinations up to November 5, resulting in barring women from a large proportion of the higher grades of service, is reflected naturally in the positions to which women are appointed and in the relative salary levels. One outcome of vital bearing is the overwhelming concentration, 91 per cent, of woman appointees in the clerical service. This massing in turn carries with it the depression of salaries toward the old-time woman's level, a figure traditionally below that which any number of men qualified to fill the positions will accept.

In order to get definite facts as to the entrance salaries of women compared with those of men, a study was made of the salaries paid to persons appointed to the Government service during the months of January and February, 1919. With the exception of persons working for nominal salaries or persons whose salary was paid in part only by the United States, and with the exception of manufacturing, mechanical, and unskilled laboring positions outside of Washington and similar positions in Washington to which no women were appointed, all appointments, whether for the departmental service in Washington, or for the field service, in the ten departments and under seven commissions were included in the study.

In the first two months of 1919, 7,959 appointments, exclusive of those specified above, were made to the Government service. Of

these 4,689 (58.9 per cent) were women and 3,270 (41.1 per cent) were men. The positions filled during this period ranged from charwoman to Federal Trade Commissioner. The salaries ranged accordingly from \$240 a year to \$10,000 a year; but the majority of appointees received neither one extreme nor the other. Over 86 per cent of all women were appointed at salaries ranging from \$900 to \$1,299 a year. Only 36 per cent of the men were appointed to positions at these salaries.¹

The following table shows the number and per cent of women and men entering the Government service during the first two months of 1919, classified according to entrance salaries and character of appointment:

NUMBER AND PER CENT OF WOMEN AND MEN RECEIVING APPOINTMENTS IN THE GOVERNMENT SERVICE AT EACH SPECIFIED ENTRANCE SALARY DURING JANUARY AND FEBRUARY, 1919, BY CHARACTER OF APPOINTMENT.

Salary group.	Probational.		Temporary.		Excepted. ¹		Total.		Per cent.	
	Wo-men.	Men.	Wo-men.	Men.	Wo-men.	Men.	Wo-men.	Men.	Wo-men.	Men.
Under \$600.....	143	93	51	112	8	2	202	207	4.3	6.3
\$600 and under \$700.....	42	45	28	48	2	3	72	96	1.5	2.9
\$700 and under \$800.....	37	89	23	101	2	3	62	193	1.3	5.9
\$800 and under \$900.....	42	56	10	19	7	1	59	76	1.2	2.3
\$900 and under \$1,000.....	206	42	118	82	19	4	343	128	7.3	3.9
\$1,000 and under \$1,100.....	730	150	151	112	7	5	888	267	18.9	8.2
\$1,100 and under \$1,200.....	1,956	289	47	72	6	3	2,009	364	42.8	11.2
\$1,200 and under \$1,300.....	534	203	239	161	37	60	810	424	17.3	13.0
\$1,300 and under \$1,400.....	36	39	32	35	1	12	69	86	1.6	2.6
\$1,400 and under \$1,500.....	51	85	13	34	3	3	67	122	1.5	3.7
\$1,500 and under \$1,600.....	16	112	19	117	.....	57	35	286	.7	8.8
\$1,600 and under \$1,700.....	10	56	7	57	.....	6	17	119	.4	3.6
\$1,700 and under \$1,800.....	.....	3	.....	5	.....	.....	.....	8	.....	.2
\$1,800 and under \$1,900.....	12	161	7	71	2	30	21	262	.5	8.0
\$1,900 and under \$2,000.....	1	12	3	8	.....	3	4	23	.1	.7
\$2,000 and under \$2,100.....	2	34	5	39	.....	31	7	104	.2	3.2
\$2,100 and under \$2,200.....	.....	8	.....	12	1	4	1	24	(²)	.7
\$2,200 and under \$2,300.....	.....	27	.....	6	.....	7	.....	40	.....	1.2
\$2,300 and under \$2,400.....	.....	4	.....	1	2	.....	2	5	(²)	.2
\$2,400 and under \$2,500.....	.....	15	3	30	3	13	6	58	.1	1.8
\$2,500 and under \$3,000.....	.....	40	6	64	.....	11	6	115	.1	3.5
\$3,000 and under \$3,600.....	.....	35	4	80	3	48	7	163	.2	5.0
\$3,600 and under \$4,000.....	.....	9	.....	24	1	11	1	44	(²)	1.3
\$4,000 and under \$5,000.....	.....	4	.....	10	1	19	1	33	(²)	1.1
\$5,000 and over.....	.....	4	.....	6	.....	13	.....	23	.....	.7
Total.....	3,818	1,615	766	1,306	105	349	4,689	3,270	100.0	100.0

¹ Excepted appointments are those to positions which are excepted from examination by law or by executive order.

² Less than one-tenth of 1 per cent.

The table shows very clearly that as the salary advances the proportion of woman appointees receiving it decreases very rapidly. Only 4.7 per cent of the women as compared with 26.9 per cent of the men were engaged at rates ranging from \$1,300 to \$1,899. Posi-

¹ The proportion of men and women receiving the higher salaries is greater in positions which are excepted from civil-service examination and in temporary positions. Only 18.6 per cent of the woman appointees received excepted or temporary appointments, whereas 50.6 per cent of the men received these kinds of appointments.

tions carrying from \$1,900 to \$2,499 went to less than one-half of 1 per cent of the women, but to nearly 8 per cent of the men. Twenty-five hundred dollars but under \$3,600 a year was paid to less than one-third of 1 per cent of the women but to 8.5 per cent of the men; while \$3,600 a year and over was received by only two women, or less than one-tenth of 1 per cent of the woman appointees, whereas 100, or over 3 per cent of the men appointees, received over \$3,600 a year. As a whole, therefore, about 46 per cent of the men, as compared with slightly over 5 per cent of the women, received more than \$1,299 a year, in spite of the fact that the prevailing policy of appointing men as messengers resulted in twice as large a proportion of men as women being paid less than \$900 a year.

The concentration of women's appointments within the \$900 and under \$1,300 group corresponds closely with the concentration of their appointment within the clerical services, as stated in the opening paragraph of this section. Ninety-one per cent of the 4,689 women appointed in January and February of 1919 went into clerical occupations of one type or another. Forty-eight and one-half per cent of the men's appointments were made to these positions. Even within the clerical group concentration of the sexes occurs. Men predominate in the supervisory positions, in those requiring special training and experience, and, at the other end of the scale, as office messengers. Women predominate as stenographers, typists, and in index, filing, statistical, and other kinds of general office work.

The fact that influences other than the numbers of men and women available for the particular positions are at work in determining whether clerical work shall be done by a man or a woman is shown by an analysis of the number of people of each sex passing the examination, when compared with the proportion of positions filled by each sex.

In the first six months of 1919, 59 per cent of the persons passing the clerical tests were women, whereas 72 per cent of the appointments in the first two months of 1919 were women.

This discrepancy is largest among persons holding clerk positions, that is, persons who have passed the general clerk examination in spelling, arithmetic, penmanship, letter writing, and copying and correcting manuscript, and who are assigned to various office positions throughout the Government service. With a slightly larger number of men passing these examinations than women, 80 per cent of the positions were filled by women. For file and cataloguing clerk positions 74.5 per cent of the successful applicants were women although 84 per cent of the vacancies were filled by women. Eighty-six and one-half per cent of the positions in which various office appli-

ances are used were filled by women although they constituted but 81 per cent of those passing the examinations. Only in stenographic and typewriting positions do the percentage of appointments of woman eligibles fall within three points of each other. When special training is required the situation is reversed. Almost 30 per cent of the eligibles were women while only 15 per cent of the positions were filled by women. Approximately the same ratio between eligibles and appointments existed in the messenger service.

Another condition that appears to influence the proportion of men and women appointed to various positions is the weaker bargaining power of women. All applicants for probational positions state in their examination papers the minimum salary which they will accept. With the exception of messenger positions and card perforation machine operator positions the minimum salary advertised by the Civil Service Commission for clerical positions is \$900 a year. Among the applicants for probational clerical appointments in the months of January and February, 274 women as against 36 men agreed to accept the minimum offered or less; among the temporaries 131 women and 66 men agreed to accept \$900 or less; and as to the excepted positions at this salary or less 21 women and 1 man agreed to accept them. In other words, of the 529 applicants who expressed willingness to accept the advertised minimum or less, over 80 per cent were women.

A study of the relative salaries prevailing in this clerical group where the numbers emphasized are the largest, also bears witness to the weaker bargaining power of women. Although the salary received by the largest single group of people doing clerical work of a varied nature fell between \$1,100 and \$1,199 for both men and women, 36 per cent of the male appointees received more than this amount as against 16 per cent of the female appointees. The highest salary for a man in this group was \$2,400, for a woman \$1,800 a year. In the minor clerk positions, the largest single group of women received from \$1,000 to \$1,099 per year. A similar group of men got from \$1,200 to \$1,299 per year. The prevailing rate for woman typists was \$1,000 to \$1,099, for man typists between \$1,100 and \$1,199. Stenographers of both sexes received \$1,200 to a larger extent than any other salary. A slightly larger proportion of man than woman stenographers received over this amount.

Under clerical work requiring special training and experience and original thought are included law clerks, correspondence clerks, and clerks especially qualified to be intrusted with special kinds of office work. Although 14 women passed the law-clerk examination, none was appointed to this position during January and February of 1919.

They were appointed as correspondence clerks and special experts in the Bureau of War-Risk Insurance at salaries ranging from \$1,100 to \$2,000. Men taking the same positions received from \$1,200 to \$3,500.

As to the positions requiring education and experience, few women were appointed to managerial, supervisory, office organizing, or secretarial positions. Of the 15 women receiving such positions, only one earned an amount commensurate with the responsibility supposedly involved in these positions. The others received \$1,200, \$1,400, and \$1,600. Some men received the low rates that women did, but over half received \$2,000 and over.

As statisticians, work requiring college graduation and some practical experience, women accepted positions at \$1,200, \$1,800, and \$2,000. Men secured \$1,800, \$3,000, and \$4,000 jobs. Of the four women taking positions as verifiers of income and excess profit tax returns, two received \$1,400, one \$1,800, and one \$2,000. Nine men appointed to these positions received less than \$1,400, but 103 received over \$2,000.

A further study of the appointments of women as scientific investigators, collectors of statistical data, or in other positions requiring education and experience, shows the same condition. In the majority of the occupations to which women and men were appointed in any numbers, although men frequently received lower entrance salaries than women, the proportion of man appointees to the higher paid positions in each occupation was always in excess of the proportion of woman appointees to these positions.

Not until the entrance salaries to be paid in each occupation are fixed for probational, temporary, and excepted positions in accordance with the responsibilities and difficulties of the tasks to be undertaken, not until the classes of work within each occupation are so well determined and their salaries fixed so that the persons marking examination papers will be able to mark each applicant's class and salary status on the examination paper, will it be possible to eliminate the inequalities which have arisen through custom in the beginning salaries offered to women and men.

INDUSTRIAL ACCIDENTS.

New Basis for Measuring Accident Frequency and Severity Rates.

AT A meeting of the committee on statistics and compensation insurance cost of the International Association of Industrial Accident Boards and Commissions held at Harrisburg, Pa., December 3 to 5, 1919, the following resolution was adopted changing the unit for measuring both accident frequency and accident severity rates:

Resolved, That accident rates, both frequency rates and severity rates, be computed on the basis of 1,000 hours' exposure instead of 3,000 hours' exposure, as heretofore.

The unit of measure for both frequency and severity accident rates, which has come to be generally used, is the "300-day worker," sometimes called "full-time worker." This hypothetical worker is supposed to work 10 hours a day for 300 days in the year, or 3,000 hours per year.

The committee on statistics and compensation insurance cost at its first meeting considered very carefully the question of a proper unit for measuring accident rates and decided to adopt the only unit then in actual use, namely, the "300-day worker."

The "300-day worker" was chosen as the standard measure for accident rates because (1) it is absolutely necessary to have a common unit for measuring accidents in all occupations, all industries, all States, and all countries; (2) the "300-day worker" had been recommended as the standard unit for computing accident rates by the Permanent International Committee on Social Insurance and the International Institute of Statistics and was in use in Germany and Austria at the time the committee on statistics took up the matter of standardization of accident statistics; (3) it was alleged that most workers did work about 10 hours a day and about 300 days in the year. It was further argued that while the "300-day worker" did conform closely to the normal worker, still he was merely an abstraction, a unit of measure, and would measure exposure to accident just as accurately for an 8-hour day as a 10-hour day, for a 200-day

year as a 300-day year. The use of this unit, it was maintained, did not suggest a 10-hour day or a 300-day year as the ideal and proper working day and industrial year.

In fact both employers and employees do regard the "300-day worker" as suggesting what the ideal working day and working year should be. The secretary of the National Safety Council has pointed out that the 8-hour day is becoming the standard working day and suggested that the unit measure be made 2,400 hours per year instead of 3,000 hours, so as more nearly to reflect the yearly working time. A 2,000-hour year was also considered by the committee on statistics and compensation insurance cost, but it was recognized by all members of the committee that any standard unit of measure which suggested the length of time men do or should work is undesirable.

In view of the fact that the working time, both the hours per day and the days per year, varies widely from plant to plant, from industry to industry, from city to city, from country to country, and from year to year, it was thought best by the committee to cut loose entirely from a unit of measure that could be misunderstood as, in any way, implying what the proper working time should be. The adoption of 1,000 hours' exposure rids us forever of any such implication and gives a unit which is convenient in size and will remain unaffected by changes in the working day or variations in the working year. The 1,000-hour exposure is a stable, scientific, mathematical unit of measure, which is what is needed for the measurement of accident rates. It has the further advantage that accident rates measured by any other unit of exposure may be readily expressed in terms of the 1,000-hour unit and vice versa. For instance, all accident rates computed in units of the "300-day worker" may be converted into rates per 1,000 hours' exposure by dividing by 3. Frequency rates are to be expressed in rates per thousand thousand (1,000,000) hours' exposure of the working force, instead of per thousand "300-day workers." Severity rates are to be expressed as days lost per thousand hours' exposure of the working force, instead of days lost per "300-day worker." In both instances the new rates can be derived from the old rates by dividing by 3.

INDUSTRIAL HYGIENE AND MEDICINE.

A Standard Method of Sickness Reporting.

IN ORDER to promote the adoption of a standard method of sickness reporting by as many establishments and sick-benefit associations as possible, two plans for recording and reporting sickness among industrial employees and sick-benefit associations have been prepared by the Public Health Service. They were formulated by a special committee on industrial morbidity statistics, Vital Statistics Section of the American Public Health Association, in cooperation with the Public Health Service and with the advice and assistance of other Government bureaus.¹ Both plans are based on the same principles, but the first is considered preferable as offering possibilities for much greater detail in personnel records. In both it is considered essential that a diagnosis of each case of sickness causing disability be recorded.

Plan A.

According to plan A an individual personnel card is kept for every employee to be considered, whether the individual becomes sick or not. For this card the following form, 4 by 6 inches in size, is suggested:

MODEL FORM FOR PERSONNEL AND SICKNESS CARD—FACE.

1. Name of Employee.						2. Check No.	3. Date This Record Begins	4. Firm No.	5. Date Employment Ended.	
6. Color and Sex.		7. Year of Birth.		8. Marital Condition.		9. Speaks English?		10.		
11. Departments and Occupations in Plant.										
From—	To—	Months.	Department.	Occupation.	Possible Injurious Conditions.					
.....					
12. Former Occupations Outside of Plant.										
From—	To—	Months.	Occupation.	Industry.	Possible Injurious Conditions.					
.....					
13. Remarks:										

¹ Sickness records for industrial establishments. Public Health Reports, Nov. 14, 1919, pp. 2593-2604. United States Public Health Service, Washington.

among a group of persons is expressed in the form of a rate, there is afforded no basis for comparison with sickness among other groups of persons, nor can the increase or decrease of sickness among any group be measured."

Study of Influenza-Pneumonia Among Wage Earners.

SIGNIFICANT facts concerning the mortality from the influenza epidemic of 1918-19 are brought out by Lee K. Frankel and Louis I. Dublin¹ in a paper read before the vital statistics section of the American Public Health Association meeting at New Orleans. The data cover the period from October 1, 1918, to June 30, 1919, and are limited to the policyholders of the industrial department of the Metropolitan Life Insurance Co., which represent over 12,000,000 people, white and colored, male and female, of all ages except early infancy and extreme old age. The group is well distributed over the United States and Canada and the results are considered to be generally applicable to the working population of the United States.

Of 105,552 policy claims paid during the period under investigation, 70,729 deaths were due to influenza-pneumonia. Slightly more than three-fourths of these deaths occurred during the months of October, November, and December, 1918, 34,471 occurring in October alone. When related to the number of years of life exposed, these deaths indicate an annual rate of 774 per 100,000 during the nine-month period. As against these ratings for the epidemic period there was a rate of 152 per 100,000 during the 12 months ending September 30, 1918. The difference between 774 and 152 per 100,000, namely, 622, is regarded as an approximate measure of the effect of the epidemic.

The chief interest in the statistics centers around the incidence of deaths in relation to sex, color, and age. The respiratory diseases under normal conditions show a higher mortality among males than females. For example, in the seven years from 1911 to 1917, the mortality rates of males showed an excess of 18 per cent over females, among white people, and of 30 per cent among colored. During the period from October, 1918, to June, 1919, however, the rates for males and females respectively were 789 and 763 among whites, and 767 for both males and females among colored people. "There is, altogether, a suggestion that the excess mortality caused by the epidemic did not

¹ Influenza mortality among wage earners and their families. By Lee K. Frankel and Louis I. Dublin. Reprinted from American Journal of Public Health, Vol. IX, No. 10, October, 1919, pp. 731-742.

operate on the sexes as the normal mortality from influenza-pneumonia had in previous years."

Normally, the incidence of respiratory diseases is much higher among colored than among white persons, the period from 1911 to 1917 showing an excess of 72 per cent of colored over white males and 56 per cent of colored over white females thus affected. It was found that during the period of the epidemic the situation was reversed, the first three months showing a rate of 1,522 per 100,000 for colored males as against 1,844 per 100,000 for white males; and of 1,504 per 100,000 for colored females against 1,723 for white females.

While during normal times influenza-pneumonia affects primarily the first age period, from one to four years, and the period of late middle and old age, the statistics of the epidemic show the highest rate among whites to be the period from 25 to 34 years, which in normal times shows the minimal rate. The authors conclude that "we are concerned in this epidemic with a disease or group of diseases which behave very differently from the way in which the disease known by the same names affected the community in previous years."

Advantages of Industrial Clinics in General Hospitals.

IN A paper read before the National Safety Council, Cleveland, Ohio, in October and reprinted in *Modern Medicine*,¹ Dr. D. L. Edsall, of the Massachusetts General Hospital, explains the advantages offered by the industrial clinic when it is operated in connection with a general hospital. He states that it is hardly to be expected that each individual industrial establishment will have in its employ a group of leading men in all the various lines of clinical and scientific medicine, and that for this reason hospitals, particularly those connected with medical schools and with the staffs that the latter have, will always need to be centers for the study and treatment of difficult cases and for the investigation of problems, however far health establishments in industrial plants may progress. He is convinced that no other method than a special clinic goes so far to insure good service to the patients and no other method so stimulates and enlightens the interest of the hospital staff in general in this important health factor. Likewise, by no other means, he declares, is it possible to group the cases together in such manner that the results of study can be analyzed and made available, and in

¹ Industrial clinics in general hospitals, by D. L. Edsall, M. D. In *Modern Medicine*, November, 1919, pp. 575-577.

no other way does there occur such an accumulation and repetition of experience as to make evident and important problems that had been unrecognized or had seemed of little significance.

To be really useful and successful several things appear to be necessary. The clinic should be in charge of a physician whose greatest interest is in the work, and he should be on sufficient salary to enable him to spend most or all of his time at the work. This is necessary in order that he may properly develop his clinic and be free to make visits to factories in order to accumulate constantly increasing knowledge of industrial processes, and in order to determine day by day whether in doubtful cases seen in the clinic the work really explains a part or the whole of the effect upon health. Much of his time will be needed also in making studies in the clinic, in factories, and in the laboratory of the problems that are frequently suggested; and in this he will have many opportunities to keep occupied voluntary or paid assistants.

Another essential element in the clinic's success will be a trained social worker who is familiar with factory conditions and industrial processes as well as with general social conditions.

Dr. Edsall believes that the primary value of such a clinic has been the better care of the patients, and that equally obvious are the opportunities offered for furnishing new knowledge and thus improving conditions through carefully planned studies and through accumulations and analyses of records.

The largest possibilities of useful development, according to Dr. Edsall, lie in the research that can be carried out "if the clinic acts as a center for coordinating the problems that are unearthed in it with the health and technical departments of the industries, on the one hand, and on the other, the men and facilities that are found in medical schools and hospitals." He suggests that "there are among these two groups and their equipment the possibilities of attacking all sorts of problems and, not infrequently, of solving them. Research developments that will control or do away with hazards are, in the opinion of the writer, in the long run far more important than the diagnosis and treatment of a group of cases, important as the latter is."

Physiologic Needs of Woman Workers in Relation to Incomes.

COMMENTING on the results of investigations by Greenwood, Hodson, and Tebb dealing with the metabolism of female munition workers, which have recently been published by the British Food (War) Committee of the Royal Society,¹ the Journal of the American Medical Association² says:

¹ Greenwood, M., Hodson, C., and Tebb, A. E.: Report on the metabolism of female munition workers, Proc. Roy. Soc., section B, 91:62 (Aug. 6), 1919.

² Journal of the American Medical Association, Nov. 15, 1919, p. 1533.

The war has for the first time made considerable demands on women to expend their energies in toil of an exacting sort. Hence the need of including them in the newer calculations of food requirement in relation to industry. * * * Grouping the operations of these persons (female munition workers) in the sequence of severity of the labor involved, it is concluded that light turning and forging need about 100 calories per square meter per hour. The data for other operations are as follows: For tool setting, heavy turning, stamping, finishing, and shell hoisting, 125 calories; for gauging, walking, and carrying, 160 calories; for more arduous labor, 180 calories. Translating these findings into food fuel requirements for the entire day, after allowance is made for culinary and alimentary waste, etc., the needs amount to 2,800, 3,100, 3,500, and 3,800 calories, respectively, per day. The figures cited show that the energy requirement of the lightest class of workers may be only about three-quarters that of the heaviest. Nevertheless, the remuneration of the kind of work conducted by the latter is often much less than that of several operations calling for many fewer calories. Even after making allowance for one and a half nonworking days, the weekly calory requirement of the two most unlike groups ranges from 17,000 at one extreme to 21,500 at the other. Any scheme of remuneration that aims to make returns adequate to keep the cost of food at a reasonably low proportion of the total income must take into account the decidedly greater food needs of those who often represent the least well-recompensed group. Thus, a food allowance of \$10 a week which just suffices for the less active worker must be augmented to \$13 in case the greater effort is expended. As the English experts now remind us, in any scientific appraisal of the income needed to maintain an accepted standard of living, it is essential to determine the minimal expenditure necessitated by the occupation of the wage earner. Variations in the physiologic demand translated into terms of money may nowadays be not inconsiderable.

The Use of Psychiatry in Industrial Medicine.

NEUROPSYCHIATRY proved itself of undisputed value in the medical history of the war. Its application to industrial medicine now appears to be accepted as a logical consequence, and references to the training and work of the industrial psychiatrist, the psychiatric nurse, and social worker are common, although their meaning is still somewhat cryptic so far as the average reader is concerned. It is, therefore, of special interest to see outlined clearly a probable field for the activities of the psychiatrist in industrial medicine and a goal toward which his work may be hopefully directed during the near future. A lucid statement as to what seems to be a reasonable application of psychiatry to industrial hygiene under the present limited understanding of this branch of medicine, combined with the limitations imposed upon its practice by industrial conditions, is presented by Dr. Stanley Cobb, neuropsychiatrist in industrial hygiene of the Harvard Medical School, in the *Journal of Industrial Hygiene*.¹

¹ Applications of psychiatry to industrial hygiene, by Stanley Cobb. *Journal of Industrial Hygiene*, November, 1919, pp. 343-347.

Dr. Cobb believes that much of the chaos in industry to-day is due to the unhealthy mental condition of the workers, and that this unhealthy condition is only the natural consequence of long endurance of an environment which ignores the fundamental needs of human nature and thus represses normal emotional and mental expression. He considers it no exaggeration to agree with Carleton Parker in saying that "Modern labor unrest has a basis more psychopathological than psychological, and it seems accurate to describe modern industrialism as mentally insanitary."

Stated in nontechnical language, the practical usefulness of industrial psychiatry lies in the study of the individual worker and his environment. The author thinks that a hopeful aspect of the present situation is the fact that the technical literature in the fields of political economy, education, industrial management, psychology, medicine, and social service shows "a feeling of broad humanitarianism, a desire to understand each member of the industrial system as an individual, and a reaction against the old system of exploiting labor to produce wealth."

He believes that the careless methods of reasoning regarding human nature which are a part of the orthodox tests must be exchanged for intelligent analysis of human motives, and that by so doing various phenomena such as business confidence, the release of work energy, the decay of workmanship, decline in the thrift habit, and labor unrest may be properly interpreted. He quotes Parker to the effect that the workman has about "16 instinct unit characters" which require satisfaction in the same degree as is usually provided for the college student. The same author in discussing the I. W. W. states that in the thwarting of these instincts and the limiting of the opportunities of the worker to obtain the happiness, personal development, and aid when sick that he needs, a state of mind amounting to an industrial psychosis is induced and that the I. W. W. are merely symptoms showing the neglect in these respects of industrial workers in this country. These "mentally insanitary" conditions may be corrected not only by shorter hours and increased pay but by the education of children so that they may learn how to use their leisure time properly.

Dr. Cobb believes that economists are outdistancing physicians in abandoning cut and dried methods and ideas, and that in developing mental hygiene in industry the physician must forget orthodox psychiatry and substitute an individual psychology which will take into consideration the reaction of individuals to their environment.

A hypothetical case is cited of what is commonly known as "nervous breakdown" in a department store employee, which might

have been prevented by a half-hour interview of an intelligent psychiatrist, leading to a little material assistance and a simple readjustment of the woman's personal problem. Such cases, variously called "neurasthenia," "psychasthenia," and "psychoneurosis" are common in wards and dispensaries, it is stated, where the doctors do little for them, the need being for an investigation and readjustment of the patients' personal problems. These conditions and need for this kind of treatment are found not only among people positively ill but among the restless, inefficient, and the radical elements of society. "Peabody and his collaborators found an interesting example of this in the cases of Effort Syndrome studied at U. S. A. General Hospital No. 9. A striking number of the histories showed that in civil life these men drifted from one employment to another, never breaking down enough to consult a physician, but adding their number to the shifting, inefficient labor element so costly to employers. It took the rigor of army life, with no possibility of escape by moving on, to bring out their symptoms. Before these people have left their work or have been fired for inefficiency, they should be interviewed by some one competent to understand them and their probable troubles. At such times advice from a physician, the loan of some money, a visit to a sick child or wife, or any of the thousand possible personal and individual aids, might save the worker from becoming soured, keep him from joining the ranks of the discontented, and prevent the development of a litigant and paranoid personality. * * *"

When the instincts for self-assertion, creation, and excitement are suppressed through the workings of the present industrial system the result is an abnormal frame of mind which is evidenced in striking, drinking, etc., unless some outlet for the workers' energies is provided. This whole field is so large, however, that Dr. Cobb believes the average industrial physician will be satisfied to watch for and treat sympathetically the psychotic symptoms as they appear in individuals.

In regard to the claims made as to the value of mental tests of applicants for industrial positions, he believes that they are of use from the point of view mainly of determining subnormal individuals, although they are of service in reducing misfits in shops—a condition conducive to mental breakdowns.

While mental fatigue has received much attention from psychiatrists, Dr. Cobb thinks that overwork is not the fundamental cause of neuroses or psychoneuroses but that these are fundamentally emotional breakdowns. Although the symptoms are similar to those of neuromuscular fatigue, this is cured by simple rest, which is not the case in the nervous diseases under discussion.

The mechanism of such a neurosis is typically something like this: An individual is in an intolerable situation which he is constitutionally unable to dominate; the reaction of a neurosis sets in with depression of spirits, irritability, preoccupation, self-pity, etc., but a conventional cause for the decreased efficiency must be found to rationalize the situation, so the individual calls it overwork. Obviously with this idea of overwork in mind the symptom usually acquired is fatigue or asthenia, but frequently symptoms more closely associated with the work are developed, such as paralysis of parts of the body necessary for work, muscular pains making work impossible, tremors, or even epileptiform seizures. * * * Work may of course be an etiological factor, but not through so simple a mechanism as accumulated fatigue. Work that represses emotional cravings often brings out neuroses, just as satisfactory work is the greatest curative agent we have for these conditions. Let us no longer fool ourselves into thinking that overwork, per se, is the cause of mental breakdown.

The problems of industrial psychiatry, therefore, summed up briefly are: Prevention of mental breakdowns by giving the worker the proper environment and removing causes of discontent, and treating such cases from an individual standpoint, as well as considering as psychiatric cases those persons who until recently have been given such unsympathetic names as "the groucher," "the kicker," "the trouble maker," and "the hobo."

A reasonable application of psychiatry to industry under present conditions would seem to be as follows:

1. Physical examination of all applicants for work.
2. Mental examination by (a) a period of training and observation, or (b) through mental tests.
3. Keeping in personal touch with employees by means of (a) good foremen, (b) a system for watching individual efficiency, or (c) a sympathetic staff with a psychiatric point of view in the employment management office, thus salvaging the men who might otherwise be fired.
4. Training the industrial physician to a knowledge of how human nature is constituted, not in conventional terms, but in the light of a dynamic and living psychology that considers the behavior of human beings in terms of instinctive sources of energy, integrated into motives, these motives needing outlet through energy transformation into satisfactory activity.

WORKMEN'S COMPENSATION.

Comparison of Compensation Laws in the United States, Including 1919 Legislation.¹

By CARL HOOKSTADT.

IN 1917 the Bureau of Labor Statistics made a comparison of the principal features of the workmen's compensation laws of the several States and Territories. This was published as Bulletin 240. Since then 33 jurisdictions have amended their compensation laws, while 5 new States² have been added to the list of those having such laws.

At present 42 States, the 3 Territories of Alaska, Hawaii, and Porto Rico, and the Federal Government have workmen's compensation laws upon their statute books.³ These laws range widely as regards both coverage and amount of benefits provided. In some of the States the scale of benefits is so low and the scope so limited that the compensation act is practically no improvement over the former employers' liability system.

Especially is this true of the recent Alabama act, which exempts all employers having less than 16 employees; provides no administrative commission; does not require employers to insure; and, the greatest weakness of all, permits settlements for less than the statutory amount of benefits. Furthermore, settlements between the employer and employee are final and not subject to review, except that cases in which periodical payments continue for more than six months may be modified on the ground of increase or decrease of incapacity due solely to the injury.

In attempting a comprehensible comparison of the various acts it is necessary to concentrate upon the more important features. The scope of an act—in other words, what industries are covered, what persons are compensated, and what exemptions are made—is perhaps of foremost importance. The amount of compensation received is probably the next important feature of a compensation law. This includes the compensation scale, the length of time for which compensation is paid, the maximum and minimum limits, the amount of

¹ The present article is a summary of a forthcoming bulletin.

² Alabama, Missouri, North Dakota, Tennessee, and Virginia.

³ North Carolina, South Carolina, Georgia, Florida, Mississippi, Arkansas, and the District of Columbia are the only jurisdictions still without such laws.

medical service provided, and the length of the waiting period. Other important features are the administrative system, provisions as to insurance, and type of injuries covered.

Compensation Systems.

Compensation laws may be either compulsory or elective. A compulsory law is one which requires every employer within the scope of the compensation law to accept the act and pay the compensation specified. There is no choice. An elective law is one in which the employer has the option either of accepting or of rejecting the act, but, in case he rejects, the customary common-law defenses are abrogated. The requirements as to insurance constitute another basis of classification. On this basis the laws may be classified as compulsory, including all laws in which some form of insurance is required, or optional, including laws in which no insurance is required. The following table shows the compensation States grouped according to these two classifications:

COMPENSATION STATES CLASSIFIED ACCORDING TO WHETHER LAW IS COMPULSORY OR ELECTIVE.

Compensation compulsory (13).		Compensation elective (32).	
Insurance required (12).	Insurance not required (1).	Insurance required (27).	Insurance not required (5).
California. Hawaii. Idaho. Illinois. Maryland. New York. North Dakota. Ohio. Oklahoma. Utah. Washington. Wyoming.	Arizona.	Colorado. Connecticut. Delaware. Indiana. Iowa. Kentucky. Maine. Massachusetts. Michigan. Missouri. Montana. Nebraska. Nevada. New Hampshire. New Jersey. New Mexico. Oregon. Pennsylvania. Porto Rico. Rhode Island. South Dakota. Tennessee. Texas. Vermont. Virginia. West Virginia. Wisconsin.	Alabama. Alaska. Kansas. Louisiana. Minnesota.

It will be noted that of the 45 compensation States¹ 13 are compulsory and 32 are elective as to compensation provisions, while 39 are compulsory and 6 elective as to insurance requirements.

¹ For the sake of simplicity all jurisdictions are referred to as States.

Very considerable differences appear in the methods provided by the laws of the 39 States in which insurance is obligatory. Thus the State may make provision for the carrying of such insurance, and require all employers coming under the act to avail themselves of such provision; or the State fund may simply offer one of alternative methods. Again, the State may refrain entirely from such action, but require insurance in private companies, stock or mutual; and lastly, self-insurance may be permitted, i. e., the carrying of the risk by the individual, subject to such safeguards as the law may prescribe.

The following table shows the groupings on the bases indicated:

COMPULSORY INSURANCE STATES, CLASSIFIED AS TO DIFFERENT KINDS OF INSURANCE ALLOWED.

State fund (17).		Private insurance (31).	Self-insurance (31).
Exclusive (8).	Competitive (9).		
	California.....	California.....	California.
	Colorado.....	Colorado.....	Colorado.
		Connecticut.....	Connecticut.
		Delaware.....	Delaware.
	Idaho ¹	Hawaii.....	Hawaii.
		Idaho.....	Idaho.
		Illinois.....	Illinois.
		Indiana.....	Indiana.
		Iowa.....	Iowa.
		Kentucky.....	Kentucky.
	Maryland.....	Maine.....	Maine.
		Maryland.....	Maryland.
	Michigan.....	Massachusetts.....	
		Michigan.....	Michigan.
	Montana.....	Missouri.....	Missouri.
		Montana.....	Montana.
Nevada.....		Nebraska.....	Nebraska.
		New Hampshire ²	New Hampshire. ³
		New Jersey.....	New Jersey.
		New Mexico.....	New Mexico.
	New York.....	New York.....	New York.
North Dakota.....			
Ohio ³			Ohio. ³
Oregon.....		Oklahoma.....	Oklahoma.
Porto Rico.....	Pennsylvania.....	Pennsylvania.....	Pennsylvania.
		Rhode Island.....	Rhode Island.
		South Dakota.....	South Dakota.
		Tennessee.....	Tennessee.
		Texas.....	
	Utah.....	Utah.....	Utah.
		Vermont.....	Vermont.
Washington.....		Virginia ⁴	Virginia. ⁴
West Virginia ⁵			West Virginia. ⁵
Wyoming.....		Wisconsin.....	Wisconsin.

¹ Idaho permits self-insurance. Employers who carry their own risk may insure in authorized guaranty companies.

² The New Hampshire law requires employers accepting the act to furnish proof of solvency or give bond, but makes no other provision for insurance.

³ Ohio permits self-insurance, but all employers are required to contribute their proportionate share to the State insurance fund surplus.

⁴ Self-insurers required to contribute 4 per cent of their premiums to commission's maintenance fund.

⁵ West Virginia has practically an exclusive State insurance system. Self-insurance is allowed, but employers desiring to carry their own risk must contribute their proportionate share to the administrative expenses of the law.

Broadly speaking, the laws may be divided into four main groups or combination of groups, namely: (1) Exclusive State fund, (2) competitive State fund, (3) private insurance, either stock or mutual, and (4) self-insurance or where employers are permitted to carry their own risk. In most cases the employers have the option of several kinds of insurance. This does not hold true, however, of the States having strictly exclusive systems. In these cases no other form of insurance is permitted.

It will be noted that six States have such exclusive systems. In three of these, Nevada, Oregon, and Porto Rico, compensation is elective and insurance is therefore not absolutely compulsory, since employers need not accept the act, but should they accept, insurance in the State fund is compulsory. In North Dakota, Washington, and Wyoming both compensation and insurance are compulsory. In these six States the State becomes the sole insurance carrier. It classifies the industries into groups according to hazard, fixes and collects premiums, adjudicates claims and pays compensation. Two other States (Ohio and West Virginia) are nearly exclusive in character. They allow no private casualty company to operate, but permit self-insurance. Ohio permits employers to carry their own risk, though all such employers are required to contribute their proportionate share to the State insurance fund surplus. Self-insurers, however, are not permitted to insure their risk in private companies. West Virginia has practically an exclusive State insurance system. It permits no private insurance, but does allow self-insurance. The employers, however, who desire to carry their own risk must contribute their proportionate share to the administrative expenses of the law.

In the other 31 States having compulsory insurance laws some form of competition exists, or at least the employer is given an option as to the method of insuring his risk. In nine of these States¹ the laws provide for a State fund through which the State conducts a workmen's compensation insurance business in competition with private liability companies. Private casualty companies, however, are permitted to write compensation insurance in all of these States. Idaho differs somewhat from the other States having competitive State funds. It allows employers to carry their own risk and also permits substitute insurance schemes if the benefits provided equal those of the act. Self-insurers, however, as evidence of satisfactory security, may furnish a surety bond or guaranty contract with any authorized surety or guaranty company. Moreover, the attorney general has

¹ California, Colorado, Idaho, Maryland, Michigan, Montana, New York, Pennsylvania, and Utah.

held that the words "guaranty contract" includes insurance contracts.

Of the 39 compulsory insurance States, 31 permit private companies to operate, the only exceptions being the 6 exclusive States of Nevada, North Dakota, Oregon, Porto Rico, Washington, and Wyoming, and the States of West Virginia and Ohio.

Thirty-one States allow employers to self-insure or carry their own risk, the exceptions again being the exclusive States and Massachusetts and Texas. Employers who avail themselves of this privilege are required either to give proof of their financial solvency and ability to pay compensation or to furnish bonds or other security, or to do both. In several States such employers are also permitted to secure their compensation payments by guaranty insurance.

New Hampshire's compensation law is exceptional in that employers who accept the act must furnish proof of financial solvency or deposit adequate security, but the law makes no other provision as to insurance.

Scope or Coverage.

No State compensation act, even when full use of the elective provisions is taken into account, covers all employees. The nearest approach to universal coverage is the New Jersey act, which includes all employees, except casual laborers, public officials, and public employees receiving salaries in excess of \$1,200. The principal exemptions, in the order of their importance, perhaps, are: Nonhazardous employments; agriculture; domestic service; numerical exemptions, i. e., exempting employers having less than a specified number of employees; public employees; casual laborers or those not employed for the purpose of the employer's business; and employments not conducted for gain.

Hazardous Employments.

The following 13 States include only hazardous employments: Alaska, Arizona, Illinois, Kansas, Louisiana, Maryland, Montana, New Hampshire, New Mexico, Oklahoma, Oregon, Washington, and Wyoming. In these States the industries covered are enumerated in the act. In Alaska only mining operations are included, but, in the other States, the principal hazardous employments are covered, including manufacturing, mining, transportation, and construction work.

Numerical Exemptions.

Twenty-two States exempt employers having less than a stipulated number of employees from the operation of the act, as shown in the following table:

NUMERICAL EXEMPTION STATES CLASSIFIED ACCORDING TO NUMBER OF EMPLOYEES EXEMPTED.

Employers having less than—						
3 employees (6).	4 employees (3).	5 employees (7).	6 employees (2).	10 employees (1).	11 employees (2).	16 employees (1).
Kentucky. Oklahoma. Porto Rico. Texas. Utah. Wisconsin.	Colorado. New Mexico. New York.	Alaska. Connecticut. Delaware. Kansas. New Hampshire. Ohio. Missouri.	Maine. Rhode Island.	Tennessee.	Vermont. Virginia.	Alabama.

Agriculture and Domestic Service.

Hawaii and New Jersey are the only States which include agriculture and New Jersey the only State which includes domestic service. In all other States these employments are excluded.

Public Employees.

The following 26 States include all public employees, including both State and municipal: California, Colorado, Connecticut, Hawaii, Idaho, Illinois, Indiana, Louisiana, Maine, Michigan, Montana, Missouri, Nebraska, Nevada, New Jersey, New York, North Dakota, Ohio, Oregon, Pennsylvania, Rhode Island, South Dakota, Utah, Virginia, West Virginia, and Wisconsin.

In the following 12 States the inclusion of public employees is only partial: Alabama, Louisiana, Kansas, Kentucky, Maryland, Massachusetts, Minnesota, Oklahoma, Porto Rico, Vermont, Washington, and Wisconsin.

In the following 7 States public employees are exempted: Alaska, Arizona, Delaware, New Hampshire, New Mexico, Tennessee, and Texas.

In addition to the foregoing exclusions, many States have special exemptions of more or less importance, the most frequent being the exclusions of highly paid employees, outworkers, and clerical occupations. Maine also excludes logging and Tennessee excludes coal mining.

Per Cent of Employees Covered.

The foregoing exclusions have to do only with the statutory scope of the compensation laws. But what do these various inclusions and exclusions really mean when applied in each State? How many employees are actually excluded through the nonhazardous, or numerical, or agricultural, or domestic service exemptions? Then again, how does the same statutory exclusion affect different States?

The exemption of agriculture in Rhode Island, for instance, is of little importance as compared to a similar exemption in Texas.

In the following table an attempt has been made to compute the percentage of employees covered by the compensation acts of the various States. The computations, though based upon a detailed analysis of the Federal occupation census figures, are in some cases merely estimates, and no claim is laid to such accuracy as the percentages would suggest. The aim has been, however, to maintain uniformity of treatment as between States, so that while the percentage of error for a given State may be considerable, the percentages given would show the relative status of each State with a reasonable degree of accuracy. The States are arranged in descending order of percentage of employees covered. All employees in employments covered by the compensation law are included irrespective of whether or not the employers in the elective States have accepted the act.

COMPENSATION STATES ARRANGED IN DESCENDING ORDER OF PERCENTAGE OF EMPLOYEES COVERED.

State.	Per cent of employees covered.	State.	Per cent of employees covered.
New Jersey	99.8	South Dakota	58.0
Hawaii	92.6	New Hampshire	56.0
Pennsylvania	88.8	Illinois	55.4
Massachusetts	87.8	Vermont	55.2
Michigan	83.1	Arizona	52.4
Rhode Island	82.9	Washington	51.5
Connecticut	81.9	Montana	50.9
New York	80.1	Oregon	48.7
West Virginia	80.1	Texas	47.9
Indiana	79.4	North Dakota	46.8
Minnesota	79.0	Wyoming	46.3
Ohio	76.3	Maryland	45.9
Nevada	76.2	Virginia	45.6
California	76.2	Tennessee	37.2
Wisconsin	75.4	Kansas	36.9
Utah	74.4	Oklahoma	35.9
Maine	72.9	Louisiana	35.2
Nebraska	70.4	Alabama	33.6
Idaho	68.7	Alaska	31.2
Missouri	66.1	New Mexico	30.7
Colorado	63.1	Porto Rico	20.5
Delaware	62.9		
Iowa	62.7		
Kentucky	60.2		

Waiting Period.

In most of the States, an injury to be compensable must cause disability for a certain length of time, no compensation being paid during this time. This noncompensable preliminary period is known as the "waiting period." In two States (Oregon and Porto Rico) there is no such waiting time, compensation being paid for all injuries producing any disability. The most common provision is that

disability must continue for more than one week, this being found in 22 States. Utah and the Federal Government require a waiting period of 3 days, 7 States of 10 days, and 13 of 2 weeks. In 21 States the waiting period is abolished entirely if the disability continues longer than certain specified periods.

The following table classifies the States according to length of waiting period:

COMPENSATION STATES, CLASSIFIED BY LENGTH OF WAITING PERIOD.

No waiting period (2).	3 days (2).	1 week (22).	10 days (7).	2 weeks (13).
Oregon. Porto Rico.	Utah. United States.	California. Connecticut (none if disabled over 4 weeks). Hawaii (none if partially disabled). Idaho. Illinois (none if disabled 4 weeks). Indiana. Kansas. Kentucky. Louisiana (none if disabled 6 weeks). Michigan (none if disabled 6 weeks). Minnesota. Missouri (none if disabled over 6 weeks). Nebraska (none if disabled 6 weeks). Nevada (none if disabled 2 weeks). North Dakota (none if disabled over 1 week). Ohio. Oklahoma (none if disabled 3 weeks). Texas. Vermont. Washington (none if disabled over 30 days). West Virginia. Wisconsin (none if disabled over 4 weeks).	Colorado. Maine. Massachusetts. New Jersey. Pennsylvania. South Dakota (none if disabled 6 weeks). Wyoming (none if disabled over 30 days).	Alabama (none if disabled 4 weeks). Alaska (none if disabled 8 weeks). Arizona (none if disabled over 2 weeks). Delaware (none if disabled 4 weeks). Iowa. Maryland (1 week if totally and permanently disabled). Montana. New Hampshire. New Mexico. New York (none if disabled over 7 weeks). Rhode Island (none if disabled over 4 weeks). Tennessee (none if disabled 6 weeks). Virginia.

Compensation Scale.

The actual amount of benefits received by injured workers is dependent upon the percentage scale, the weekly maximum, the periods for which compensation is paid, and the maximum amount payable in any individual case. The following table shows the maximum period and maximum amount of compensation for each State in case of death, permanent total disability, and partial disability:

MAXIMUM PERIODS AND MAXIMUM AMOUNT OF COMPENSATION PAYABLE IN CASE OF DEATH, PERMANENT TOTAL DISABILITY, AND PARTIAL DISABILITY.

States.	Death.		Permanent total disability.		Partial disability.	
	Weeks.	Amount.	Weeks.	Amount.	Weeks.	Amount.
Alabama.....	300	\$5,000	550	\$5,000	300	.....
Alaska.....	.....	6,000	.....	6,000	.....	\$4,800
Arizona.....	400	4,000	Life.	4,000	During disability.	4,000
California.....	240	5,000	Life.	.....	240	3 years' earnings.
Colorado.....	312	3,125	Life.	.....	During disability.	2,600
Connecticut.....	312	.....	520	.....	520	.....
Delaware.....	285	.....	475	4,000	285	.....
Hawaii.....	312	5,000	312	5,000	312	5,000
Idaho.....	400	.....	Life.	.....	150	.....
Illinois.....	416	4,000	Life.	.....	416	.....
Indiana.....	300	5,000	500	5,000	300	.....
Iowa.....	300	.....	400	.....	225	.....
Kansas.....	260	3,800	416	.....	416	.....
Kentucky.....	335	4,000	416	5,000	335	4,000
Louisiana.....	300	.....	400	.....	300	.....
Maine.....	300	3,500	500	4,200	300	.....
Maryland.....	416	4,250	Life.	5,000	.....	3,500
Massachusetts.....	500	4,000	500	4,000	During disability.	4,000
Michigan.....	300	.....	500	6,000	500	.....
Minnesota.....	300	.....	550	.....	300	.....
Missouri.....	300	.....	Life.	.....	400	.....
Montana.....	400	.....	Life.	.....	150	.....
Nebraska.....	350	.....	Life.	.....	300	.....
Nevada.....	Death or remarriage.	.....	Life.	.....	433	.....
New Hampshire.....	300	3,000	300	.....	300	.....
New Jersey.....	300	.....	400	.....	300	.....
New Mexico.....	300	.....	520	.....	.....	.....
New York.....	Death or remarriage.	.....	Life.	.....	During disability.	3,500
North Dakota.....	Death or remarriage.	.....	Life.	.....	During disability.	.....
Ohio.....	416	5,000	Life.	.....	During disability.	3,750
Oklahoma.....	Not covered.	.....	500	.....	300	.....
Oregon.....	Death or remarriage.	.....	Life.	.....	104	.....
Pennsylvania.....	300	.....	500	5,000	300	.....
Porto Rico.....	.....	4,000	.....	4,000	.....	2,500
Rhode Island.....	300	.....	500	5,000	300	.....
South Dakota.....	378	3,000	Life.	3,000	312	.....
Tennessee.....	400	.....	550	5,000	300	.....
Texas.....	360	.....	401	.....	300	.....
Utah.....	312	5,000	Life.	.....	312	5,000
Vermont.....	260	3,500	260	4,000	260	.....
Virginia.....	300	4,000	500	5,000	300	.....
Washington.....	Death or remarriage.	.....	Life.	.....	.....	2,000
West Virginia.....	Death or remarriage.	.....	Life.	.....	340	.....
Wisconsin.....	320	4,500	780	.....	During disability.	4,500
Wyoming.....	.....	3,000	.....	5,500	.....	1,500
United States.....	Death or remarriage.	.....	Life.	.....	During disability.	.....

Per Cent of Wages.

In all but three States (Oregon, Washington, and Wyoming) the amount of compensation is based upon wages. A number of States, however, provide fixed lump sums for certain injuries, but apply the percentage system to all others. In most of the States the prescribed percentage remains uniform for all injuries. A few States have varying percentages for different types of injuries, and in several States the percentage varies with conjugal condition and number of children.

In 18 States¹ the amount of compensation is 50 per cent of the employee's wages; in 4 States,² 55 per cent; in 9 States,³ 60 per cent; in 3 States,⁴ 65 per cent; and in 8 States⁵ and the Federal Government, 66 $\frac{2}{3}$ per cent.

Weekly Maximum and Minimum.

The compensation benefits based upon percentage of wages are usually modified by weekly maximum and minimum limits which may materially affect the amounts, though to what extent depends, of course, upon the wage level. Two States (Alaska and Wyoming) have no maximum or minimum provisions; 5 States,⁶ have a weekly maximum of \$10 or under; 1⁷ has a maximum of \$11; 11⁸ have a maximum of \$12; 7,⁹ of over \$12 and under \$15; 8,¹⁰ of \$15; 6 States¹¹ and the Federal Government have a maximum of over \$15 to \$18; 2 States¹² have a maximum of \$20 or over; while 3 States¹³ provide monthly pensions of fixed amounts.

Death.

The benefits for death in most cases approximate three or four years' earnings of the deceased employee. The methods provided for determining compensation for death vary somewhat. Two States¹⁴ provide for fixed absolute amounts without reference to wages or length of time, and one State¹⁵ proportions the amount of compensa-

¹ Alabama (increased to 60 per cent in certain cases), Alaska, Arizona, Colorado, Connecticut, Delaware, Illinois (increased to 65 per cent in certain cases), Maryland, Montana, New Hampshire, New Mexico, Oklahoma, Porto Rico, Rhode Island, Tennessee, Vermont, Virginia, and West Virginia.

² Idaho, Indiana, Louisiana, and South Dakota.

³ Hawaii (total disability only; partial, 50 per cent; death, 25 to 60 per cent), Iowa, Kansas (specified injuries, 50 per cent), Maine, Michigan, Nevada (total disability only; partial, 50 per cent; death, 15 to 66 $\frac{2}{3}$ per cent), Pennsylvania, Texas, and Utah.

⁴ California, Kentucky, and Wisconsin.

⁵ Massachusetts, Minnesota, Missouri, Nebraska, New Jersey (death, 35 to 60 per cent), New York, North Dakota, and Ohio.

⁶ Colorado, Louisiana, New Hampshire, and Virginia, \$10; Porto Rico, \$7.

⁷ Tennessee.

⁸ Alabama (increased to \$15 in certain cases), Idaho, Illinois (increased to \$15 in certain cases), Kentucky, Maryland, New Jersey, New Mexico, Ohio (death and permanent total disability, \$15), Pennsylvania, South Dakota, and West Virginia.

⁹ Montana and Vermont, \$12.50; Indiana, \$13.20; Connecticut, death and partial disability, \$18, other disabilities, \$14; Michigan, \$14; Rhode Island, total disability, \$14, other disabilities, \$10; Wisconsin, \$14.63.

¹⁰ Delaware, Iowa, Kansas, Maine, Minnesota, Missouri, Nebraska, and Texas.

¹¹ Utah, \$16; Hawaii and Oklahoma, \$18; Massachusetts, death and specified injuries, \$10, other disabilities, \$16; Nevada, \$9.23 to \$16.62; New York, \$15 to \$20; Federal Government, \$15.38.

¹² California, \$20.83; North Dakota, \$20.

¹³ Oregon, Washington, and Wyoming.

¹⁴ Alaska and Wyoming.

¹⁵ Porto Rico.

tion to the earning capacity and number and needs of dependents of deceased. Six States¹ provide for annual earnings for three or four years. The large majority of States, however, apply a wage percentage for specified periods. Of these, 2 States² pay death benefits for less than 300 weeks; 13³ for 300 weeks; 7⁴ for over 300 but under 400 weeks; 7⁵ for 400 to 500 weeks; while 6 States⁶ and the Federal Government provide benefits until the death or remarriage of the widow. Twenty-two States also place a limit upon the maximum amount payable in any one case. These maximum amounts range from \$3,000 in New Hampshire, South Dakota, and Wyoming to \$6,000 in Alaska. The Oklahoma law does not cover fatal accidents.

Permanent Total Disability.

Most States recognize the fact that a permanently disabled workman is a greater economic loss to his family than if he were killed outright at the time of the accident, and, consequently, provide greater benefits than in case of fatal accidents. Eighteen States⁷ and the Federal Government provide that for permanent total disability compensation payments shall continue for the full period of the injured workman's life. Three States⁸ pay benefits for 312 weeks or less; 7 States⁹ for 400 but under 500 weeks, 13 States¹⁰ for 500 to 550 weeks; and one State¹¹ for 9 to 15 years. Alaska and Wyoming provide fixed absolute amounts, while Porto Rico proportions the amount of compensation to the wage and age of the injured workman. Nineteen States also place a limit upon the maximum amount payable in any one case. These maximum amounts range from \$3,000 in South Dakota to \$6,000 in Alaska and Michigan.

¹ California, Kansas, New Hampshire, 3 years; Illinois, South Dakota, and Wisconsin, four years.

² Vermont, 260 weeks; Delaware, 285 weeks.

³ Alabama, Indiana, Iowa, Louisiana, Maine, Michigan, Minnesota, Missouri, New Jersey, New Mexico, Pennsylvania, Rhode Island, and Virginia.

⁴ Colorado, Connecticut, Hawaii, and Utah, 312 weeks; Kentucky, 335 weeks; Nebraska, 350 weeks; Texas, 360 weeks.

⁵ Arizona, Idaho, Montana, and Tennessee, 400 weeks; Maryland and Ohio, 416 weeks; Massachusetts, 500 weeks.

⁶ Nevada, New York, North Dakota, Oregon, Washington, and West Virginia.

⁷ Arizona, California, Colorado, Idaho, Illinois, Maryland, Missouri, Montana, Nebraska, Nevada, New York, North Dakota, Ohio, Oregon, South Dakota, Utah, Washington, and West Virginia.

⁸ Vermont, 260 weeks; New Hampshire, 300 weeks; Hawaii, 312 weeks.

⁹ Iowa, Louisiana, New Jersey, and Texas, 400 weeks; Kansas and Kentucky, 410 weeks; Delaware, 475 weeks.

¹⁰ Indiana, Maine, Massachusetts, Michigan, Oklahoma, Pennsylvania, Rhode Island, and Virginia, 500 weeks; Connecticut and New Mexico, 520 weeks; Alabama, Minnesota, and Tennessee, 550 weeks.

¹¹ Wisconsin.

Partial Disability.

Two methods for compensating partial disabilities are generally provided for. One method is based upon the percentage of wage loss occasioned by such disability, payments continuing during incapacity but subject to maximum limits. The second method is the adoption of a specific schedule of injuries for which benefits are awarded for fixed periods, the payments being based upon a percentage of wages earned at the time of the injury. Usually both methods of payment are provided for. The practice in most States is to pay a percentage of the wage for fixed periods for certain enumerated injuries and for all other injuries a percentage of the wage loss during disability. The number of injuries specified in the schedule varies in the different States, but provision is generally made for the loss of arm, hand, leg, foot, eye, fingers, and toes, and parts thereof.

In 36 States the schedules for enumerated partial disabilities are stated in terms of weeks. In 23 of these States¹ the amounts provided are in lieu of all other compensation benefits except medical service; in 10 States² and the Federal Government compensation is also paid for temporary total disability during the healing period in addition to the schedule amounts; in Massachusetts and Rhode Island, compensation is paid for total disability during the healing period and for partial disability thereafter, in addition to the schedule amounts; while Maine provides for continuing partial disability payments in addition to those provided by the schedule but not over 300 weeks in all. These facts should be borne in mind, therefore, in considering the following comparative table:

¹ Alabama, Colorado, Delaware, Hawaii, Idaho, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Montana, Nebraska, New Mexico, New York, Oklahoma, Pennsylvania, Tennessee, Texas, Virginia, and Wisconsin.

² Connecticut, Illinois, Missouri, Nevada, New Jersey, Ohio, Oregon, South Dakota, Utah, and Vermont.

NUMBER OF WEEKS FOR WHICH COMPENSATION IS PAYABLE FOR SPECIFIED INJURIES IN THE SEVERAL STATES.

State.	Loss of—													
	Arm (at shoulder).	Hand.	Thumb.	Index finger.	Middle finger.	Ring finger.	Little finger.	Leg (at hip)	Foot.	Great toe.	Other toe.	Sight of one eye.	Hearing, one ear.	Hearing, both ears.
Ala. ¹	200	150	60	35	30	20	15	175	125	30	10	100	.....	150
Colo. ¹	208	104	35	18	13	7	9	208	104	18	4	104	35	139
Conn. ²	208	156	38	38	30	25	20	182	130	38	13	104	52	156
Del. ¹	194	158	.....	.....	.....	.....	.....	194	135	.....	.....	113	.....	.....
Hawaii ¹	312	244	60	46	30	25	15	288	205	38	16	128	60	312
Idaho ¹	200	150	30	20	15	12	9	180	125	15	6	100	.....	.....
Ill. ²	200	150	60	35	30	20	15	175	125	30	10	100	.....	.....
Ind. ¹	250	200	60	40	35	30	30	200	150	60	20	150	.....	100
Iowa ¹	225	150	40	30	25	20	15	200	125	25	15	100	50	150
Kans. ¹	210	150	60	37	30	20	15	200	125	30	10	110	25	100
Ky. ¹	200	150	60	45	30	20	15	200	125	30	10	100	.....	.....
La. ¹	200	150	50	30	20	20	20	175	125	20	10	100	.....	.....
Maine ³	150	125	50	30	25	18	15	150	125	25	10	100	.....	.....
Md. ¹	200	150	50	30	25	20	15	175	150	25	10	100	.....	.....
Mass. ⁴	50	50	12	12	12	12	12	50	50	12	12	50	.....	.....
Mich. ¹	200	150	60	35	30	20	15	175	125	30	10	100	.....	.....
Minn. ¹	200	150	60	35	30	20	15	175	125	30	10	100	.....	156
Mo. ²	220	165	55	40	32	32	20	195	140	35	12	100	40	160
Mont. ¹	200	150	30	20	15	12	9	180	125	15	6	100	.....	.....
Nebr. ¹	225	175	60	35	30	20	15	215	150	30	10	125	50	100
Nev. ²	260	217	65	39	30	22	17	217	173	30	11	108	87	260
N. J. ²	200	150	60	35	30	20	15	175	125	30	10	100	40	160
N. Mex. ¹	150	110	30	20	15	10	9	140	100	15	6	100	35	135
N. Y. I. ¹	312	244	60	46	30	25	15	288	205	38	16	128	.....	.....
Ohio ²	200	150	60	35	30	20	15	175	125	30	10	100	.....	.....
Okla. ¹	250	200	60	35	30	20	15	175	150	30	10	100	.....	.....
Oreg. ²	416	329	104	69	39	35	26	381	277	43	17	173	156	416
Pa. ¹	215	175	.....	.....	.....	.....	.....	215	150	.....	.....	100	.....	.....
R. I. ⁴	50	50	12	12	12	12	12	50	50	12	12	50	.....	.....
S. Dak. ²	200	150	50	35	30	20	15	160	125	30	10	100	.....	.....
Tenn. ¹	200	150	60	35	30	20	15	175	125	30	10	100	.....	150
Tex. ¹	200	150	60	45	30	21	15	200	125	30	10	100	.....	150
Utah ²	200	150	30	20	15	12	9	180	125	15	6	100	.....	.....
Va. ¹	200	150	60	35	30	20	15	175	125	30	10	100	.....	.....
Vt. ²	170	140	40	25	20	15	10	170	120	20	8	100	43	170
Wis. ¹	320	240	70	32	20	12	14	300	180	25	8	140	40	160

¹ Payments under this schedule are exclusive of or in lieu of all other payments.
² Payments under this schedule are in addition to payments for temporary total disability during the healing period.
³ Payments cover total disability. Partial disability may be compensated at end of periods given for not over 300 weeks in all.
⁴ Payments under this schedule are in addition to all other payments.

Comparison of Benefits.

Thus far the various compensation factors have been treated as individual units. In the following table an attempt has been made to determine what benefits would be received under each compensation law in a given accident. Four representative types of injuries were taken as follows: (1) Death, (2) loss of major hand at wrist, (3) total disability for a period of 4 weeks, and (4) total disability for a period of 13 weeks. The waiting period was deducted in com-

puting the benefits for both of the disability items and for the loss of the hand in case compensation for temporary total disability was provided by law.

The example taken was that of a married man, 35 years of age, receiving \$21 a week, and having a dependent wife, 30 years of age, and three normal dependent children, 3, 6, and 9 years of age. In computing the life expectancy of the injured man or his widow the American experience table of mortality was used.

The maximum benefits in each case have been given. The amounts computed for death include burial expenses where such are provided by law. It has been assumed that the loss of the hand resulted in a total disability of 26 weeks and a subsequent partial disability of 50 per cent for life. Several States have no schedules of specified injuries, and in such States the compensation for loss of the hand has been based upon the given percentage of wages for the given number of weeks limited by the maximum amounts. In such States, together with those States which provide for a continuing partial disability in addition to the specified scale, both compensations have been given, i. e., compensation for total disability only and compensation for total plus partial disability. Compensation for total disability during the healing period has been included in the amounts given for those States which provide for such benefits. For the total disability accidents, as already noted, the waiting period in each case has been taken into consideration and deducted from the amount of the compensation.

It has been the purpose to take an example which is most typical of all States and conditions. It is admittedly true that the specific example and the four items taken will result in a higher scale for some of the States than would have resulted had a different example been taken or had the whole scale of compensation benefits been considered. For example, compensation for the death of a married man with three children would result favorably for such States as Nevada, North Dakota, Oregon, Washington, New York, and West Virginia, which pay compensation until the death or remarriage of the widow.

In computing the money benefits no account has been taken of the present value of such benefits. A fixed lump sum paid outright at the time of the injury of course exceeds the present worth of the same amount paid in weekly installments over a period of years. In comparing the computed benefits, therefore, it is necessary to take this fact into consideration.

COMPARISON OF BENEFITS PAID UNDER THE WORKMEN'S COMPENSATION LAWS OF THE SEVERAL STATES.

State.	Money benefits received in typical cases.			
	Death.	Loss of hand. ¹	Total disability accident.	
			4 weeks.	13 weeks.
Alabama.....	\$3,250	\$1,890	\$50.40	\$163.80
Alaska.....	4,800	2,400	21.00	136.50
Arizona.....	4,000	273	42.00	136.50
		² 4,000		
California.....	3,276	2,853	40.95	163.80
Colorado.....	3,125	1,040	25.71	115.71
Connecticut.....	3,376	1,911	31.50	136.50
Delaware.....	4,994	1,659	42.00	136.50
Hawaii.....	5,100	2,562	37.80	151.20
Idaho.....	7,315	1,733	34.65	138.60
Illinois.....	4,000	2,402	54.60	177.45
Indiana.....	3,565	2,310	34.65	138.60
Iowa.....	3,880	1,890	25.20	138.60
Kansas.....	3,276	1,575	37.80	151.20
Kentucky.....	4,075	1,800	36.00	144.00
Louisiana.....	3,565	1,733	34.65	150.15
Maine.....	3,500	1,575	32.40	145.80
		² 2,678		
Maryland.....	4,325	1,575	21.00	115.50
Massachusetts.....	4,000	844	36.00	162.00
		² 4,844		
Michigan.....	3,780	1,890	37.80	163.80
Minnesota.....	3,880	2,100	42.00	168.00
Missouri.....	4,300	2,674	42.00	182.00
Montana.....	4,275	1,575	21.00	115.50
Nebraska.....	5,050	2,450	42.00	182.00
Nevada.....	15,672	2,606	59.63	193.80
New Hampshire.....	3,000	240	20.00	110.00
		² 1,679		
New Jersey.....	3,250	2,095	30.86	138.86
New Mexico.....	3,540	1,155	21.00	115.50
New York.....	15,647	3,416	28.00	182.00
North Dakota.....	17,582	3,640	56.00	182.00
Ohio.....	5,150	2,150	42.00	168.00
Oklahoma.....	(³)	2,100	42.00	136.50
Oregon.....	⁴ 13,837	⁴ 2,005	⁴ 45.36	⁴ 147.42
Pennsylvania.....	5,406	2,100	30.86	138.86
Porto Rico.....			28.00	91.00
Rhode Island.....	3,000	773	21.00	136.50
		² 2,348		
South Dakota.....	3,000	2,033	29.70	150.15
Tennessee.....	4,300	1,575	21.00	136.50
Texas.....	4,536	1,890	37.80	151.20
Utah.....	4,094	2,212	45.00	158.40
Vermont.....	2,557	1,859	31.50	126.00
Virginia.....	3,100	1,500	20.00	110.00
Washington.....	14,869	1,915	36.35	157.50
West Virginia.....	10,249	2,100	31.50	126.00
Wisconsin.....	4,468	3,276	40.95	177.45
Wyoming.....	3,050	1,348	38.88	174.00
United States.....	17,582	258	50.00	176.00
		² 11,954		

¹ It is assumed that loss of hand causes decrease of 50 per cent in earning capacity.

² Includes compensation for partial disability.

³ Fatal accidents not covered.

⁴ 10 per cent deducted to cover employee's contributions.

Medical Benefits.

The following tabular statement shows briefly the maximum medical benefits provided under the various compensation laws:

MAXIMUM PERIODS AND AMOUNTS OF MEDICAL SERVICE UNDER VARIOUS COMPENSATION LAWS.

State.	Maximum period.	Maximum amount.	State.	Maximum period.	Maximum amount.
Alabama.....	60 days.....	\$100	New Jersey.....	4 weeks ¹	¹ \$50
Alaska.....	.....	.....	New Mexico.....	2 weeks.....	\$50
Arizona.....	.....	.....	New York.....	60 days ¹	Unlimited.
California.....	Unlimited..	Unlimited.	North Dakota.....	Unlimited.....	.....do.....
Colorado.....	60 days.....	\$200	Ohio.....	.....do.....	¹ \$200
Connecticut.....	Unlimited..	Unlimited.	Oklahoma.....	60 days ¹	¹ \$100
Delaware.....	2 weeks.....	\$75	Oregon.....	Unlimited....	¹ \$250
Hawaii.....	Unlimited..	\$150	Pennsylvania.....	30 days.....	¹ \$100
Idaho.....	.....do.....	Unlimited.	Porto Rico.....	Unlimited.....	Unlimited.
Illinois.....	8 weeks ¹	¹ \$200	Rhode Island.....	4 weeks.....	.....do.....
Indiana.....	30 days ¹	Unlimited.	South Dakota.....	12 weeks.....	\$150
Iowa.....	4 weeks.....	¹ \$100	Tennessee.....	30 days.....	\$150
Kansas.....	50 days.....	\$150	Texas.....	2 weeks ¹	Unlimited.
Kentucky.....	90 days.....	\$100	Utah.....	Unlimited.....	\$500
Louisiana.....	Unlimited..	\$150	Vermont.....	2 weeks.....	\$100
Maine.....	30 days ¹	¹ \$100	Virginia.....	30 days.....	Unlimited.
Maryland.....	Unlimited..	\$150	Washington.....	Unlimited ².....	.....do ²
Massachusetts.....	2 weeks ¹	Unlimited..	West Virginia.....	Unlimited.....	\$600
Michigan.....	90 days.....	.....do.....	Wisconsin.....	90 days ¹	Unlimited.
Minnesota.....	.....do ¹	¹ \$100	Wyoming.....	Unlimited.....	\$100
Missouri.....	8 weeks.....	\$200	United States.....	.....do.....	Unlimited.
Montana.....	2 weeks.....	\$50			
Nebraska.....	Unlimited..	\$200			
Nevada.....	90 days ¹	Unlimited..			
New Hampshire.....	.....	.....	

¹ Additional service in special cases or in discretion of commission.

² Employees must pay one-half of medical cost.

It will be noted that three States (Alaska, Arizona, and New Hampshire) furnish no medical service except that in fatal cases involving no dependents the expenses of last sickness shall be paid by the employer. Six compensation acts¹ provide unlimited service. Nine laws place no limitation upon the period during which medical treatment shall be furnished, but do limit the amount; while nine limit the period, but do not limit the amount. All of the other laws place limitations upon both period and amount.

Administration.

Some responsible administrative body is necessary to insure to the injured workman his rights under the law, and to see that he receives the full amount of his compensation immediately and regu-

¹ California, Connecticut, Idaho, North Dakota, Porto Rico, and the Federal Government.

larly. Eleven¹ of the 45 States, however, have no such administrative body. In these States compensation matters are settled directly by the parties concerned and in case of dispute the question is taken to the courts for adjudication.

Reports of Industrial Accident Boards.

Idaho.²

THE Industrial Accident Board of the State of Idaho submits as its first annual report an account of the operations of the law for a period of 10 months. Being of the nature of an introductory report, several pages are given to an account of compensation legislation in the United States, and more in detail to the history of the law of Idaho and the organization of the administrative board. An analytical statement sets forth the general provisions of the law of the State.

During the 10 months covered by this report there were 3,849 accidents reported, of which 3,083 have been finally disposed of. The law provides for a seven-day waiting period, and 1,463 cases of injury were of such brief duration as to receive no benefits on this account. Awards were made in 1,565 nonfatal cases, aggregating \$69,293.62, or an average of \$44.28 per case. In 18 fatal cases the awards aggregated \$95,664.74, or an average of \$5,314.71. The same average for 720 nonfatal and 43 fatal cases unsettled would bring the actual and estimated awards and compensation for the first 10 months up to \$425,372.49. To this should be added hospital bills totaling \$56,354.40, making \$481,726.49 as the total amount of benefits accruing to injured workmen during the first 10 months' operation of the law.

Computation is made of the wage loss actually suffered by reason of the waiting period of seven days prescribed by the act. This amount is based on the average reported wage of \$4.15 per day, and aggregates \$60,116.90. As the law provides for benefits on a basis of 55 per cent of the wages, it is evident that the injured workman bears not only the 45 per cent wage loss in every case, but the total of this additional \$60,116.90 by reason of such a moderate waiting period as the seven days provided for by the Idaho statutes.

The nature of the industries of the State is clearly reflected in the classification of accidents by industries, 1,209 occurring in lum-

¹ Alabama, Alaska, Arizona, Kansas, Louisiana, Minnesota, New Hampshire, New Mexico, Rhode Island, Tennessee, and Wyoming.

² First annual report of the Industrial Accident Board of the State of Idaho from January 1, 1918, to October 31, 1918. Boise, 1918. 24 pp.

ber and timber, and 1,067 in mining, quarrying, and metallurgy, these two groups furnishing more than two-thirds of the 3,083 closed cases of accidents under consideration. Manufacturing afforded but 112 cases, while construction furnished a larger number—197 in all. The nature of the industries also affects the number of fatal accidents, the report stating that:

The death rate in Idaho has gone far beyond the national standard, which is 0.932, or less than 1 per cent, while our experience has proven 1.584, or over 1½ per cent; that is, in every 100,000 accidents in Idaho there would be 1,584 deaths, while according to the national standard there should be but 932. There are two very good reasons for this: First, the proportion of workmen in the two hazardous industries of lumbering and mining is greater in Idaho than in the average State; second, our lumbering operations in great part are carried on in hilly country, which also is subject to continued snowfall and cold weather, with resultant increase in hazard far above level country and more moderate climatic conditions.

A suggestive incident relates to the refusal of a municipality to insure its liabilities under the law, it claiming a right to carry its own risk. Two serious accidents occurred to its employees during the year, so that it "finds itself confronted with a liability approximately ten times greater than would have been the cost of insuring with the State fund as contemplated by the law."

The law permits payments to nonresident alien dependents only in proportion as the country of citizenship permits payment in corresponding circumstances; but difficulty has been experienced by the commission in discovering the provisions of the laws of residence of a number of claimants, and in view of the extreme unlikelihood of any practical reciprocal adjustment ever being made, this provision would seem to be more of a burden than any practical benefit, unless the purpose is to exclude nonresident alien beneficiaries.

Maryland.¹

THIS report is limited to a brief statement of the operations of the board, the value of laws of this type being regarded as so fully established as to require no discussion. During the year 42,570 reports of industrial accidents were received, of which 5,015 claims were disposed of during the year; 163 were claims based on deaths. Claims were allowed in 4,826 cases and disallowed in 387 cases; 129 cases remained pending, as against 310 pending cases remaining from the preceding year. Benefits awarded aggregate \$884,919.24, of which \$120,930 was reported as medical expense on accidents not resulting in claims.

¹ Fourth annual report of the State Industrial Accident Commission of Maryland, for the year November 1, 1917, to October 31, 1918. Baltimore, 1919. 40 pp.

Out of 5,015 claims through the year, 163 were for fatalities, 6 for permanent total disability, and 458 for permanent partial disability. Mining and quarrying furnished 263 accidents, manufacturing 2,058, and construction 1,544.

A State accident fund is maintained in competition with other insurance systems, having in force at the end of the year 1,438 policies. This is a comparatively small fraction of the 9,456 employers insured under the act, but an encouraging growth is indicated in the fact that, as compared with the past year, the net premiums show an increase of 46 per cent, the total for the year covered being almost equal to the combined premiums of the two preceding years. The loss record was 49.6 per cent on the premiums written and the expense ratio was 8.4 per cent. A catastrophe reinsurance of 4 per cent and a catastrophe reserve of 10 per cent bring the total cost of insurance up to 72 per cent on the premiums written. This report was regarded as "exceedingly gratifying" in view of the number of inexperienced workmen employed in numerous war activities. The fund was the subject of an audit by the State auditor during the year, and though some minor errors in bookkeeping were disclosed, the books and accounts were reported as "correct." Assets aggregate \$369,921.63, with a total net surplus of \$199,046.96.

Montana.¹

THE Industrial Accident Board of Montana is charged with the administration not only of the compensation law of the State but also with the inspection of mines and steam boilers. Nearly one-half of the present volume is taken up with an account of its inspection work and a reproduction of the laws enforced by it.

In the portion devoted to the compensation law, several pages are given over to a general consideration of the principles involved; a reproduction of the opinion of the Supreme Court of Montana in the case of *Shea v. North Butte Mining Co.*, in which the constitutionality of the compensation law was upheld; discussions of particular features of the law, medical and hospital service, waiting period, coverage, State funds, etc. The problem of the crippled workmen is considered at some length, and rehabilitation is strongly urged. It is estimated that the 609 permanently crippled men, reported during the four years of the operation of the law, could be restored to industry at a total cost not exceeding one-half of the

¹ Fourth annual report of the Industrial Accident Board, for the 12 months ending June 20, 1919. Helena, 1919. 437 pp.

economic loss represented by their food alone, and that their restoration to industry would give a net gain of \$280,000 a year. It is recommended that a rehabilitation fund be formed by contributions from employers in cases where fatal accidents occur leaving no beneficiaries or dependents, as is done in the State of New York to provide a fund for compensating second injuries resulting in total disability.

A point of interest is the number of cases (in excess of 6,000) that have come before the board for adjudication during the period of its existence without a single appeal being taken to the courts from the rulings made. The case taken to the supreme court was on a friendly suit for the purpose of securing an authoritative ruling as to the construction of the law.

Three plans of insurance is permitted: First, self-insurance; second, insurance in a private company; and third, insurance in a State fund. Under the first and last plans there have been practically no disputes and very few delays in settlement, the State fund showing but 14 cases in which the payment of compensation was delayed beyond the day when it was due. "Unfortunately, under plan 2, many of the insurance companies are dilatory in the payment of compensation, and in many cases the first payment on disability cases has not been made until 90 days after the accident, due to the necessity of the claim being sent to the eastern office of the company for adjustment."

The statistical tables show the accidents, awards, etc., under each insurance plan, separately. Risk classes are reported on separately as to the rates, incomes, benefits, and balances in the State fund. The total assets of the fund amount to \$500,462 at the end of the year, with an available balance of \$94,279. The premium income for the year covered by the report was \$181,709, of which \$68,708 was paid out in compensation. For the four fiscal years during which the fund has been in existence the premium income was \$386,390, of which \$64,835 has been expended for compensation, distributed as follows: For temporary total disabilities, 40 per cent; for permanent partial disabilities, 18 per cent; for fatal injuries, 27 per cent; doctors and hospital bills, 11 per cent; funeral expenses, 2 per cent.

The report shows 1,970 employers under the act as of June 30, 1919, with 50,386 employees; of these, 64 employers with 24,848 employees are self-insurers; 874 employers with 10,857 employees are insured in private companies; and 1,032 employers with 14,681 employees are insured in the State fund. During the year 1918-19, 5,475 accidents were reported, of which 122 were fatal; 1 caused a permanent total disability; 151, permanent partial disability; and 5,201, temporary total disability.

A computation is made of the time and wage loss on account of accidental injuries during the four years covered by the law. The total time loss is given as 256,738 days, entailing a wage loss of \$1,075,085, or an average of \$4.19 per day. The greatest loss is 132,677 days in mining other than coal, the wage loss being \$573,693; next in order is smelters, 30,435 days, with a wage loss of \$125,407. Coal mining and logging and lumbering come next in rank. Evidently, in addition to the above, should be considered the loss due to accidental death; 688 fatalities have been reported, the average age of the decedents being 33 years. On the basis of the American experience table of mortality, these deaths represented a time loss of 22,015 years, or at the average daily wage in the State a wage loss of approximately \$30,000,000.

Medical Treatment for Government Employees Under Federal Compensation Act.

HOW the Employees' Compensation Commission of the United States Public Health Service has dealt with the problems involved in securing proper and adequate medical service for injured Government employees is explained by Dr. John W. Trask, medical director of the commission, in the October issue of *Modern Medicine*.¹ The experience of the commission is not only interesting, but, being practically suggestive, ought to be of value to all who are concerned in the provision of hospital benefits for large numbers of employees.

The benefits provided by the United States Employees' Compensation Act to employees of the Government injured in the performance of duty are of three classes: (1) Medical and hospital treatment; (2) money compensation for loss of wages in excess of three days; and (3) money compensation to the surviving dependents of employees dying as a result of injuries. Dr. Trask's article concerns only the first of these classes, which is covered by the following section of the law:

That immediately after an injury sustained by an employee while in the performance of his duty, whether or not disability has arisen, and for a reasonable time thereafter, the United States shall furnish to such employee reasonable medical, surgical, and hospital services and supplies unless he refuses to accept them. Such services and supplies shall be furnished by United States medical officers and hospitals, but where this is not practicable shall be fur-

¹ Medical and hospital treatment under United States compensation act. By John W. Trask. In *Modern Medicine*, October, 1919, pp. 489-495.

nished by private physicians and hospitals designated or approved by the commission and paid for from the employees' compensation fund. If necessary for the securing of proper medical, surgical, and hospital treatment, the employee in the discretion of the Commission, may be furnished transportation at the expense of the employees' compensation fund.

Reasonable medical service is defined by Dr. Trask as unlimited medical service.

It [the law] provides that medical service for an injury shall be furnished for a reasonable time after the injury. As a reasonable time will be as long as the injured person has need of treatment on account of the injury, the service is coexistent with the need thereof.

The provision that the medical and hospital service furnished shall be reasonable limits it to that which may properly be considered to be effective in bringing about the restoration of damage done by the injury; that is, the restoration in so far as possible of the injured person to the physical condition possessed by him previous to the injury. This implies efficiency of the service rendered.

The problem, then, becomes entirely one of how best to secure efficient medical and hospital service for Government employees who may be injured while at work in any part of the country. As most injuries are of an emergency nature and require immediate treatment, it is necessary that such treatment be available wherever employees are located. Such provision has been made by the dispensary service furnished by the War Department at its arsenals, principal ordnance plants, and supply depots, and by the Navy Department at its navy yards; and the United States Public Health Service has cooperated by making freely available to all beneficiaries of the compensation act its hospitals and dispensaries, wherever located. When, however, the injury occurs in a locality in which no Government hospital or dispensary is provided, it must be treated by a physician or at a hospital designated by the commission; and as United States hospitals and medical officers have a relatively limited distribution, the designation of such hospitals and physicians involves problems of great importance for which the commission has found the best solution only through its experience in dealing with them. In this connection Dr. Trask says:

The idea was first held that the necessary medical, surgical, and hospital service for injured employees could be best obtained wherever Government hospitals and dispensaries were not available by the designation and use of hospitals, as it was believed that the hospital represented group medicine; that the injured employees could be sent to the hospitals and there would receive the attention of whatever specialist the nature of their various injuries indicated, be it the general surgeon, orthopedic surgeon, ophthalmologist, neurologist, roentgenologist, pathologist, or bacteriologist; that the question of medical and surgical treatment could be left to the hospital; and that only where there was no Government hospital or dispensary, or private hospital, would there be need of designating private physicians.

The commission, however, early found that leaving the question of medical and surgical treatment to the hospital was not a practicable arrangement; that the hospital service as relates to bed, board, and nursing was in most city hospitals a thing quite apart from the furnishing of the efficient medical and surgical attention implied by the Federal compensation act. Patients sent to hospitals were frequently given scant consideration. If assigned to a particular physician, it was often to one of lesser experience. Often the cases seemed to be left entirely to the inadequate attention of the busy resident staff. This was true in general, excepting in the proprietary hospitals in the smaller towns. It was true even of the better hospitals, one might say of the best hospitals, of the larger cities.

This point is illustrated by detailed accounts of several cases in which suffering was entailed and recovery delayed by inefficient treatment given the patients at the hospitals to which they were sent. The commission has now adopted the method of designating, in connection with each hospital, one or more competent, well-trained surgeons of established reputation, and it requires that every compensation case going to the hospital shall be placed under the immediate care of one of the designated physicians. Under this arrangement the hospital renders its bill for hospital care and the surgeon renders his bill for professional attention. "This insures to the injured employee the personal and interested service of a competent physician, and gives to him the same close attention he would receive as a private patient of a reputable, competent practitioner. If the services of other specialists or consultants are required, the attending surgeon secures such services, submitting bills therefor."

When the commission first began the designation of physicians and hospitals the question of the required qualifications of the physicians or surgeons selected seemed to present a serious problem, as it was feared that the charges of highly qualified, experienced men, particularly surgeons, would be exorbitant. Experience soon proved, however, that the commission could not afford any but the most competent men available in the locality, as the handling of injury cases by men of insufficient training or experience frequently resulted in the making of permanent cripples, particularly in bone and joint injury cases, which might have been prevented by the services of competent orthopedic surgeons. In this connection Dr. Trask says:

The commission was happy and, in a measure, surprised to find that the bills presented by the well-trained and experienced surgeons were in general no greater than the bills presented for treatment of similar cases by men of inadequate and insufficient training. In fact, the charges made by the most competent men have been on the whole the most reasonable, particularly so when the much better service rendered is considered. A permanent cripple is a charge against the commission as long as he lives. Every employee restored to work, every cripple prevented, is an economy.

Another question which had to be decided by the commission after due consideration was whether or not to adopt a schedule of rates or charges for medical services. The decision was against such a fee schedule.

The plan adopted was to use as great care as possible in designating under the provisions of the act, only men with adequate training and considerable experience in surgery, of mature age, and of established reputation in their respective communities; and then to explain to those appointed that the purpose of the commission was to secure service; that in bone or joint injuries the commission expected X-ray examination and control; that where there appeared to be any reason therefor, neurologists, pathologists, or other specialists should be called in consultation; that the purpose of the commission was to make the best possible restoration of the injured person; and that as regards charges the commission merely expected that the charges would be reasonable for the service rendered.

The commission has found that this arrangement was acceptable to and welcomed by the class of men they selected—a class of men whose services it would have been impossible to obtain under the limitations of a fee schedule—and this notwithstanding the fact that the fees actually charged have been within the limits of any reasonable fee schedule which might have been adopted. Should the commission find one of its designated surgeons giving inadequate service or making unreasonable charges, it has recourse to cancellation of his designation; but there have been exceedingly few instances in which this has been called for.

The plan now followed by the commission is to designate the physician and then to ask him to indicate the hospital he would like to use for the injury cases requiring hospital treatment. The injured employee is sent to the surgeon or physician, and, if a hospital case, he is then sent to the hospital, or, if the injury is serious, he is sent direct to the hospital and the physician is notified. The patient is usually placed in the general ward of the hospital, but a private room and special nurse are allowed when, in the opinion of the physician, such are necessary. In fact, any service actually needed by the patient is allowed. In the event of a patient who is assigned to a ward desiring a private room for his own convenience he may secure one by paying the difference between the ward rate and the rate for the room.

The experience of the commission is summed up briefly as follows:

(1) In Government hospitals and dispensaries the service rendered varies with the training and personality of the members of the staffs.

(2) In non-Government hospitals good medical and surgical service is usually not obtained unless the cases are put in charge of selected physicians or surgeons paid by the commission.

(3) Paying the "doctor's" bills for an injured employee is not synonymous with furnishing reasonable medical and surgical service.

(4) Reasonable and adequate medical and surgical service can be obtained only from conscientious physicians and surgeons with good training and experience.

SOCIAL INSURANCE.

Attitude of Medical Society of the State of New York Toward Compulsory Health Insurance.

THE attitude of the Medical Society of the State of New York toward compulsory health insurance, proposed for legislative enactment, is set forth in a report drawn up by a special committee appointed by the president of the society to study the subject of compulsory health insurance with special reference to its relationship to the medical profession, which report was adopted by the house of delegates of the society on November 22, 1919. The report gives a brief résumé of the subject, outlines the provisions of the proposed legislation, and concludes with a statement of findings and a recommendation that the medical society "unqualifiedly oppose the enactment by the Legislature of the State of New York of any law instituting a system of compulsory insurance against sickness because of its menace to the public health of the State." The committee's statement, together with its findings and recommendation, as adopted is as follows:

The essential components of all compulsory health insurance schemes are two: First, the provision of a cash indemnity during a relatively brief period of incapacity to labor due to illness; secondly, the provision to the insured and their dependents during a determinate time of so-called medical benefits which comprise medical, dental, and nursing attendance, hospital and sanatorium accommodations, maternity attendance, drugs, and all necessary medical and surgical supplies.

The proponents of this legislation rest their demand for the institution of this scheme in America upon two main allegations: First, that a very large amount of poverty is due to illness causing consequent unemployment and loss of income; secondly, that a vast amount of the population receives inadequate and insufficient medical attendance; that is, that medical attendance is grossly deficient both as to quantity and quality.

With the general features of the measures proposed for the legislative enactment of the compulsory health insurance scheme in this State your committee will deal only in the briefest manner; the matter is familiar to you. It is proposed to establish an administrative machinery radiating downward from a division of the State industrial commission composed of a certain number of commissioners appointed by the governor who, in turn, appoint a chief of the

bureau of health insurance. Subordinate to the commission and acting under regulations made by the commission function the boards of directors of the local funds composed of three members elected by the employer members of the local fund, three elected by the employees and one additional elected by these six. All the affairs of the funds are administered locally by these boards of directors. Each local fund employs a medical officer who is permitted to practice and who is practically the medical supervisor of the administration of the benefits of the act. The medical profession is not represented upon any executive body under the proposed law, but is permitted to function solely through advisory committees, local and State. Its sole statutory representative has an administrative, not an executive function.

After consideration of the evidence put forward by the proponents of this legislation in support of their statement that a large proportion of the poor have been impoverished through unemployment caused by illness, your committee finds that none of this evidence is unimpegnable and that it rests upon largely a priori reasoning. The preponderance of evidence is against the fact that any considerable amount of impoverishment is caused by illness; moreover in those cases where impoverishment is caused by illness, it is due to the long-enduring disability preceding death occurring in the chronic diseases, especially tuberculosis, chronic heart disease, cancer, chronic joint infections, renal and vascular disease which cause a disability long exceeding the period of 26 weeks during which the insured is entitled to benefits under the scheme. The statistics of the labor bureau of New York State show that in the main disability from all causes, including accident, injury, and illness, is the source of, on the average, only 5.7 per cent of unemployment, about the same amount as that caused by weather conditions (5.6 per cent) or a little less than half that caused by labor disputes (10.6 per cent), or one-thirteenth that due to lack of work (74.6 per cent). A survey entitled "Poverty in Baltimore and Its Causes; Study of Social Statistics in the City of Baltimore," by the Alliance of Charitable and Social Agencies, McCoy Hall, Baltimore, Md., November 15, 1918, gives strong evidence of the small part illness plays in the cause of poverty; moreover, it evidences strikingly the fact heretofore stated as to the relationship of prolonged disability not covered in any scheme for health insurance to the relatively few cases of impoverishment due to sickness. Your committee would find, therefore, that short illnesses causing ephemeral disability bear no relation to poverty; that where impoverishment is caused by illness it is in all instances due to long-continued disability; and that illness is but a very minor cause of unemployment as compared even to the conditions of the weather or labor disputes.

Your committee is unable to find any available evidence that will bear inspection proving that, in the main, medical attendance in this State is grossly deficient in quantity or grossly defective in quality. If these facts were true it is unable to satisfy itself that the people of this State would receive a larger and closer degree of medical attention where one physician may care for either 2,000 or more patients as permitted under this scheme than they now receive where the proportion of physicians to population is about as 1 is to 780. Moreover, your committee is satisfied that the quality of medical attention would no more be benefited in the United States than it has in Germany, Austria, and Great Britain, by the conversion of medical practice from its present plan into an enormous scheme wherein the practitioner would be employed from year to year under contract, and in the final analysis subject to lay dictation as to means and methods of practice.

Your committee feels very strongly that the inquisitorial powers which would be conferred upon the State industrial commission and its agents, and upon the local boards of directors must be considered in its effect upon the public health, and especially as to the rôle it might assume in submerging and nullifying the activities of the present State department of health which has played so large a part in the reduction of morbidity and mortality by means of preventive, not palliative, medicine.

There is no uncertainty about the evidence that the relative morbidity rate, mortality rate, infant-mortality rate, and maternal-mortality rate has been much more materially reduced in the United States during the past 20 years than it has been in Germany and Austria, where compulsory health insurance, not alone, but the whole scheme, including invalidity and unemployment insurance and old-age pensions, have been in force. It can, therefore, be seen that compulsory health insurance, as such, plays a very small part in the reduction of length and severity of illness, and that on the whole it has been of extremely little value medically in those countries, while it has been the cause of a profound deterioration in medical service and medical morale. Even in England, where it has been in operation for a comparatively short time, it has proven so defective and ineffective for the purpose for which it was instituted that it is now proposed to inaugurate the plan of State medicine to supplant it.

Your committee therefore finds:

1. There is no necessity for the institution of a scheme covering the major portion of the population of the State, providing for the institution of contract medical practice on a colossal scale in order to furnish medical attendance and other services.

2. In those countries where this scheme has been in operation for many years it has caused a deterioration in medical morale and medical service, and that its effect in this State would be the same; that is, a lessening in the quality of medical service.

3. In comparison with those countries where this scheme has been in operation, the United States shows a more marked reduction in mortality rate, both general and as affecting maternal and infantile mortality rate. Apparently the morbidity rate under the scheme has doubled instead of being diminished in Germany and Austria since the institution of the social-insurance plan.

4. There is danger of the scheme gradually undermining the functions so extremely valuable to the community at present subserved by the State department of health.

5. Owing to the paucity of accurate and unimpeachable data collected by means of an unbiased investigation, your committee recommends that the legislature of 1920 be requested to appropriate a sufficient sum of money for the use of the health department and such other departments in association with it as it requires for the purpose of making a survey of the State of New York to determine the amount and character of illness in its economical relation to the Commonwealth.

6. If additional legislation is to be enacted, it should provide for a greater development of existing agencies for preventive medicine, together with the extension on a large scale of the present county and municipal functions for both preventive and remedial medicine, and it should make further provision for the inauguration of more widely extended utilization of the present institutional clinical facilities for the diagnosis and treatment of disease in order to facilitate the access of the entire population of the State to modern methods in the practice of medicine.

Your committee therefore recommends that the house of delegates, and, through them, the Medical Society of the State of New York, unqualifiedly oppose the enactment by the Legislature of the State of New York of any law instituting a system of compulsory insurance against sickness because of its menace to the public health of the State.

Report of British Departmental Committee on Old-Age Pensions.¹

THE departmental committee appointed by the Treasury in April, 1919, "to consider and report what alterations, if any, as regards rates of pension or qualification should be made in the existing statutory scheme of old-age pensions" have presented their report.²

Old-age pensions were first introduced in the year 1908. The rate was 5s.³ to those whose yearly means did not exceed £21 a year (about 8s. a week), while reduced pensions were payable to those whose incomes exceeded £21 but did not exceed £31 10s. a year (about 12s. a week). The pensioner must have attained the age of 70; must be a British subject, resident in the United Kingdom; and must not be in receipt of poor relief (other than medical or surgical relief). There were also certain disqualifications for convicted criminals, for pauper or criminal lunatics, and for those who "had habitually failed to work according to their ability, opportunity, and need."

Various changes, mostly of detail, were made by an amending act of 1911. During the latter part of the war and up to the present time an additional allowance of 2s. 6d. a week has been given to pensioners whose means do not exceed the statutory limit (of £31 10s. a year); and existing pensions have not been reduced or revoked in consequence of increase of means if such increase was due (1) to separation allowances or voluntary allotments; (2) to temporary voluntary assistance, up to 5s. a week, to meet the increased cost of living; or (3) to additional earnings, provided that the total means do not exceed 30s. a week.

The total number of persons in receipt of old-age pensions on March 31, 1919, was 920,198, of whom 911,706 were in receipt of the additional allowance granted during the war. Over 90 per cent of the pensions were of the full value of 5s. The number of claims made during the year ended March 31, 1919, was 142,084. The number of claims rejected, or pensions revoked, during the year was

¹ Reprinted from the Labour Gazette, London, November, 1919, p. 465.

² Cmd. 410. Price, 3d. net.

³ Owing to present fluctuations in value of the English pound conversions are not made into United States money. Normally the par value of the pound is \$4.87.

47,766; and in addition 6,615 claims lapsed, or were withdrawn, etc. The number of pensioners who were reported to have died during the year was 105,746. The total amount paid in pensions rose from £8,468,000 in the year ended March 31, 1910, to £12,607,000 in the year ended March 31, 1916. The amount in the last financial year (ended March, 1919) was approximately £11,731,000, to which must be added the additional allowance, amounting to £5,997,000.

The majority report, signed by the chairman and nine other members of the committee, makes the following recommendations:

(1) Rate of pension to be increased to 10s. a week, absorbing the additional allowance of 2s. 6d.

(2) Abolition of means qualification.

(3) Qualifying age to remain at 70, pending inquiry as to the possibility of extending the scope of the insurance acts. (The committee emphasize the need for this inquiry, as an integral part of the whole question of "public assistance" on a reformed basis.)

(4) Outdoor relief, or "home assistance," not to be a disqualification for receipt of pension.

Other recommendations deal with eligibility of aliens—in which connection it is recommended that the British-born wives of aliens should not be disqualified—with the qualifying period of residence, and with other matters. It is suggested that the "failure to work" qualification, which is virtually inoperative, should be abolished.

Seven members of the majority append reservations; five of the seven favor an increase in the amount of the pension (to 12s. 6d. or 15s.) and a reduction in the age to 65.

Seven members of the committee present a minority report, concurring in the increase of the rate of pension to 10s. (one of the seven recommends 12s. 6d.), and in certain other proposals of the majority, but not in the abolition of the means limit. They recommend, however, that the means limit should be doubled, i. e., that it should be £42 a year for a full pension, and £63 a year for any pension at all.

Accident Insurance Law of France Amended to Include Occupational Diseases.¹

THE accident insurance law of France was amended by the law of October 25, 1919, so as to include occupational diseases. The occupational diseases covered by the law are specifically mentioned in an annexed schedule. Such diseases may be either acute or chronic but must result from regular occupation in any of

¹Journal Officiel de la République Française, Paris, Oct. 27, 1919 p. 11973.

the industries named. This list is subject to revision by subsequent legislation.

The employer is responsible for sickness of this class occurring within a period of one year from the date on which the employee quits work. That responsibility, however, diminishes in proportion to the length of time intervening between the date of quitting service and the date when sickness results in incapacity to labor. If during this period the incapacitated person has other employment, in the same class of establishment, the last employer becomes jointly responsible for a portion of the compensation provided for by the original act.

If, by reason of the inexcusable fault of either of the employers, the health of an employee is affected, the employer at fault may be held for an increased proportion of the compensation payable. The last employer is responsible for the payment of the entire compensation, having recourse against the former employers for recovery of the portion due from them.

Employers, making a declaration that in their processes of manufacture they no longer employ substances causing any of the industrial diseases mentioned in this law, are subject to its provisions only in cases where disability occurs within one year from the date of such declaration. Making false declarations is a penal offense.

A person incapacitated by such sickness and demanding compensation must notify the mayor of the commune within 15 days from the date such incapacity begins.

The scope of the national accident fund (law of July 11, 1868) is extended to include sickness and death due to occupational diseases. Insurance rates are to be promulgated within six months and must be sufficient to cover the risks without the necessity of drawing upon the subsidy mentioned in the original act.

Employers becoming liable to compensation may relieve themselves of their liability by depositing the capitalized value of the pensions awarded with the national retirement fund (*caisse National des Retraites*), which for this purpose shall prepare present-value tables based upon the mortality of victims of occupational diseases and of their survivors. Until such tables have been prepared the capitalized value of pensions shall be determined in accordance with tables in use for Government pensions in pursuance of the law of July 20, 1886.

Public administrative regulations shall determine the conditions under which guaranty and insurance companies may insure employers against the risks covered by the present law.

It is a violation of law for any person whatever, by threats, gift, promise of money, payment of medical charges or for medicine, to

entice or attempt to entice any person suffering from industrial diseases to any clinic, physician, or pharmacy against the will of the sick person. The latter has the right to designate the physician or druggist he wishes to be employed.

The following industrial diseases and industries are specifically mentioned as being covered by the amended act:

Class 1.—Lead and its compounds.

Disability due to lead colic, articular rheumatism, extensor paralysis, hysteria, nephritis, gout.

Industries: 1. Lead smelting and refining; 2. Casting, rolling, and adjusting of lead or its alloys; 3. Manufacture of type from lead alloys; 4. Manufacture of tin vessels with lead alloys; 5. Soldering with lead alloys; 6. Operating typesetting machines which use lead alloys; 7. Plating with lead alloys; 8. Casting toys made of lead alloys; 9. Manufacture of tin-foil caps for bottles, using lead alloys; 10. Melting old cans; 11. Handling lead type; 12. Manufacture of lead compounds (white lead, minium, litharge, chromate of lead, etc.); 13. Color mixing, lead base; 14. Painting with lead colors; 15. Manufacture of lead accumulators; 16. Manufacture of drying compounds and lead varnishes; 17. Manufacture of pottery and stoneware having a lead enamel; 18. Decorating porcelain with lead compounds; 19. Enameling of metals with lead enamel; 20. Varnishing or lacquering with lead products; 21. Dyeing with lead colors; 22. Glass polishing with pewter.

Class 2.—Mercurial poisoning.

Sickness: Mercurial stomatitis, mercurial palsy, nutritive disorders due to mercurial poisoning, mercurial cachexy, mercurial paralysis.

Industries: 1. Distillation of mercury; 2. Manufacture of incandescent lamps and radiographic ampulla with the aid of mercury tubes; 3. Manufacture of mercurial barometers, manometers, and thermometers; 4. Gilding, silver plating, and mercurial plating; 5. Manufacture of salts of mercury (azotete, chlorurets, cyanure, etc.); 6. Carotting of furs; 7. Furrier, employing mercury; 8. Bronzing and damaskeening with salts of mercury; 9. Taxidermy, employing salts of mercury; 10. Manufacture of gun primings with fulminates of mercury.

Social Insurance in Portugal.¹

BY decrees Nos. 5636 to 5639, inclusive, the Republic of Portugal recently inaugurated the policy of compulsory insurance covering sickness, invalidity, old age, and industrial accidents.

Sickness insurance.—The first of these decrees relates to sickness insurance. Insurance is obligatory for all persons 15 to 75 years of age engaged in any honorable occupation, whose annual income or

¹ Boletim da Previdência Social. Ano II, No. 7, Outubro a Maio de 1919. Lisbon.

earnings does not exceed 900 escudos.¹ All such persons are required to become members of a compulsory mutual insurance association by the payment of a weekly or monthly premium. The employer is authorized to deduct such dues from the wages of the employee and make regular payment into the fund.

As a temporary measure members are divided into three classes, paying 0.50, 0.40, and 0.30 escudos, respectively, as monthly premiums.

Benefits vary with the class in which insured, and continue for one year, divided into four periods, as follows:

AMOUNT OF DAILY COMPENSATION PAYABLE, BY CLASS AND BY PERIOD.

Class.	Period.			
	First 30 days.	Second 30 days.	Third 30 days.	Last 275 days.
	<i>Escudos.</i>	<i>Escudos.</i>	<i>Escudos.</i>	<i>Escudos.</i>
Class No. 1.....	0.30	0.22	0.14	0.10
Class No. 2.....	.24	.18	.12	.08
Class No. 3.....	.16	.12	.08	.06

The scale of compensation is subject to revision every second year.

Membership for six months entitles any member, in addition to the pecuniary benefits, to baths and open-air treatment; and for two years to certain death benefits, etc., payable to his survivors. After three months' membership the insured and his wife and children under 14 years of age are entitled to free clinical service and medicine.

Persons whose annual earnings, wages, or income exceed 900 escudos are required to pay a premium as follows: From 900 to 1,850 escudos, 0.50 escudo; from 1,850 to 3,800 escudos, 1 escudo; from 3,800 to 5,000 escudos, 2 escudos; over 5,000 escudos, 3 escudos.

A mutual insurance association must be established in each municipality. In municipalities where a mutual sick benefit association is in operation it must, within 60 days from the date of the decree, reorganize on the basis of a compulsory insurance association. In Lisbon and Porto six mutual associations shall be established in each ward.

Invalidity and old-age insurance.—Insurance against invalidity and old age, and for compensation to survivors is compulsory for all persons earning less than 900 escudos, with the exception of the following classes: Public officials entitled to pensions; soldiers employed as laborers; infirm persons incapable of earning one-third average

¹ Owing to fluctuations in exchange value no attempt is made in this article to make conversions into United States money. The normal value of the escudo is \$1.08.

wages and entitled to free subsistence; wage earners, employees, and establishments already insured.

Invalidity is defined as absolute inability, due to natural causes, to perform any work.

The municipal officials of each parish shall cause a census to be taken of all classes of employees between the ages of 15 and 65 years.

The insurance is under State supervision, under the direction of the Institute of Compulsory Social Insurance. The insured is entitled to a deferred annuity, and a pension is provided for the surviving widow and for orphans.

The fund is constituted (1) by a 6 per cent assessment on all salaries or wages up to 900 escudos, payable by the employer, (2) by a like assessment of $1\frac{1}{2}$ per cent payable by the employee, and (3) by an annual subsidy by the State of 13.33 escudos for each soldier recruited. Payments are made by special stamps placed in the book held by the insured. The proportion of funds payable by employers, employees, and the State is subject to revision every second year.

In case of invalidity the annuity varies with the number of premiums paid into the fund: (1) Payment of 235 weekly premiums (47 payments per year for five years) entitles the insured to a pension equal to one-sixth of the total deferred annuity which may be acquired under the law; (2) payment of 470 weekly premiums (from 6 to 10 years, inclusive), to a pension equal to one-third of full annuity; (3) of 705 weekly premiums (from 11 to 15 years, inclusive), to one-half of full annuity; (4) of 940 weekly premiums (16 to 20 years, inclusive), to two-thirds of full annuity; (5) of 1,175 weekly premiums (21 to 25 years, inclusive), to five-sixths of full annuity; and (6) of 1,410 premiums (after 30 years) to full annuity.

The full old-age annuity becomes payable when the insured reaches 70 years of age, provided the full 1,410 premiums have been paid.

A transitory period of 25 years is established, in order to provide for those whose age at the time old-age insurance is effected does not permit them to make the full number (1,410) of weekly payments. Those who are 45 years of age at the time the fund is instituted will receive 75 per cent of the full annuity, those over 50 years of age 50 per cent, and those over 60, 25 per cent.

Annuities for dependents may be provided for by the payment of 1 per cent of the earnings of the person insured, and are graduated in amount according to the number of years of membership of the insured and amount of premium paid.

The children of deceased insured persons not entitled to old-age or invalidity pensions but who have paid the required premiums, shall be paid 10 escudos per month for the six months following the death

of the insured. In case a widow is left without children she is to receive 50 escudos, payable in five monthly installments. Where there is neither widow nor children, ascendants are to be paid 60 escudos.

Any mutual aid association in existence which provides pensions for inability to labor may become associated with the Social Insurance Institute by transferring its invalidity, old-age, and widows' and orphans' funds to the institute.

All mutual sickness funds, parish councils, and labor associations are required to aid the institute in its supervision, for the purpose of carrying into effect the provisions of this decree.

Industrial accident insurance.—Industrial accident insurance is compulsory for every person employed by another in any branch of labor, either mental or physical. Every employer is required to insure his salaried employees and wage earners. The benefits consist of free medical attendance, medicine, and the pecuniary compensation.

Industrial accidents include injuries due to accident, functional disturbances, and industrial poisoning arising in the course of the employment and sickness proven to be due to the employment.

The establishment, employer, State, and administrative corporations (municipalities) are respectively responsible to their employees for the payment of compensation for industrial accidents. These may transfer their individual responsibility to mutual associations, recognized insurance companies, or the compulsory sickness insurance fund.

Each municipality must establish one or more mutual employers' or mixed accident insurance associations for the sole purpose of effecting this insurance and maintain a register of all employers, wage earners, salaried persons, etc.

The pecuniary compensation provided for is as follows: For death, 20 per cent of the annual earnings of the deceased to the widow, so long as she remains such, 15 to 60 per cent to the children (boys under 14, girls under 16), according to the number, and there being no children, 10 per cent to each of the dependent ascendants, but not to exceed 40 per cent in all; for disability—(a) permanent total, 66 $\frac{2}{3}$ per cent of annual earnings, (b) permanent partial, 50 per cent of wage loss, (c) temporary total, during disability, 66 $\frac{2}{3}$ per cent of earnings, (d) temporary partial, 50 per cent of wage loss.

Compensation is computed on full annual earnings up to 900 escudos plus one-half of earnings in excess of that sum.

The cost of the insurance is to be borne by the employer, deductions for this purpose from employees' earnings being prohibited.

Every employer who fails to insure as provided for must deposit with the Minister of Labor cash, a mortgage, guarantee, or bond in a sum equivalent to the reserve required to comply with this decree.

Insurance Institute.—A Compulsory Social Insurance and General Provident Institute is established for the supervision of all classes of compulsory insurance.

LABOR DEPARTMENTS.

Proposed Organization of New York State Department of Labor.

IMPRESSED with the necessity for simplifying the government of the State of New York, the governor appointed, in January, 1919, a nonpartisan reconstruction commission to make a report on retrenchment and reorganization in the State government. This commission has issued a summary, which is part one of its complete report.¹

In prosecuting its inquiry the commission found that in nearly every State public attention has been forcibly drawn to the necessity of reducing expenditures or at least of holding them to the lowest point consistent with the proper discharge of public functions and fair conditions of employment.

The commission also found that the movement for economy and efficiency has passed beyond the stage of protest and discussion. Between 1911 and 1917 (when the movement was temporarily checked by the war) a number of States instituted commissions of inquiry for the purpose of discovering more business-like methods in State administration. All of these commissions are substantially agreed that economy and responsible government can only result from:

1. The consolidation of offices, boards, and commissions into a few great departments of government, each of which is responsible for the conduct of a particular major function such as finance, health, welfare, or public works.
2. Vesting the power of appointment and removal of department heads in the governor; making him in fact, as well as in theory, the responsible chief executive of the State. There is a difference of opinion as to the desirability of confirmation of the governor's nominations by the senate.
3. A consolidated budget system with accounting control over spending officers.

Thirty-eight States have enacted legislation providing for a consolidated budget system with varying provisions as to methods of preparation, legislative review, and enactment into law. Half of these States have placed upon the governor the responsibility for initiating the budget.

¹ Summary of Report of Reconstruction Commission to Governor Alfred E. Smith on Retrenchment and Reorganization in the State Government, Oct. 10, 1919. Albany, N. Y., 1919. 44 pp.

The State government of New York, it is proposed, shall be re-organized with the following departments: Executive department; department of audit and control; department of taxation and finance; department of attorney general; department of state; department of public works; department of conservation; department of agriculture and markets; department of labor; department of education; department of health; departments of mental hygiene, charities, and correction; public service commissions; departments of banking and insurance; department of civil service; department of military and naval affairs.

Proposed Organization of a Department of Labor.

The commission proposes that a department of labor shall be organized as follows:

1. Place at the head of the department of labor an industrial commission consisting of five members appointed by the governor, with the advice and consent of the senate, for terms of five years.

2. The industrial commission will appoint a director of labor, who shall be the administrative head of the department and serve during good behavior.

3. The commission will also appoint a secretary, who will prepare the calendar for the commission, do the general administrative and secretarial work of the commission and serve as secretary to the industrial council.

4. The present counsel and his assistants will be transferred to the attorney general's office if the attorney general is made appointive.

5. The industrial council will be reorganized under a chairman who by specific provision may not be a member of the commission and will establish in the important industries of the State representative subcouncils of employers and employees for the discussion and action upon common problems of industry and for consultation by the commission and the industrial council. The 10 members of the council will be appointed by the governor for terms of five years, two terms ending each year. The chairman will continue to be chosen by vote of the members of the council and will hold office at the pleasure of the council.

6. The department will be organized with a staff and seven bureaus, as follows: Industrial staff; bureau of administration; bureau of employment; bureau of statistics and information; bureau of inspection; bureau of mediation and arbitration; bureau of workmen's compensation; bureau of the State insurance fund.

The head of the bureau of administration will be the secretary of the department.

The head of the industrial staff will be the chief of the industrial staff.

The head of the bureau of employment will be the chief of the bureau of employment.

The head of the bureau of statistics will be the chief statistician.

The head of the bureau of inspection will be the chief of the bureau of inspection.

The head of the bureau of mediation and arbitration will be the chief of the bureau of mediation and arbitration.

The head of the bureau of workmen's compensation will be the chief of the bureau of workmen's compensation. His deputies will be known as deputy commissioners of compensation.

The head of the bureau of the State insurance fund will be the manager of the State insurance fund.

The heads of all these bureaus will be in the competitive class under civil service excepting the secretary.

7. The duties of the present bureau of industries and immigration with reference to the education of aliens, will be transferred to the department of education. The other functions of the bureau will be transferred to the State and local health and police departments.

8. The present division of industrial hygiene in the bureau of inspection will be combined with the bureau of industrial code and the bureau of women in industry in a single industrial staff.

9. In connection with the development of the bureau of employment a bill will be passed providing that all private employment agencies in the State shall be licensed and shall pay a fee of \$250. The industrial commission will license everywhere in first and second class cities. Half the fees of such cities and all of the fees elsewhere will go to the State industrial commission for the support of the bureau of employment.

The bureau of employment will develop a program including the following subjects:

(1) The organization of the labor market to bring about extensive dovetailing of winter and summer trades and to stimulate the use of subsidiary trades.

(2) Directing labor to new occupations when changes of industrial structure result in displacement from chosen occupations.

(3) Reserving certain places in industry for older men and women and leaving the younger generation the task of finding and forcing fresh openings for themselves.

(4) Concentrating attention upon the need for industrial training, including "vestibule" or preliminary training, where such training does not lead to "blind-alley" employment, training in plants to increase efficiency while gainfully employed, and training in trade and business schools. This should be done with the State and local departments of education and with private educational institutions.

(5) Directing boys and girls away from "blind-alley" employment.

(6) Testing periodically and comprehensively the amount of unemployment. This should be done by the bureau of employment in cooperation with the bureau of statistics and information.

(7) In cases of seasonal employment or depression urging employers to shorten hours rather than discharge employees.

10. The bureau of statistics and information will cooperate with the bureau of employment in the issuance of employment statistics covering the largest possible number of employees and in the preparation of statistics on wages and the cost of living. The funds of the bureau of statistics for this and other purposes will be increased and statistical field agents will be provided.

11. The bureau of mediation and arbitration will take a larger part in settling industrial disputes. It will be organized under a chief who will have a panel of 20 representative citizens who will act as mediators and arbitrators when called upon, and such assistants as are required to make investigations and gather statistics.

12. The work of the bureau of workmen's compensation will be so arranged as to limit drastically the number of reviews by and appeals to the commission. A careful codification will be made of the decisions of this bureau. A medical social-service staff will be created in this bureau to follow up cases.

13. The State insurance fund will be placed in a bureau separate from the bureau of workmen's compensation and immediately under the director. An annual audit of the fund will be made by the superintendent of State insurance.

14. If a minimum wage or health insurance legislation is passed, the administration will be provided for in new bureaus under the director of labor and not in independent new departments.

15. The above recommendations will require only statutory changes.

STRIKES AND LOCKOUTS.

“Vacations” in the Printing Industry in New York City.

By A. J. PORTENAR.

THE recent trouble in the printing industry in New York City was a strike in the sense that a large number of workmen quit work at the same time for the accomplishment of a common purpose, yet it was never officially authorized nor officially acknowledged as a strike by either the local unions involved or by their internationals. There was, however, an essential difference in the respective attitudes of the locals and internationals, in that the locals in fact, though unofficially, supported the strike; while the internationals opposed it and eventually compelled the return of the men to work. Demands for an increase of \$14 per week and the establishment of the 44-hour week were the inciting causes of the outbreak, but before it was ended another issue had been injected—namely, the supremacy of international authority—and this latter issue finally became the more important of the two.

The workers in the printing industry are organized into five craft unions, each headed by an international, which is the parent body and issues its charters to subordinate unions located in various printing centers. These five are the International Typographical Union, which embraces all composing room employees; International Printing Pressmen and Assistants' Union; International Stereotypers and Electrotypers' Union; International Photo-Engravers' Union; International Brotherhood of Bookbinders.

These international unions, while each reserves complete autonomy within its craft, have been organized into an alliance known as the International Allied Printing Trades Association. The subordinate local unions are organized into the Allied Printing Trades Councils in their localities. The local unions are responsible to their respective internationals; the local councils are responsible to the International Printing Trades Association.

Among other purposes, the internationals allied in the association have mutually agreed that, in the event of a secession by locals of any one of them, they will support each other in suppressing the secession. The following excerpt from the agreement illuminates this point:

That when any union or members or group of members subordinate to any one of the five international unions making up the International Allied Printing Trades Association secede from the parent organization, the five international unions will join in a general movement against the seceders, and to the end that the supremacy and authority of the international organizations affected may be clearly and permanently established, the five international unions pledge their moral and financial support. In other words, and in a more concise form of expression, the five international unions of the printing trade, namely, the International Typographical Union, the International Printing Pressmen and Assistants' Union, the International Brotherhood of Bookbinders, the International Stereotypers and Electrotypers' Union and the International Photo-Engravers' Union, propose to stand firmly together in the protection of the jurisdiction rights of each one of the international organizations, and to that end pledge their united treasures to the success and permanency of the principles herein enunciated.

Early in 1919 most of the craft unions in the printing industry in New York City agreed to make a united demand for a flat increase of \$14 a week and the establishment of a 44-hour week, to become effective October 1, 1919. The unions not participating in this movement were Electrotypers' Union No. 100 and Stereotypers' Union No. 1, which for some time have had the 44-hour week, and Photo-Engravers' Union No. 1, which will get it on January 1, 1920. The following are the unions which entered into this agreement to present these uniform demands, and their minimum scales at that time were:

Typographical Union No. 6, \$36.

Printing Pressmen's Union No. 51, scales which varied from \$31 to \$46.

Franklin Union No. 23 (cylinder press feeders), \$30.

Job Press Feeders' Union No. 1, \$22.

Mailers' Union No. 6, \$28. (The mailers have local autonomy, but are subordinate to the International Typographical Union.)

Bookbinders' Unions Nos. 1, 6, 11, and 22, an average of \$36.

Bookbinders' Union No. 43 (female), \$18.50 to \$22.

Paper Cutters' Union No. 119, \$36. (Paper cutters are subordinate to the International Brotherhood of Bookbinders.)

Paper Rulers No. 9, \$36. (Paper rulers are subordinate to the International Brotherhood of Bookbinders.)

The officials of each of these unions, upon making this agreement to present uniform demands, stated that their contracts terminated not later than September 30, 1919. Therefore all of them were presumably in a position to enforce these demands without breach of contract.

Before this agreement had been made Pressmen's Union No. 51, Franklin Union No. 23, and Job Press Feeders' No. 1, all of them subordinate to the International Printing Pressmen's and Assistants' Union, had been drifting toward a break with the parent body. They charged that there had been misappropriation of funds by the international officers, and there was also much dissatisfaction with the law governing the referendum. These local unions, together with locals of the same craft in other cities, had previously started a proceeding for an accounting. The locals in New York City had declined to pay their per capita tax, depositing it with a trust company pending a decision of the lawsuit. Under the laws of the International Printing Pressmen and Assistants' Union any local which fails to pay per capita tax is automatically suspended at the end of three months. The International Printing Pressmen's Union naturally held that the deposit of the money elsewhere did not constitute payment, and notified the delinquent locals that the penalty of expulsion would be enforced when the three months' period had ended.

This condition was known to all the other locals in the industry, but at that time it did not seem to be regarded as an obstacle to the united action proposed. The demands were made known to the employers on April 14, and the pressmen's unions took part in all conferences without objection from anyone at that time.

Immediately after the presentation of these demands there was held in Chicago, on April 21, a meeting of what is known as the Joint International Conference Council, which is a newly created body composed of representatives from the employers' organizations on the one side and the five international presidents on the other. The employer delegates from New York brought to the attention of the conference the demands of the local New York unions. The outcome of this conference was a proposition that the 44-hour week be established throughout the industry on May 1, 1921, and that each of the representatives at the conference would go back to his organization and ask for the ratification of that agreement.

The convention of employers thereafter ratified the agreement. On May 28 a referendum vote was taken throughout the jurisdiction of the International Typographical Union on the question, Shall the 44-hour week become effective May 1, 1921? Typographical Union No. 6 of New York City voted "No" by a vote of 5,656 against and 618 for, but in spite of this heavily adverse vote, the proposition was carried throughout the country by a majority of 12,470. The pressmen's International Union also held a referendum vote which ratified the proposal by more than a two-thirds majority.

Regardless of these referendum votes, the local New York unions continued to press their demands for \$14 increase and a 44-hour week, effective October 1, 1919. All of the unions previously mentioned continued to act in concert, including the unions of pressmen, cylinder feeders, and job press feeders, which were now approaching the time when their expulsion would automatically ensue because of their refusal to pay per capita tax to their international. Some time in June a conference was held in the office of Typographical Union No. 6 between the international and local officials. Later conflicting reports were made to the membership explaining what had happened at that conference. President Marsden G. Scott, of the International Typographical Union, declared in a circular letter issued on September 25 that he had emphatically stated at that conference that Typographical Union No. 6 would not be permitted to press the demand for the 44-hour week in view of the action of the referendum. President Leon Rouse of Typographical Union No. 6 was equally emphatic in saying that Mr. Scott had refused to commit himself in any way at that time. The officials of Typographical Union No. 6 based their contention that they had a right to press for the 44-hour week on the authority of a resolution adopted by the Scranton convention (1917):

Whereas, The International Typographical Union was responsible for the eight-hour day in the printing industry; and

Whereas, the Saturday half-holiday in the book and job offices throughout the international jurisdiction has become an established feature, necessitating three-quarter hours overtime five days per week to make up for same; Therefore be it

Resolved, That it is the sense of the International Typographical Union that a week's work in the book and job trade should consist of 44 hours of eight hours the first five days and four hours on Saturday; and, be it further

Resolved, That subordinate unions be instructed to negotiate scales in the book and job offices under above provisions whenever practical.

The international officers held that the referendum vote fixing May 1, 1921, as the time for establishing the 44-hour week was binding on all the membership.

On July 1 the situation became complicated by the expulsion of Franklin Union, No. 23 (cylinder feeders), for nonpayment of per capita tax.

On August 2 Pressmen's Union No. 51 and Job Press Feeders No. 1 were also expelled for the same reason. Nevertheless these unions continued to take part in conferences held with the local association of employers until some time in September. At that time the employers' conference committee gave notice that they would no longer confer with any organization not affiliated with its international and with the American Federation of Labor. The so-called "outlaw"

unions then withdrew, with the understanding that their interests would be cared for by President Rouse, of Typographical Union No. 6.

Conferences continued through August and September without any definite result until early in September. Bookbinders' Unions Nos. 1, 6, and 43; Paper Cutters No. 119; Paper Rulers No. 9; and Mailers No. 6 declared at a conference between the employers and the unions that they were mistaken in their previous statements to the effect that they had no contracts outstanding beyond September 30; that in fact they had arbitration agreements which extended beyond that date. Therefore they would accept the increase of \$6 which had previously been offered by the employers and would agree to the postponement of the 44-hour week until May 1, 1921. They qualified this, however, by saying that if better terms were obtained by any other union, then such terms were automatically to be extended to them.

As soon as the three pressroom unions had been declared "outlawed" by their international the formation of new Nos. 51, 23, and 1 was begun. A small minority of the membership of those unions had remained loyal to the international, and these formed the nucleus for the new organizations. For a considerable time there were few accretions to these new unions.

On September 5 there were two pressmen working in the pressroom of the Publishers' Printing Co. who carried cards in the new No. 51. The remainder of the pressroom force were members of the outlawed unions. The officers of the old union demanded that these two men be discharged. The demand was refused and nearly the whole force, with the exception of these two men, quit work immediately.

On September 30 there was posted in the pressrooms of all the members of the Printers League and the Typothetae (closed shop division) the following notice: "On and after October first, only pressmen and feeder members of the international will be employed in this office."

The posting of this notice meant a lockout in the pressrooms of the organized commercial job shops of New York City, for practically their entire working forces were members of the unions which had seceded from their international, the act of secession being the refusal to pay per capita tax, with their consequent expulsion. The morning of October 1 therefore found the pressrooms deserted, but the composing-room forces working. All the other unions had either not been involved originally or had withdrawn from the controversy as above stated.

There can be no question that the sympathies of both the officers and the rank and file of Typographical Union No. 6 were with the "outlawed" unions. These men had in many cases been working together for years. In addition, they were still animated by the common purpose to secure the 44-hour week immediately. The officers of No. 6 declared that they would do nothing which would imperil their regular standing inside of their international, but at the same time showed no inclination to modify their demands in any particular, but no order to quit work on October 1 in support of these demands was officially given, and there is no evidence to show that such an order was unofficially promulgated.

On the morning of October 1, 139 men working in the composing room of the Technical Press were laid off without notice, on the ground that there was no work for them. On the same morning three men were laid off in the Carey Press on the same ground, but the members of the union working in that shop declared that those laid off had all been prominent in agitating for the wage increase and shorter work week. Be that as it may, this body of about 150 men immediately divided itself into committees of three or four to notify the members working in all the other shops of what had happened and to ask them to quit work. This they could not do as strikers, for none of the procedures laid down by law previous to the declaration of a strike had been complied with. Meetings were held in the various shops, with the result that individual "vacations" immediately became extremely popular. Before night 1,000 men had gone on vacation, and before the week had ended the number was about 3,800. Thus, on October 6 there were on the street about 2,500 members of Pressmen's Union No. 51, 2,500 members of Franklin No. 23 (feeders), and about 500 members of Job Press Feeders No. 1. These had all been locked out by the employers. Also, there were approximately 3,800 members of Typographical Union No. 6 "on vacation."

A meeting of Typographical Union No. 6 was held on October 5, at which the executive committee recommended the passage of a resolution ordering the vacationists back to work. The president told them the resolution must be passed, so that no charge of violating international law relating to strikes could be made against the unions. The resolution was adopted, but it was plain that neither officers nor members had the slightest intention of living up to it. An unofficial organization was formed among the "vacationists," called the 44-50 Club, which in a measure performed the usual duties of a strike committee.

Throughout October conferences were held with the employers which were utterly barren of result. The employers renewed their offer of a \$6 advance and expressed a willingness to arbitrate the whole question. Typographical Union No. 6 refused both of these offers. The pressroom unions could not enter the conferences, because the employers refused to recognize them. The unions held frequent meetings which were very largely attended, but which resulted only in the adoption of dilatory motions expressing confidence in the officers and directing them to seek further conferences with the employers. So the whole month of October passed without any particular change in the situation, both parties refusing to recede in the slightest degree from the positions they had taken.

During that month the question of support for the men on the street became extremely urgent. The pressroom unions expended all the funds they had for the maintenance of their members. Typographical Union No. 6 could not legally levy an assessment for strike purposes. They overcame the difficulty by sending to the referendum a proposition for a 10 per cent assessment for the benefit of the "unemployed." This proposition could hardly fail of adoption, because the "unemployed" made up an actual majority of the membership. It was carried with slight opposition. The proceeds of this assessment, however, were entirely insufficient to pay the benefit of \$12 a week which had been voted, and which was increased to \$15 the following week, and the special funds of the union had to be depleted to support the "vacationists."

One of the most irritating features of the whole difficulty was that the international officers came to New York, conferred with the employers, issued newspaper statements condemning the "vacations," but did not confer with the officers of the local union nor appear at any of the frequent meetings which were held. This attitude of the international officers created such an intense feeling of resentment that it was an important factor in keeping up the determination of the rank and file to stay out. On November 2 all the officers of the international executive council except the president appeared before Typographical Union No. 6 and urged the men to return to work. Their mission was fruitless.

The issue of wages and hours had by this time become subordinate. The international officers frankly confessed that their object in coming to New York was to beat down secession. The employers knew that even if they could get their compositors back, they would nevertheless be unable to go very far unless they could man their pressrooms; but they believed that if the support of Typographical Union No. 6 was withdrawn from the seceding unions the latter would collapse. As

a matter of fact, the members of the seceding unions were making application in the new pressroom unions in continually increasing numbers throughout October and early November, and that movement would have been greatly accelerated had it not been for the determined attitude of the "vacationists" in Typographical Union No. 6.

The compositors and pressmen on the street knew that the financial resources of their respective organizations were getting very low, but they held out in the belief that the employers also were being subjected to terrific financial strain, and that they might crack first. Everybody knew that a great deal of work was leaving the city, some of it on temporary contracts and some permanently diverted. Employing printers in other cities, notably Cincinnati, made strenuous efforts to grab New York work. The unions were encouraged in their expectations by the fact that a number of employers did actually enter into agreements with them to pay a \$6 advance, work 44 hours, hire members of the outlawed unions, and make a final adjustment of wages and hours whenever an agreement had been reached with the employers' association; but when the attempt was made to carry out these agreements, all the other unions represented in the Allied Printing Trades Council, with the exception of Typographical Union No. 6, refused to work with the seceding pressmen, and refused to do any work for any shop that employed them. Such shops could not get any plates or photo-engravings, could not get any bindery workers or send their work to an outside bindery, or have anything done outside of their composing rooms or pressrooms. Some employers carried out the agreement in spite of this handicap, but most of them who were willing to make such agreements declined to settle trouble in one department if by consequences they invited trouble in another. The situation was that the pressroom unions were being discriminated against more severely than nonunion men by all the unions except Typographical Union No. 6, and No. 6 itself was drifting into a position where it might also become an outlawed union.

On October 29 the employers' conference committee sent a letter to President Rouse of Typographical Union No. 6 renewing the offer of an immediate advance of \$6, all other matters to be submitted to arbitration, an answer to be given not later than November 3, and refusing any further conferences. The purpose of this communication was to compel No. 6 either to accept the arbitration offered or definitely refuse it.

A resolution passed by the Scranton convention of the International Typographical Union (1917) reads:

We recommend that the executive council be instructed to suspend the charter of any union which violates its contract or which refuses fair arbitration in any dispute which may arise under that contract or in the negotiation of a new agreement.

Acceptance would naturally mean the end of the difficulty; refusal would give the international executive council the legal right to intervene.

At a meeting on November 9 Typographical Union No. 6 by a vote of 2,500 to 17 refused arbitration. Shortly thereafter the executive council came to New York and the following letter was sent to Typographical Union No. 6:

NEW YORK, November 22, 1919.

MR. LEON ROUSE, *President,*

New York Typographical Union No. 6,

DEAR SIR: The executive council of the International Typographical Union has reached the conclusion that the present situation in the printing industry in the jurisdiction of New York Typographical Union No. 6 has reached the point where attempts will be made to inaugurate open-shop or nonunion conditions in some commercial office composing rooms that have previously been union unless some remedy is immediately applied.

The council further says that the position of New York Typographical Union No. 6 in refusing to arbitrate the question of the time the 44-hour week shall go into effect in these offices is contrary to the declared policies of the International Typographical Union, and is a menace to other subordinate unions.

In view of these facts and for the purpose of protecting the interests of New York Typographical Union No. 6, and the International Typographical Union, the executive council directs that New York Typographical Union No. 6 at its meeting to-morrow, November 23, order its members who are taking so-called vacations to return to work in all offices on Monday, November 24, 1919, and that it instruct its officers to accept arbitration as a method of settling any disputes at present in controversy. It then expects that the members will return to work in compliance with the order of the union.

In case New York Typographical Union No. 6 at its meeting on Sunday, November 23, 1919, fails to comply with this order of the executive council, that body will be compelled to take action authorized by section 2, Article X, of the International Typographical Union constitution, which reads as follows:

SECTION 2. Any subordinate union which shall fail to make reports required by law or the executive council, or which shall neglect or refuse to obey any law or legal mandate of the International Typographical Union, or executive council, may be fined or have its charter suspended by the executive council.

At a meeting held on November 23, following the receipt of this letter, the executive committee of the local typographical union recommended the adoption of a resolution in line with the mandate of the international union. Some of the members advocated the repetition of a previous performance—namely, to pass the resolution to return to work, but not to comply with it. After a bitter debate, the resolution was adopted by a divided vote.

The men returned to their work the next morning and the eight weeks "vacation" in the book and job shops of the printing industry of New York City was ended. The pressmen had preceded the compositors back to work in most shops, the certain defeat of their secession movement being plain to them. They accepted the amnesty of-

ferred by their international union, which required only that they surrender their cards in the old unions and take out cards in the new ones, even giving them credit for all dues paid to the outlawed unions.

After the men had returned to work, negotiations for the selection of an arbitrator were begun, and all the issues concerning wages and hours will be submitted to him. The 44-hour week will almost certainly be postponed until May, 1921, but some further increase of wages will probably be added to the flat \$6 already obtained.

Two significant facts have been brought out during the trouble. One is that there exists a considerable group who are ready to renounce their international allegiance upon slight provocation. This fact foreshadows the inevitable struggle for control between the radical and conservative elements throughout the whole body of organized labor. The second is that compulsory arbitration, which is bitterly opposed whenever embodied in proposed legislation, was in this instance imposed by an international union on one of its locals.

Berlin Metal Workers' Strike.¹

THE strike of Berlin metal workers began on September 17, 1919, and by September 30 it was affecting nearly four-fifths of the persons employed in the Berlin metal-working industry, the total on strike being about 100,000. It arose out of the award of August 21 made by the conciliation board appointed to settle a previous strike. This award divided the workers into five wage groups. The rates were to be fixed by a joint commission. The commission failed to come to an agreement, and the workers' representatives who broke off negotiations sent an ultimatum on September 16 to the heads of eight firms threatening to strike if their demands were not granted within 24 hours.

The commission had made 19 partial awards, which failed to satisfy the workers, who thought that the awards meant reduced wages and assignment to lower wage groups. The chairman of the new conciliation board, formed after the break-off of negotiations, published on September 16 a reply to the men's complaints, in which he states:

The award on August 21 provided five classes of wages, payable on first engagement. In addition three service bonuses were to be paid after certain fixed periods of employment. These bonuses were to apply to individual workers in each branch who showed special ability and industry or were em-

¹ From various issues of *Vorwärts*. Berlin, September 13 to October 18, 1919.

ployed on work dangerous to health, and not, as the Metal Workers' Union asserts, to whole (occupational) groups of workers.

As five classes were to be fixed, it was clearly the task of the commission to place the most highly qualified workers in the first class, the least qualified in the fifth class, and the rest in the three intermediate classes.

The minimum wages so far accorded in the partial awards are almost without exception higher, and in no case lower, than existing minimum wages.

A different account of the dispute, which throws the blame on the employers, was given by a representative of the commission at a general meeting of the Berlin Metal Workers' Union on September 22. He said:

"After four meetings, resulting in 19 partial awards, negotiations were broken off. The employers strongly opposed the commission's ruling that workers who perform severe work dangerous to health should be included in the first category, and refused to give way on this point."

The strike began in small departments of a few firms and spread rapidly. The strikers were vital to the industries, so that lockout measures became necessary. From 500 the number of strikers had risen by September 22 to 5,000; and three days later to 18,000. On September 26 the large Siemens works had to be closed, as the firemen had struck, and 60,000 workers were out of employment. By September 30 the number of firms affected was 125; there were 31,300 men on strike and 72,300 were locked out. Seldom has a strike begun so vaguely as this one. Hitherto definite demands have formed the basis of every dispute. The latest dispute has arisen because it was assumed the employers were trying to bring about a reduction in wages.

The commission of 15, appointed by the Metal Workers' Union to formulate the workers' demands, drafted an agreement which was presented to the employers during the first week in October. By October 9, 40 firms had signed the agreement and work had been resumed, and a week later this number had been doubled. Meanwhile the strike continued to spread in concerns the owners of which refused to come to an agreement. At some works the strikers were replaced by voluntary workers organized as an emergency corps (technische Nothilfe); and as a protest the commission of 15, on October 17, ordered a general strike of electrical workers. On the same day, however, a proposal was put forward by the minister of labor and accepted by the employers' association and the Metal Workers' Union. The electrical workers agreed to resume work the same evening. The proposal is as follows:

1. Negotiations for the division of workers into five wage classes are to be undertaken, and worked out in sections before the chairman of the arbitration

court. If an agreement be reached it shall be binding on both parties. If no settlement be reached, the court of arbitration shall give a final decision.

2. The court of arbitration shall consist of 4 neutral members with 3 employers and 3 workers as assessors.

3. The neutral members shall be appointed, after consultation with both parties, by the minister of labor.

4. The award of August 21 shall remain valid. In the fifth wage class the increases shall be raised by sums ranging from 5 to 10 pfennigs, in accordance with the concession already made.

IMMIGRATION.

Immigration in October, 1919.

THE following tables, prepared by the Bureau of Immigration of the Department of Labor, show the total number of immigrant aliens admitted into the United States in each month from January, 1913, to October, 1919, and the numbers admitted in each fiscal year, 1915 to 1919, and in October, 1919, by nationality. The total departures of emigrant aliens in October, 1919, numbered 25,447.

IMMIGRANT ALIENS ADMITTED INTO THE UNITED STATES IN SPECIFIED MONTHS
JANUARY, 1913, TO OCTOBER, 1919.

Month.	1913	1914	1915	1916	1917	1918	1919	
							Number.	Per cent increase over preceding month.
January.....	46,441	44,708	15,481	17,293	24,745	6,356	9,852	18.3
February.....	59,156	46,873	13,873	24,710	19,238	7,388	10,586	7.5
March.....	96,958	92,621	19,263	27,586	15,512	6,510	14,105	33.2
April.....	136,371	119,885	24,532	30,560	20,523	9,541	16,860	19.5
May.....	137,262	107,796	26,069	31,021	10,487	15,217	15,093	10.5
June.....	176,261	71,728	22,588	30,764	11,095	14,247	17,987	19.2
July.....	138,244	60,377	21,504	25,035	9,367	7,780	18,152	.9
August.....	126,180	37,706	21,949	29,975	10,047	7,862	20,597	13.5
September.....	136,247	29,143	24,513	36,398	9,228	9,997	26,584	29.1
October.....	134,440	30,416	25,450	37,056	9,284	11,771	32,418	21.0
November.....	104,671	26,298	24,545	34,437	6,446	8,499	.....	.....
December.....	95,387	20,944	18,901	30,902	6,987	10,748	.....	.....

¹ Decrease.

Classified by nationality, the number of immigrant aliens admitted into the United States during specified periods and in October, 1919, was as follows:

IMMIGRANT ALIENS ADMITTED INTO THE UNITED STATES DURING SPECIFIED PERIODS AND IN OCTOBER, 1919, BY NATIONALITY.

Nationality.	Year ending June 30—					October, 1919.
	1915	1916	1917	1918	1919	
African (black).....	5,660	4,576	7,971	5,706	5,823	845
Armenian.....	932	964	1,221	321	282	112
Bohemian and Moravian.....	1,651	642	327	74	105	56
Bulgarian, Serbian, Montenegrin.....	3,506	3,146	1,134	150	205	102
Chinese.....	2,469	2,239	1,843	1,576	1,697	170
Croatian and Slovenian.....	1,912	791	305	33	23	27
Cuban.....	3,402	3,442	3,428	1,179	1,169	194
Dalmatian, Bosnian, Herzegovinian.....	305	114	94	15	4	8
Dutch and Flemish.....	6,675	6,433	5,393	2,200	2,735	896
East Indian.....	82	80	69	61	68	26
English.....	38,662	36,168	32,246	12,980	26,889	5,217
Finnish.....	3,472	5,649	5,900	1,867	968	119
French.....	12,636	19,518	24,405	6,840	12,598	2,779
German.....	20,729	11,555	9,682	1,992	1,837	620
Greek.....	15,187	26,792	25,919	2,002	813	475
Hebrew.....	26,497	15,108	17,342	3,672	3,055	713
Irish.....	23,503	20,636	17,462	4,657	7,910	1,227
Italian (north).....	10,660	4,905	3,796	1,074	1,236	1,067
Italian (south).....	46,557	33,909	35,154	5,234	2,137	5,103
Japanese.....	8,609	8,711	8,925	10,168	10,056	914
Korean.....	146	154	194	149	77	3
Lithuanian.....	2,638	599	479	135	160	30
Magyar.....	3,604	981	434	32	52	9
Mexican.....	10,993	17,198	16,438	17,602	28,844	4,095
Pacific Islander.....	6	5	10	17	6	1
Polish.....	9,065	4,502	3,109	668	732	168
Portuguese.....	4,376	12,208	10,194	2,319	1,574	701
Roumanian.....	1,200	953	522	155	89	69
Russian.....	4,459	4,858	3,711	1,513	1,532	194
Ruthenian (Russniak).....	2,933	1,365	1,211	49	103	5
Scandinavian.....	24,263	19,172	19,596	8,741	8,261	2,367
Scottish.....	14,310	13,515	13,350	5,204	10,364	1,740
Slovak.....	2,069	577	244	35	85	197
Spanish.....	5,705	9,259	15,019	7,909	4,224	1,251
Spanish-American.....	1,667	1,881	2,587	2,231	3,032	431
Syrian.....	1,767	676	976	210	231	82
Turkish.....	273	216	454	24	18	2
Welsh.....	1,380	983	793	278	608	148
West Indian (except Cuban).....	823	948	1,369	732	1,223	193
Other peoples.....	1,877	3,388	2,097	314	247	59
Total.....	326,700	298,826	295,403	110,618	141,132	32,418

PUBLICATIONS RELATING TO LABOR.

Official—United States.

CALIFORNIA.—*Industrial accident commission. Tunnel safety rules, effective December 1, 1919. Sacramento, 1919. 139 pp.*

— *Laws, statutes, etc. Labor laws of California. Prepared by the California State Library. Sacramento, 1919. 261 pp.*

DISTRICT OF COLUMBIA.—*Minimum Wage Board. Wages of women in hotels and restaurants in the District of Columbia. Washington, October 10, 1919. 23 pp. Bulletin No. 3.*

This report is summarized on pages 144 to 148 of this issue of the MONTHLY LABOR REVIEW.

IDAHO.—*Industrial accident board. First annual report from January 1, 1918, to October 31, 1918. Boise, 1918. 24 pp.*

A summary of this report appears on pp. 247 and 248 of this issue of the MONTHLY LABOR REVIEW.

MARYLAND.—*State industrial accident commission. Fourth annual report for the year November 1, 1917, to October 31, 1918, inclusive. Baltimore, 1919. 40 pp.*

This report is summarized on pp. 248 and 249 of this issue of the MONTHLY LABOR REVIEW.

MASSACHUSETTS.—*Bureau of Statistics. Forty-sixth quarterly report on employment in Massachusetts, quarter ending June 30, 1919. Boston, 1919. 20 pp.*

Reports increased activity in all important industries and trades, particularly in the building trades, boot and shoe and textile industries, and in iron and steel manufacturing, and an increase in the demand for labor. The total number of strikes recorded during the quarter was 161, compared with 65 during the preceding quarter. Returns received from 1,129 labor organizations in Massachusetts, representing an aggregate membership of 249,737, give the number of members unemployed for all causes at the close of June, 1919, as 12,637, or 5.1 per cent of the total number, in contrast with 13.4 per cent unemployed at the close of March, 1919.

— *State Board of Conciliation and Arbitration. Annual report for the year ending December 31, 1918. Boston, 1919. 98 pp. Public document No. 40.*

"The chief labor troubles were 163, in which one or both parties were unwilling to abandon hostile action." In such disputes, summarized as cases of mediation, the board sought the parties and proffered its advice, suggestions, and assistance. The board's services were sought in 222 petitions, including 59 for determining as normal the conditions of business concerns having a history of labor troubles, and 163 joint applications for arbitration. Ten of the latter were filed in 1917; three of recent origin are pending. In 39 cases a mutual settlement was effected, 2 applications were withdrawn, the contention having been abandoned, and the remaining 119 resulted in awards covered in the report.

MICHIGAN.—*Department of Labor. Thirty-sixth annual report. 1918. Lansing, 1919. 766 pp.*

Contains reports on inspection of factories, workshops, stores, hotels, restaurants, coal mines, and boats, on Michigan free employment bureaus and private employment agencies, prison and reformatory statistics, and labor laws. In 1918, 15,592 factories and workshops were inspected, as compared with 14,262 for the previous year. The number of women employed in the industries of the State during 1918 was 95,349, an increase of 19,337, or 25.4 per cent, when compared with 1917. The number of children employed was 1,651, being an increase of only 26 over the number for 1917. During the year 51,110 accidents were reported, this being 6,962 less than the number reported for 1917. For the fiscal year ending November, 1918, the work of Michigan free employment bureaus shows an increase of 8,010 placements over the previous year, the totals being respectively 108,463 for 1917, and 116,473 for 1918.

MINNESOTA.—*Department of Labor and Industries. Court decisions, Attorney General's opinions, Department of Labor advice, relative to the Workmen's Compensation Act. St. Paul, September, 1919. 84 pp. Bulletin No. 16.*

MONTANA.—*Industrial Accident Board. Fourth annual report for the 12 months ending June 30, 1919. Helena, 1919. 437 pp.*

A brief digest of this report appears on pages 249 to 251 of this issue of the MONTHLY LABOR REVIEW.

NEW MEXICO.—*State Mine Inspector. Seventh annual report for the year ending October 31, 1918. Albuquerque, 1918. 101 pp.*

The output of coal for the year was 4,037,726 short tons valued at \$9,876,361; the production of coke 607,241 tons valued at \$2,448,494.57. No labor disturbance was reported and the relations between employer and employees are stated to have been amicable. Employment at the mines was as follows: Miners, 3,070; day men in mines, 837; boys in mines, 45; day men on top, 876; boys on top, 45; total employed, 4,837; men employed at coke ovens, 315.

NEW YORK.—*Reconstruction Commission. Summary of report to Governor Alfred E. Smith on Retrenchment and reorganization in the State government. October 10, 1919. Albany, 1919. 44 pp. Charts.*

A digest of the proposed reorganization of the New York department of labor appears on pages 266 to 269 of this number of the MONTHLY LABOR REVIEW.

— *University. State-aided evening vocational schools. Albany, June 15, 1919. 37 pp. Bulletin No. 688.*

The purpose is to define the kinds of evening vocational schools entitled to special aid under the provisions of section 605, article 22 of the education law, as amended by chapter 531, Acts of 1919, to describe the plans of organization and administration which experience seems to show are the most satisfactory, and to indicate to communities the proper procedure required to enable them to secure State aid. The text of the law, effective Aug. 1, 1912, is included.

OHIO. *Department of Health. Health of Ohio coal miners. Abstract of a report by Emery R. Hayhurst. Columbus, 1919. 24 pp. Reprint 1903 (from Ohio Public Health Journal, Feb.-May, incl., 1919).*

Portions of the material used in this report, particularly those relating to mortality, how miners cope with sickness and death hazards, community medical facilities, and general conclusions, appeared in an article by Dr. Hayhurst on Protecting the health of soft-coal miners by prevention of disease, in *Modern Medicine*, July, 1919, and was summarized in the September, 1919, issue of the MONTHLY LABOR REVIEW, pages 291-294. The report also considers working conditions, health hazards by chief occupations, housing conditions and local health administration, and sickness—types and extent.

OREGON. *State Industrial Accident Funds. Report on examination and audit, as of June 30, 1919. Salem, 1919. 4 pp.*

PHILIPPINE ISLANDS. *Bureau of Labor. Labor. Boletín trimestral. Vol. 1, No. 1. Manila, March, 1919. 111 pp.*

The first issue of a quarterly publication of the Bureau of Labor. The chief aim is stated to be "to offer the laborers of these islands a source of general information relative to labor." The publication will also contain articles relative to interisland migration of laborers, of which the bureau has charge and for which the Philippine Legislature has this year appropriated the sum of 350,000 pesos (\$175,000), and other data referring to matters of interest to laborers. This issue contains tables showing the daily wages paid to laborers and carpenters employed by the provincial government in the construction of roads, bridges, and provincial buildings; wages of laborers in agriculture, industry, and commerce during the years 1911 and 1917, statement on strikes in 1919, and other data, part of which is in English. The agricultural laborer received in 1911 an average daily wage of about 0.64 pesos (\$0.32), in a majority of cases including food and in a few, both food and lodging, and in 1917 an average daily wage of about 0.668 pesos (\$0.334), which represented an increase of 0.028 pesos (\$0.014) daily or 4.38 per cent in the six years; while the industrial and commercial Filipino laborer in 1911 earned an average daily wage of about 0.88 pesos (\$0.44), and in 1917 and a great part of 1918, 1.28 pesos (\$0.64), which means an increase of 0.40 pesos (\$0.20) or 45.45 per cent.

WISCONSIN. *State Board of Vocational Education. Courses of study. Electricity: Shop, drawing, mathematics, safety, equipment, references. Madison, 1919. 16 pp. Monograph No. 2.*

— — — *Sheet metal: Shop, drawing, mathematics, science, safety, equipment, references. Madison, 1919. 11 pp. Monograph No. 4.*

UNITED STATES. *Civil Service Commission. Civil-service act, rules, statutes, and executive orders. Revision of the rules of April 15, 1903, with notes on the rules by the commission and legal decisions, amended to July 1, 1919. Washington, 1919. 110 pp.*

— *Congress. Joint Committees on Labor. National employment system. Hearings on S. 688, A bill to provide for a national employment system; S. 1442, H. R. 4305, bills to provide for the establishment of a national employment system and for cooperation with the States in the promotion of such system, and to regulate the expenditure of moneys that shall be appropriated for such purposes. Parts 1 and 2. Washington, 1919. Pp. 1-277, 281-715. 66th Congress, 1st session.*

— *Department of Commerce. Bureau of the Census. Mortality statistics, 1917. Eighteenth annual report. Washington, 1919. 597 pp.*

— *Department of the Interior. Bureau of Education. The Federal executive departments as sources of information for libraries, compiled by Edith Guerrier. Washington, September 1, 1919. 204 pp. Bulletin No. 74.*

The author has outlined briefly the functions of the various departments of the Federal Government and characterized the features of the publications of each department of special interest to librarians. The general subjects treated in the publications of the Department of Labor are listed and grouped by bureaus. The recent bulletins and other publications of the United States Bureau of Labor Statistics are listed in full, and matters pertaining to labor bibliographies and indexes are given special mention.

— *Bureau of mines. Abstracts of current decisions on mines and mining reported from January to May, 1919. Washington, 1919. 175 pp. Bulletin 181. Law serial 19.*

Includes decisions relating to damages for injuries to miners.

UNITED STATES. *Department of Labor. Bureau of Naturalization. Naturalization laws and regulations. Washington, October 10, 1919. 39 pp.*

Includes the provision of the act of July 19, 1919, relating to naturalization.

— — — *Children's Bureau. Laws relating to "mothers' pensions" in the United States, Canada, Denmark, and New Zealand. Washington, 1919. 316 pp. Legal series No. 4, Bureau publication No. 63.*

A digest of this volume was published in the December, 1919, issue of the MONTHLY LABOR REVIEW, pages 347 and 348.

— — — *Maternity benefit systems in certain foreign countries, by Henry J. Harris. Washington, 1919. 206 pp. Legal series No. 3. Bureau publication No. 57.*

"Sources of information" are listed at the end of the sections dealing with the various countries (except France and Luxemburg) included in the report, and a bibliography arranged by country is found on pages 195-206.

— — — *Information and Education Service. Division of public works and construction development. Economics of the construction industry. Washington, 1919. 263 pp. Charts.*

Report of an investigation "of those general economic factors which, taken together, determine the financial success or failure of a prospective investment in improved real estate and which, consequently, investors are in the habit of considering before undertaking the improvement of real estate." The division was organized to "stimulate the interest of the Nation in public and private construction" with a view to the creation of buffer employment for labor during the period of transition of manufacturing interests from war to peace production. As to the stimulation of private construction, it was decided that this should take the form of supplying authentic data to assist the individual investor to judge for himself whether or not it would be profitable for him to build. "The provision of such data meant an investigation of the volume of deferred construction, of the recent course of construction-material prices, of wages in the construction industry, of land values and rents, and of mortgage-loan conditions." The more important findings of the investigation concern the following matters: Deferred construction, recent construction, prices of construction materials, wages in the construction industry, cost of construction, land values and rents, and mortgage loans.

— — — *Training Service. Courses of instruction for workers in cotton mills, including directions for installing a training department and a summary of information which every worker in a cotton mill should possess. Washington, 1919. 64 pp. Training bulletin No. 25.*

— — — *Courses of instruction in piano making; together with a section on player pianos, pneumatic actions, piano actions, and keys. Washington, 1919. 67 pp. Training bulletin No. 22.*

— — — *Industrial training in the overalls industry. The organization and conduct of training in the industrial establishments for operators and cutters. Washington, 1919. 57 pp. Training bulletin No. 18.*

— — — *Training for shirt workers. A plan for organizing and conducting training for workers in the industry. Washington, 1919. 59 pp. Training bulletin No. 19.*

— — — *Training in industrial plants. A manual for American industries setting for the theory and practice of industrial training. Washington, 1919. 30 pp. Training bulletin No. 14.*

— — — *Training in the men's suit and overcoat industry. An outline of the organization and conduct of training for cutters, pressers, machine operators, and hand sewers in the industry. Washington, 1919. 83 pp. Training bulletin No. 16.*

— — — *Training in the paper-box industry. Washington, 1919. 75 pp. Training bulletin No. 15.*

- UNITED STATES. *Department of Labor. Training Service. Training in the shoe industry.* Washington, 1919. Illustrated. Training bulletin No. 21.
- — — *Training workers in the women's cloak, suit, and skirt industry. A plan for the organization and conduct of training for cutters, pressers, machine operators, and hand sewers in the industrial establishments.* Washington, 1919. 83 pp. Training bulletin No. 17.
- — — *Women's Bureau. The eight-hour day in Federal and State legislation. A brief summary of the various "eight-hour laws" in effect in the United States: 1919.* Washington, October 15, 1919. 19 pp. Bulletin No. 5.
- — — *The employment of women in hazardous industries in the United States. A brief résumé of State and Federal laws regulating the employment of women in hazardous occupations: 1919.* Washington, 1919. 8 pp. Bulletin No. 6.
- — — *Night-work laws in the United States. Brief summary of State legislation regulating night work for women.* Washington, October 15, 1919. 5 pp. Bulletin No. 7.
- *Interstate Commerce Commission. Division of Statistics. Thirtieth annual report on the statistics of railways in the United States for the year ended December 31, 1916.* Washington, 1919. 959 pp.
- *Treasury Department. Commissioner of Internal Revenue. Annual report for the fiscal year ended June 30, 1919.* Washington, 1919. 244 pp. Document No. 2844.

Contains a section relating to the tax on the employment of child labor.

- — *Public Health Service. Health insurance, the medical profession, and public health. Including the results of a study of sickness expectancy.* By B. S. Warren and Edgar Sydenstricker. Washington, 1919. 16 pp. Reprint No. 516 from the *Public Health Reports*, April 18, 1919, pages 775-789.

The principal points which suggest themselves for the consideration of health insurance, both from the viewpoint of the physician and of the public health official, according to the authors, are: The sickness expectancy, i. e., the amount of sickness for which medical and surgical service must be provided; Methods of providing adequate medical and surgical relief; and Methods of adequate prevention of sickness. These points are considered in detail, and a scheme of organization outlined which has been suggested as following the general outlines of a plan for coordination approved by the Annual Conference of State and Territorial Health Officers with the Public Health Service, May, 1916. The proposed organization is stated to be about as follows:

1. Make the State commissioner of health an ex officio member of the State health insurance commission.
2. Detail a medical director from the State health department to assist the commission in supervising the administration of the medical benefits and to act as health advisor and director.
3. Detail district medical directors from the State health department to aid in the administration of the medical benefits in their respective districts.
4. Detail from the State health department a sufficient number of local medical officers to act as medical referees and to sign all disability certificates, and to perform such other duties as may be authorized by law or regulation.

Official—Foreign Countries.

AUSTRALIA. *Court of conciliation and arbitration. Commonwealth arbitration reports. Vol. 12. A report of cases decided and awards. Including conferences convened by the President or Deputy President during the year 1918. Melbourne. [1919.] 988 pp.*

— (NEW SOUTH WALES). *Board of Trade [Declaration of 8th October, 1919, as to the living wage to be paid to adult male employees, etc.] Sydney, 1919. 10 pp. Price, 6d. Published in Government Gazette No. 237 of 10th October, 1919.*

This cost of living study was made by the New South Wales Board of Trade in order to determine the living wage to be paid to adult male employees in that State. In making the study the Board of Trade followed the principles laid down in a previous study which were: That the determination of the average cost of living should be based upon the average requirements of the lowest paid class of workers; that this in turn should be based upon the average sized family of this class; and that the standard should be sufficiently high to meet the requirements for a normal mode of living.

As a result of the study the Board determined that the average cost of living had increased to £3 17s.¹ per week and accordingly this was fixed as the living wage for adult employees which should be paid in the area studied. The amounts apportioned to different items were as follows:

	£.	s.	d.
Food and groceries.....	1	11	4
Rent.....	--	15	7
Fuel and light.....	--	3	0
Clothing and boots.....	--	14	0
Other items.....	--	13	1
		3	17
			0

— — — *Second interim report on the prevalence of miners' phthisis and pneumoconiosis in certain industries. Report upon the constitution and cost of a technical commission of inquiry into miners' phthisis and other diseases affecting miners. Sydney, 1919. 57 pp.*

The first interim report, which was noted in the June, 1919, issue of the MONTHLY LABOR REVIEW, page 358, contained recommendations for the appointment of a technical commission of inquiry for the purpose of conducting an investigation into the prevalence of pneumoconiosis among miners, and pointed out the fact that such an inquiry conducted by independent medical and scientific specialists was alone likely to provide the data upon which a sound judgment upon the matter of the report could be based. The present report contains complete proposals, including an estimate of cost, for the formation of such a commission, which should consist of at least four eminent scientists, besides a radiologist, a zoologist, a physicist, and an efficient corps of assistants

— — — *Department of Labor and Industry. Industrial Gazette. Special supplement. Vol. 16, No. 2. August, 1919. Industrial conditions in Great Britain and the United States of America. Report of investigations by the Hon. G. S. Beeby. Sydney, 1919. 187 pp. Price 1s.*

Some of the subjects dealt with in this study are Factors of unrest; Present problem in Great Britain and the United States of America (including Individualism v. State control in U. S. A. and The Whitley plan in Great Britain);

¹ Conversions are not made owing to fluctuating value of the pound. Normally the par value of the English pound is \$4.87.

Collective bargaining; Industrial welfare; Industrial hazards, including workmen's compensation and social and unemployment insurance; Methods of production; Profit-sharing; Child and female labor; and Industrial research. The report also gives some suggestions for immediate reforms.

— (TASMANIA).—*Industrial Department. Chief inspector of factories. Fourth annual report for 1918-19 on factories, wages boards, shops, etc., Hobart, 1919. 26 pp.*

Includes reports on the administration of the Factories Act, 1910, with its amendments; the Wages Boards Act, 1910, with its amendments; the Shops Closing Act, 1911, with its amendments; and the Footwear Act, 1918. Inspections under these acts numbered over 3,500.

CANADA.—*Civil Service Commission. The classification of the civil service of Canada. Setting forth classes of positions and rates of compensation for each class. Revised after hearing officers and employees in the service. Ottawa, September, 1919. 853 pp. Price 50 cents.*

— — — *Report of transmission to accompany the classification of the civil service of Canada. Describing the schedules for the classification of positions and the standardization of compensation, explaining their need, basis, and use and the method of their preparation, and including a discussion of the problem of personnel in the civil service of Canada with recommendations for a comprehensive employment policy and plan. By Arthur Young and Company. Ottawa, 1919. 82 pp.*

— (ONTARIO).—*Department of Public Works. Third annual report of the trades and labor branch, including the reports of the superintendent of trades and labor, chairman of the board of stationary and hoisting engineers, chief factory inspector, chief inspector of steam boilers, inspector of labor agencies, 1918. Toronto, 1919. 72 pp. Illustrated.*

Contains reports of employment bureaus of the Province of Ontario for the year ending October 31, 1918. During this period 26,407 men applied for work, 23,217, or 87.92 per cent, of whom were referred to positions. Only 55.9 per cent of the 41,525 calls for men could be filled. The number of women applying for work was 15,617, of whom 11,538 were referred to positions. In addition to these, 10,031 days' work was found for casual employees. Of the 23,844 requests for women workers, 73.21 per cent were filled. The number of employment offices in the Province (11 in 1918) was to be increased by more than 50 per cent during 1919.

FRANCE (DÉPARTEMENT DE LA SEINE).—*Office public des habitations à bon marché. Les cités jardins du Grand Paris. No. 1. Règlement intérieur (1). Paris, 1918. 10 pp. No. 2. Compte rendu moral des travaux du conseil d'administration de 6 Juillet 1916 au 1^{er} Janvier 1918. Paris, 1918. 24 pp. No. 3. Exposition de la reconstruction. Paris, 1919. 4 pp. No. 4. Voeu émis le 9 Mai 1919 par le conseil d'administration de l'Office Public d'Habitations à bon Marché du Département de la Seine. Paris, 1919. 2 pp. No. 5. Application des maxima de valeur locative aux maisons individuelles construites dans des cités-jardins créés par les Offices publics d'Habitations à Bon Marché (1). Paris, 1919. 7 pp. No. 6. Compte rendu des travaux du conseil d'administration de l'Office Public d'Habitations à Bon Marché du Département de la Seine pendant l'année 1918. Paris, 1919. 14 pp.*

Six pamphlets giving the regulations and scope of the Public Office of Low-cost dwellings of the Department of the Seine. A more extended report of this office, including the preliminary plans submitted by a number of architects appointed to examine and report upon the problem of garden cities for the Department of the Seine, was given in the July, 1919, issue of the MONTHLY LABOR REVIEW (pages 262 and 263.).

GERMANY. *Statistisches Reichsamt, Abteilung für Arbeiterstatistik. Beiträge zur Kenntnis der Lebenshaltung im vierten Kriegsjahre. Berlin, 1919. 76 pp. 21. Sonderheft zum Reichs-Arbeitsblatt.*

A supplement to the bulletin of the German Statistical Office, Division for Labor Statistics, giving the results of an investigation into the cost of living of German urban families during the fourth year of the war. The principal results of this investigation are summarized in the present issue of the Review on pp. 114 to 117).

GREAT BRITAIN.—*Civil Service Arbitration Board. (Conciliation and arbitration board for Government employees.) Awards and agreements. Vol. I—1st May, 1917, to 1st August, 1919. London, 1919. 200 pp. Price, 4s. 6d. net.*

— *Coal Industry Commission. Vol. I. Reports and minutes of evidence on the first stage of the inquiry. Vol. II. Reports and minutes of evidence on the second stage of the inquiry. London, 1919. 414, 1,219 pp. Cmd. 359, Cmd. 360. Price, 3s. 6d. net and 7s. net.*

Articles dealing with the situation in the British coal industry and the reports of the Coal Industry Commission were published in the MONTHLY LABOR REVIEW for May, 1919, pages 109 to 114; August, 1919, pages 78 to 86; and October, 1919, pages 23 to 30.

— *Ministry of Transport. Railway working. Statement showing the results of working the railways during the period of Government control of the railways in Great Britain (5 August, 1914–31, August, 1919) and Ireland (1 January, 1917–31, August, 1919). London, 1919. 13 pp. Cmd. 402. Price, 2d net.*

— *National Relief Fund. Report on the administration, up to the 30th June, 1919 (in continuation of Cmd. 16). London, 1919. 14 pp. Cmd. 356. Price, 2d net.*

INDIA.—*Department of Statistics. Index numbers of Indian prices 1861–1918. Calcutta, 1919. II, 24 pp. Charts. No. 996. Price, As. 13 or 1 s. 3 d.*

There was a rise of 125 per cent in the average level of prices as compared with the standard period 1873, the rise being 189 per cent in the articles of import and 99 per cent in those of export. A table which shows the unweighted index numbers of the average prices of the main groups of articles with their subheads in 1918 and for six months of 1919, as compared with 1913, the prewar year which is taken as 100, indicates the average rise during the war period for all articles to be as follows: 1914, 103; 1915, 106; 1916, 129; 1917, 137; 1918, 157; 1919, 190. The greatest rise in 1918 was 150 per cent in the group "metals and coal," and the least 24 per cent in "miscellaneous." In "textiles" the increase was 67 per cent, and in "food and drink" 43 per cent. The general average price for all groups for 1918 increased by 57 per cent, the rise being 147 per cent in articles of import and 29 per cent in those of export. The greatest rise in the first half of 1919 was 102 per cent in the group "food and drink."

— *Prices and wages in India. Thirty-fourth issue. Calcutta, 1919. V, 278 pp. Charts. No. 971. Price, 2 Rs. or 3 s.*

In three parts: Wholesale prices, retail prices, and wages. Regarding wages, returns from some industrial establishments indicate that, except in the paper industry of Bengal and the rice milling industry of Burma, there was a general rise in industrial wages in 1918 as compared with the preceding year, and with the prewar period. The general averages of index numbers computed on the rates of wage earners in different industries during January of each year from 1915 to 1918, as compared with the prewar period (January, 1914), are stated in the following table:

INDEX NUMBERS SHOWING MOVEMENT OF INDUSTRIAL WAGES IN INDIA DURING
JANUARY, 1914 TO 1918.

Industries.	1914	1915	1916	1917	1918
Cotton, Bombay.....	100	103	103	106	129
Wool, Cawnpore.....	100	112	108	117	118
Mining (coal), Bengal.....	100	100	100	108	116
Tea, Assam.....	100	102	103	109	119
Brewing, Punjab.....	100	102	103	121	130
Jute, Bengal.....	100	101	100	101	103
Paper, Bengal.....	100	99	99	99	100
Rice, Rangoon.....	100	100	100	100	100

ITALY. *Ministero per l'Industria, il Commercio e il Lavoro. Direzione Generale del Credito, della Cooperazione e delle Assicurazioni private. Atti del Consiglio della Previdenza e delle Assicurazioni sociali. Sessione del 1916. Rome, 1918. 323 pp. Annali del credito e della previdenza, series II, vol. 17. Prima sessione del 1918. Rome, 1919. 202 pp. Annali del credito e della previdenza, series II, vol. 22. Seconda sessione del 1918. Rome, 1919. 234 pp. Annali del credito e della previdenza, series II, vol. 23.*

These three volumes contain the minutes of the session of 1916, and of the first and second sessions of 1918 of the Italian Social Insurance Council. The subjects under discussion at these sessions were the recognition and approval of the by-laws of scholastic and other mutual aid societies, of sickness and old-age insurance funds of railroad employees, of the old-age and invalidity insurance fund of workers in the Sicilian sulphur mines, the regulations for the carrying out of the decree of August 23, 1917, relating to compulsory agricultural accident insurance and the premium rates for this insurance, the new annuity rates proposed by the National Insurance Institute, and the regulations for the auditing of the financial condition and for the liquidation of life insurance companies.

— *Direzione Generale del Credito, della Cooperazione e delle Assicurazioni private. Provvedimenti in materia di economia e di finanza emanati in Italia in seguito alla guerra europea. Parte quinta: dal 1° Gennaio 1917 al 30 Giugno 1917. Rome, 1919. 543 pp. Annali del credito e della cooperazione, series II, vol. 10, part 5. Parte sesta: dal 1° Luglio 1917 al 31 Dicembre 1917. Rome, 1919. 336 pp. Annali del credito e della previdenza, series II, vol. 10, part 6.*

These two volumes form parts 5 and 6 of a compilation, economic and financial, of laws, decrees, etc., enacted in Italy during the European war.

JAPAN. *Bureau of General Statistics. Statistical résumé of the Japanese Empire. 33d year. Tokio, 1919. 185 pp.*

The publication gives general statistics for the Japanese Empire and colonies, among others tables showing wages and earnings of workers in various occupations by sex and by year, 1912 to 1916. It gives a list of life insurance companies, capital invested, number of members, also mutual aid societies for government employees and cooperative societies.

NEW ZEALAND. *Board of Trade. Third annual report. Wellington, 1919. 33 pp. Price, 1s.*

Considers the increases in the cost of living, the efforts at price regulations, the control of trade and industry, and the policies suggested to prevent or control monopolies. It is stated that from July, 1914, to May, 1919, the cost of living increased 42 per cent. In discussing the control of industry in connection with the campaign against rising prices it is stated that the ends to be

achieved by Government control are (a) to keep alive competitive industry, and (b) to control monopoly. It is recommended that, in order to carry out the policies of the board and to control industry effectively, there be established a Department of Industries and Commerce, consisting of "a minister of industries and commerce, a Board of Trade, a secretary of industries and commerce a secretary to the board." It is urged that the board be given power (a) to investigate the organization and business conduct of industry, especially protected industries already in existence; (b) to require annual and special reports from businesses and industries; (c) to investigate and make recommendations, and in suitable cases to enforce recommendations where infringements of the Commercial Trusts Act are alleged; (d) to investigate trade conditions in and with other countries, particularly in regard to the operation of monopolies and trusts; (e) to determine and prevent unfair methods of competition; (f) to bring about improvements in the methods of accounting used by businesses, particularly with respect to accurate and uniform methods of cost accounting; and (g) to investigate and report upon trade associations and control their activities.

— *National Provident Fund. Actuarial examination for the triennium ended 31st December, 1916. Wellington, 1919. 5 pp. Price 6d.*

— *Eighth annual report of the board for the year ended 31st December, 1918. Wellington, 1919. 3 pp. Price, 3d.*

ROUMANIA *Direcțiunea Generală a Statisticiei. Anuarul Statistic al Romaniei. 1915-1916. Bucharest, 1919. xxx, 343 pp.*

The official statistical yearbook of Roumania for the years 1915 and 1916 containing statistical data on climatology, organization, population, agriculture, means of communication (railroads, navigation, roads, posts, telegraph, and telephone), commerce, industry, stock companies, finance, public instruction, and administration of justice. The data on industry show that at the end of 1915 a total of 53,470 workers, among which were 4,679 female workers, were employed in 837 factories encouraged by the State through grants of special privileges. The annual pay roll of these factories was 49,795,673.60 lei (\$9,610,565). Data on workmen's insurance show that in the fiscal year 1913-14 a total of 217,772 persons were insured. Of this number 193,883 were males and 23,889 females. Medical aid in cases of sickness was given in 385,652 cases to insured persons and in 91,742 cases to members of their families.

SWITZERLAND (ZÜRICH, CANTON). *Statistisches Bureau. Die Ergebnisse der eidg. Berufszählung vom 1. Dezember, 1910, in den politischen Gemeinden des Kantons Zürich. Winterthur, 1919. 59 pp. 3 maps. Statistische Mitteilungen betreffend den Kanton Zürich. Heft 131.*

The results of the Swiss occupational census of December 1, 1910, in so far as they relate to the communes of the Canton Zürich. According to this census the population was distributed among the various occupations as follows:

DISTRIBUTION OF THE GAINFULLY ENGAGED POPULATION OF THE CANTON ZÜRICH, BY SEX, OCCUPATION, AND CHARACTER OF THE COMMUNES, 1910.

Character of the communes.	Number of communes.	Population.	Gainfully engaged persons.		Gainfully engaged females.		Number of persons engaged in—						
			Number.	Per 1,000 of population.	Number.	Per 1,000 gainfully engaged persons.	Farming.	Industry.	Commerce.	Transportation.	Administrative service, liberal professions.	Personal service.	
Rural:													
Farming—													
Over 70 per cent.	36	18,608	10,250	551	3,985	389	8,072	1,574	233	156	180	26	
Over 60 to 70 per cent.	27	16,688	8,549	515	2,982	347	5,609	2,253	310	197	195	30	
Over 40 to 60 per cent.	34	26,826	13,115	508	4,252	324	6,922	4,754	674	325	377	63	
Industrial—													
Over 40 to 60 per cent.	43	75,249	35,614	473	11,574	325	11,682	18,810	2,437	1,045	1,494	196	
Over 60 to 70 per cent.	28	80,096	38,281	478	13,205	345	6,910	25,205	3,101	1,441	1,350	274	
Over 70 per cent.	16	70,465	34,364	488	11,551	336	3,020	26,178	2,740	1,115	1,084	227	
Urban		2,215,983	101,252	469	30,431	300	1,933	51,322	26,059	7,705	8,922	2,311	
Total		186,503,915	241,470	479	77,980	323	44,098	133,096	35,554	11,984	13,611	3,127	

According to the preceding table the percentage of gainfully employed persons is much larger in the rural communes of the Canton Zürich than its industrial and urban communes. The percentage of gainfully employed females is largest in farming communities and lowest in the large cities. Of the gainfully employed population of the Canton, 55.1 per cent were engaged in industry, 18.3 per cent in farming, and 14.7 per cent in commerce.

— (ZÜRICH, CITY). *Städtisches Arbeitsamt. Geschäftsbericht für das Jahr 1918. Zürich, 1919. 31 pp. Chart.*

The annual report of the municipal labor office of the city of Zürich on the activities of the city's municipal and private employment offices during 1918. The activities of the municipal employment office during the five-year period 1914–1918 are shown in the following table:

STATISTICS OF THE ACTIVITY OF THE MUNICIPAL EMPLOYMENT OFFICE OF ZÜRICH, 1914–1918.

Year.	Vacant situations.			Applicants.			Situations filled.			Transient and non-resident applicants.
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	
1914.....	8,471	2,713	11,184	16,485	2,630	19,115	6,904	1,694	8,598	9,533
1915.....	10,286	2,096	12,382	14,599	2,891	17,490	7,645	1,538	9,183	3,582
1916.....	13,008	3,414	16,422	12,524	3,137	15,661	10,252	2,212	12,464	3,073
1917.....	12,906	3,504	16,410	11,328	2,647	13,975	9,904	2,008	11,912	2,550
1918.....	13,506	3,123	16,629	13,446	2,237	15,683	11,020	1,678	12,698	2,053

The results for 1918 show an increase of 219 in the number of vacant situations, of 1,708 in the number of applicants, and of 786 in the number of situations filled. The report states that the termination of the war and the conse-

quent changes in the economic situation have exercised a strong influence on the labor market and caused a considerable decrease in the demand for labor, but that Zürich was spared an acute crisis. In addition to the vacant situations shown in the preceding table, 10,537 temporary situations for laundresses, charwomen, and female day laborers were registered and 10,396 of these were filled. According to the data shown in the preceding table the number of male and female applicants per 100 vacant situations was 99.6 and 71.6, respectively, and that of applicants of both sexes 86.1. Of the male applicants, 6,786 were skilled workers, 1,414 agricultural workers, and 5,246 unskilled workers.

The number of private employment offices operating in Zürich in 1918 was 29. Ten of these were free employment offices and the other 19 were operated for profit. The 29 offices combined registered 21,507 vacant situations and 15,773 applicants, and were able to fill 7,412 (34.4 per cent) of the former.

For the year 1918 the municipal employment office received a State subsidy of 14,713 francs (\$2,839.60), a cantonal subsidy of 3,000 francs (\$579), and a subsidy of 750 francs (\$144.75) from the Zürich Cantonal Federation for the employment of unemployed for payment in kind (*Naturalverpflegung*). In addition, the Central Office of the Swiss Employment Exchanges contributed 2,000 francs (\$386) to the costs of administration.

Unofficial.

AMERICAN ACADEMY OF POLITICAL AND SOCIAL SCIENCE. *The Annals*. Vol. 86, No. 175. *The railroad problem—a discussion of current railway issues*. Philadelphia, November, 1919. 252 pp.

This volume is devoted largely to the current issues as to railway regulation and the participation of labor in the management of railroads. Its four parts contain articles on (1) Government operation, (2) Current proposals for regulation, (3) Unification of terminals, and (4) Railway efficiency and labor. Among the articles of special interest to labor are *Women in the railroad world*, by Pauline Goldmark; *Should labor participate in management*, by Glenn E. Plumb; and *Railway efficiency and labor*, by Captain O. S. Beyer, jr.

AMERICAN FEDERATION OF LABOR. *Study and report upon judicial control over legislatures as to constitutional questions*, by Jackson H. Ralston. Ordered prepared and printed in pamphlet form by St. Paul convention of the A. F. of L. Washington, 1919. 80 pp.

ARNOT, R. PAGE. *Facts from the coal commission*. Compiled by R. Page Arnot (Secretary Labour Research Department), for the Miners' Federation of Great Britain, with a foreword by Robert Smillie and Frank Hodges. London, Labour Research Department, 25 Tothill Street, Westminster, S. W. 1, 1919. 40 pp. Diagram.

Articles containing accounts of the coal commission, including the recommendations of the Sankey report, were published in the May and August, 1919, issues of the MONTHLY LABOR REVIEW, pages 109 to 114 and 78 to 86 respectively.

BARGERON, L. *L'Hygiène dans la Reconstruction des Usines*. Paris, 1919. 275 pp. Illustrated.

A monograph on industrial hygiene. In view of the reconstruction of factories in the devastated regions of northeastern France the author, basing his recommendations on his practical experiences as factory inspector, outlines guiding principles of shop hygiene to be observed in this reconstruction work. He expresses great fear that in the haste of reestablishing production scant consideration will be given to industrial hygiene in the rebuilding and equip-

ment of the factories. The volume is divided into ten chapters dealing with the following subjects: (1) Temperature of the working place; (2) lighting; (3) effects of compressed air; (4) dust; (5) foul and humid air; (6) installations for personal hygiene; (7) spittoons, privies; (8) factories of poisonous substances and explosives; (9) food and drinks; and (10) sports. In addition to laying down principles of industrial hygiene the author describes numerous appliances for the practical carrying out of these principles. The text is copiously illustrated.

CARNEGIE FOUNDATION FOR THE ADVANCEMENT OF TEACHING. *Justice and the poor. A study of the present denial of justice to the poor and of the agencies making more equal their position before the law with particular reference to legal aid work in the United States.* By Reginald Heber Smith. New York, 576 Fifth Avenue, 1919. 271 pp. Charts. Bulletin No. 13.

This bulletin constitutes the second in a series of studies of legal education and cognate matters that is in course of publication by the Carnegie Foundation, under the general charge of Alfred Z. Reed. It sets forth the defects in the administration of the law which work in effect a denial of justice to the poor or the ignorant; and the agencies, supplementary to the existing machinery, whose object is to remedy these defects. "The outcome and the object of the report is the effort to prove that these various agencies, if properly articulated with the existing system of the administration of justice, can be made to secure, so far as human means can do, the practical equality of all men before the law and to afford to all citizens without regard to wealth or rank or race the means for a prompt, inexpensive, and fair adjudication of their complaints."

COLSON, C. *Cours d'économie politique. Livre deuxième. Le travail et les questions ouvrières.* Revised edition. Paris, F. Alcan, 1917. 531 pp.

This book is a course of study in economics and deals with labor problems in a very detailed way. It studies the relation between population and labor productivity; the Malthusian theory; mortality; immigration and its effects on labor standards; and the effect of increased production on wages. It gives a historical survey of various labor organizations; a study of wages, hours, rest periods, apprenticeship, cooperative associations, labor contracts, unions, employers' organizations, strikes, lockouts, minimum wage, etc.

A special chapter is devoted to social insurance. It treats of the theory of insurance, probability and risks, premiums, workmen's compensation and employers' liability, pensions, mutual help associations, State subsidies. It gives the advantages and disadvantages of various systems in different countries, the legal measures taken by different governments with a view toward the health and security of workers, and ends with a discussion on the value of compulsory State insurance. The rest of the book deals with public and private charities, and the means of increasing the welfare of the workers. There is a table of relative increase in wages and cost of living in France, 1810-1910.

COX, HAROLD. *The coal industry. Dangers of nationalization. Second impression.* London, Longmans, Green & Co., 1919. 18 pp.

This pamphlet is based upon evidence given by the author, editor of the Edinburgh Review, before the Coal Commission.

Deutscher Buchbinder-Verband. *Bericht des Vorstandes, 1918.* Berlin, 1919. 75 pp.

The annual report of the directorate of the German Bookbinders' Federation for 1918. With respect to the labor market the report states that in the first 10 months of 1918 the number of unemployed male bookbinders never exceeded 0.6 per cent and that of female workers 1.6 per cent. In November, however,

the respective figures increased to 2 and 2.7 per cent, and in December to 4.5 and 6.5 per cent. The membership increased slightly during the first quarter and decreased during the second quarter by 324, but in the third quarter it increased again by 1,911, and the phenomenal increase of 15,608 is reported for the last quarter of 1918. On June 30, 1914, the federation had 16,413 male and 15,968 female members; that is, both sexes were equally represented. At the end of 1918 the composition of the membership had undergone a very great change, for the male members numbered only 10,591, and the female 26,378. The report points out that this disparity in the membership of the two sexes exercises an unfavorable influence upon the finances of the federation, because the administrative expenditures for female and male members are the same while the membership fees of female members are considerably lower than those of the male members. The total receipts of the federation during 1918 amounted to 675,376.53 marks (\$160,739.61) and the expenditures to 429,664.75 marks (\$102,260.21). With the exception of administrative costs, unemployment benefits with 55,650.60 marks (\$13,244.84) and sick benefits with 81,870.15 marks (\$19,485.10) were the two largest items of the expenditures. The federation is attempting to bring about a national collective agreement (Reichstarifgemeinschaft.)

The report regrets the lack of interest during the war by affiliated national federations in the bookbinders' international secretariat. The German, Austrian, and Hungarian federations were the only contributing federations in 1916, and in 1917 even the Hungarian Federation failed to make contributions. *Deutscher Holzarbeiter-Verband. Jahrbuch, 1915. Berlin, 1919. 352 pp.*

The yearbook for 1915 of the German Woodworkers' Federation. This yearbook deals with the effects of the war on the woodworking industry, the joint industrial league of this industry, the wage movement, the collective agreements in force and newly concluded, the membership movement, the financial report of the federation, monthly unemployment statistics, accident statistics, etc. The data on accident statistics will be discussed in an article in the MONTHLY LABOR REVIEW.

FOERSTER, ROBERT F. *The Italian emigration of our times. Cambridge, Harvard University Press, 1919. 556 pp.*

A study of the Italian emigrant in his varied relations both to Italy and to the countries to which he goes, and of the influences affecting emigration. Four chapters deal with Italian emigration to the United States. Italian immigrants in various skilled and unskilled occupations are discussed, one chapter being devoted to the small share taken by the Italian immigrant in the agriculture of this country. "The Italian Experience" gives information about: Considerations of employment, wages, saving; Housing; Food; The question of health; Attitude of the American employing and laboring classes. A bibliographical index appears on pp. 537-546.

FRANKEL, LEE K., AND DUBLIN, LOUIS I. *Influenza mortality among wage earners and their families. A preliminary statement of results. Reprinted from American Journal of Public Health, Vol. IX, No. 10, October, 1919, pp. 731-742.*

This paper is summarized on pages 223 and 224 of the present issue of the MONTHLY LABOR REVIEW.

GEARHART, EDNA B. *List of references on workshop committees. In Special Libraries, Industrial Number. Boston, Mass., October, 1919. Pp. 203-208.*

Annotated bibliography of books and magazine articles, including references to printed plans in operation. A partial list of firms that have inaugurated

some form of representative shop committee plan was published in the MONTHLY LABOR REVIEW for September, 1919, pp. 123-125.

GIESE, F. *Die Verfassung des Deutschen Reiches vom 11. August, 1919.* Berlin, Carl Heymanns, Verlag 1919. 438 pp. Taschen-Gesetzammlung 19.

The text of the new German constitution with commentaries. A translation of the socio-political provisions of the new constitution was published in the December issue of the MONTHLY LABOR REVIEW (pp. 132 to 135).

HARL, MRS. CHARLES M. *Profit sharing. A solution of the problem between capital and labor as it appears to one who is affiliated with neither.* Council Bluffs, Iowa [1919]. 8 pp.

HONEGGER, HANS. *Godin und das Familistère von Guise.* Zürich, 1919. 111 pp. Zürcher Volkswirtschaftliche Studien. New series, No. 6.

A history of the life of Jean Baptiste André Godin and of his practical life work, the familistère settlement and productive association at Guise (France).

HUTCHINSON, EMILE JOSEPHINE. *Women's wages. A study of the wages of industrial women and measures suggested to increase them.* New York, Columbia University, 1919. 179 pp. Studies in history, economics, and public law, vol. 89, No. 1.

The author analyzes the wage data gathered by various Federal and State agencies and commissions, the effects of minimum wage legislation, trade-unionism, and vocational education upon women's wages, and points out methods which may be expected to result in an improvement in women's industrial status.

INTERNATIONAL ASSOCIATION OF CASUALTY AND SECURITY UNDERWRITERS. *Eternal vigilance is the price of success. Address of the president, Arthur A. Childs, Ninth annual convention, the Greenbrier—the White Hotels, White Sulphur Springs, W. Va., September 16-19, 1919.* [N. p., 1919.] 19 pp.

Two subjects to which considerable attention is given are workmen's compensation insurance and accident and health insurance. Of the first, the total written insurance for 1918 by the 40 stock companies writing compensation insurance was \$94,861,458, which was a gain in premium income of over \$30,000,000. The underwriting profit was only \$197,933. In 1917 on a premium income of \$64,640,671, 32 of the stock companies took an underwriting loss of \$935,712. Thus a decided improvement was reflected for the year. The demand for accident and health insurance during 1918 is called "phenomenal." "Probably the direct and indirect hazards of the war, together with the scare created by the influenza pandemic, were largely responsible for the increase of over nine million in premiums. The total accident and health premium income of 75 stock companies was \$49,696,511. The combined experience on both accident and health insurance showed an underwriting loss of \$748,228. Fortunately for the companies writing these kinds of insurance the accident losses were considerably below normal, notwithstanding the increase in automobile accidents."

JOURNAL OF INDUSTRIAL HYGIENE. Vol. 1, No. 7. New York, Macmillan Co., November, 1919. pp. 369, 120 pp.

An article by Dr. Penteado Bill on The electrostatic method of dust collection as applied to the sanitary analysis of air, which was presented as his thesis for the degree of Doctor of Public Health, gives a very specific analysis of the method with the conclusions that:

"The electrical precipitation method of dust collection in this series showed 62.1 per cent greater average returns than the Palmer water spray sampler, for the same amount of air and under identical conditions.

"The Palmer suspensions can give factitious counts because of agglomeration of particles in aqueous suspension. For this reason the actual number of particles present may be higher than those reported.

"The electrical precipitation apparatus, as used in this study, is far too bulky for ordinary field work, but can be simplified and made portable.

"The method of electrical precipitation has certain advantages over the Palmer, viz:

"(a) Absence of suspending medium.

"(b) Uninterrupted passage of air.

"(c) Facility of determining the percentage of dust present in the air in the sample studied, and the percentage of air dust represented by the weight of total sediment.

"These conclusions seem to warrant further study of electrical precipitation of dust as applied to the sanitary analysis of air."

Other articles are on Flatfoot and its prevention, by Dr. Edward H. Bradford; Report on certain organs in a case of fatal poisoning by arseniuretted hydrogen gas, by Sheridan Delépine; The health hazards and mortality statistics of soft-coal mining in Illinois and Ohio, by Emery R. Hayhurst, whose article on the subject which appeared in *Modern Medicine* for July, 1919, was summarized in the September, 1919, issue of the *Monthly Labor Review*, pages 291 to 294; and Applications of psychiatry to industrial hygiene, by Dr. Stanley Cobb, a digest of which is published in this issue of the *Review*, pages 226 to 229.

LARRY, RAOUL. *L'Industrie Russe et la Révolution. Paris, 1919. 288 pp.*

A review of Russian industry during the revolution based on the author's personal experiences, and on official and unofficial information gathered by him during the revolution while attached to the Institut Français at Petrograd. Following the introduction the author devotes the first chapter to a discussion of the development of the social democratic party and the revolutionary organization of the Russian working class, and in describing the industrial conditions in Russia during the war up to the time of the revolution. Other chapters deal with the industrial policy of the provisional government and of the soviet; industrial Bolshevism and its effect, and industrial conditions in the Ukraine under hetman Skoropadski. The volume contains numerous statistical data on wages, employment, output, prices, etc., and it includes the text of the regulations relating to the control of production, sales, and storage of first materials by the workers and the management and the organization of nationalized establishments; the decree establishing the National Economic Council, and that regulating wages in the metallurgical establishments of Petrograd and its suburbs.

LAUNAY, L. DE. *Problèmes Économiques d'après Guerre. Paris, 1919. 319 pp.*

In this volume the author, a mining expert and member of the Institut de France, discusses the postwar economic problems of France, outlines a reconstruction program, and preaches an economic war against Germany. His reconstruction program covers the following subjects: (1) Industrial organization; (2) supply of raw materials and economic defensive; (3) transportation; (4) labor; and (5) natural resources.

In discussing postwar industrial organization the author condemns collective organization of industry under state control and advocates free association, as the best means of which he recommends the extensive establishment in industry as well as in agriculture of syndicate offices for the purpose of sale, pur-

chase, and scientific research, so-called "comptoirs." Next, he emphasizes the great advantages of scientific shop management, specialization, quantity production of standardized staple articles, economy in the consumption of fuel, and better use of the forces of nature.

With respect to the supply of raw materials he recommends in the first place that by concerted action the Allies should for years to come limit the supply of Germany with foreign raw materials, furnishing her only what she needs for feeding and clothing her own population, pointing out that such a process of starving German industry would prevent Germany from recovering her foreign trade and leave her without means to renew hostilities. He then reviews the facilities for provisioning France with the principal raw materials such as cotton, wool, silk, rubber, oils and fats, iron, copper, tin, nickel, and phosphates.

Under the heading transportation he discusses the tonnage loss of France through German submarine activities and proposes to replace it through extensive shipbuilding, the purchase of tonnage from England and America, continuation of transport agreements with foreign countries having a large merchant marine, development of French ports, and creation of free zones in them. He points out the defects of the French railroad system, and discusses the proposed construction of transversal lines, the progress in railroad construction during the war, the scarcity of rolling stock, the future financial régime of the railroad companies and advocates the speedy construction of the long projected tunnel under the English Channel. He calls attention to the advantages of river and canal transportation over railroad transportation and recommends extension of the net of canals and general improvement of rivers and waterways. Finally he advocates extensive building of good national roads for wagon and automobile traffic under the supervision of a board modeled after the English road board.

As concerns the labor question, the author entirely ignores the social labor problems and limits himself to a discussion of demobilization measures and of the shortage of male labor caused by the great loss of life during the war. As remedies for this shortage he recommends more rational use of male labor, introduction of the Taylor system, increased employment of female labor in occupations usually not filled by women in prewar times but for which war experience has shown them to be suited, and finally greater use of foreign (Italian, Spanish, Polish) and colonial labor (Tunisians, Kabyles, Moroccans, and Chinese).

The last chapter of the volume is devoted to a discussion of fuel problems and of greater exploitation of the forces of nature.

MODERN MEDICINE. Vol. 1, No. 7. Chicago, The Modern Hospital Publishing Co., November, 1919. pp. 549-650.

Under the title of The scope of the physical examination in industry, Dr. C. D. Selby outlines the main points to be observed in such an examination of employees and gives the plan in operation at the Toledo plant of the National Malleable Castings Co. An article by Dr. Charles A. Lauffer on Industrial health hazards considers such hazards under the classification of (1) poisons, dusts, fumes, gases; (2) heat, humidity, ventilation; (3) lighting; (4) crowding; (5) fire peril; (6) association with diseased employees; and considers various remedial measures suggested for dealing with them. Dr. Frankwood E. Williams discusses Nervous and mental disease as a problem in public health, with the conclusion that the importance of such disease in this relation lies "not alone in the number slain, though the number is large; not alone in the number of lives crippled and blasted, though the number is larger; not in the

burden of expense entailed, though it is enough to give any community pause; but in the damage done to social structure by the struggles at adjustment and compromise of individuals ordained to failure—more often than not failure with consequences more than individual—unless protected and safeguarded by a community manifesting a degree of understanding greater than has ever yet been shown. Infections may be eradicated; nervous and mental disease may be largely reduced in number, though it may not be so readily done away with. But the consequences of nervous and mental disease may be eliminated by an intelligent, persistent public health effort."

Other articles of special interest are Health education in industry, by Dr. W. A. Evans; Mercurial poisoning, by Dr. R. P. Albaugh; Malingering—involving the problem of getting sick or injured employees back to work, by Dr. Judson C. Fisher; Columbia University health service, by Dr. William H. McCastline; How Tuskegee Institute is promoting better health conditions in the South; and Industrial clinics in general hospitals, by Dr. D. L. Edsall. An extract from the last article appears on pages 224 and 225 in this issue of the MONTHLY LABOR REVIEW.

MOORE, TOM. *Labor's interest in safety. An address delivered at the fifth annual meeting of the Ontario Safety League. Toronto, 1919. 8 pp.*

MUTO, SANJI. *Employers and workers. The urgent need for universal labor legislation in the matter of sickness, pensions, relief to families of deceased workers, industrial, and moral training, etc. An appeal. Washington, October, 1919. 21 pp.*

This appeal by a Japanese employer of labor on a large scale for many years is intended to call attention to some of the more important measures designed for the furtherance of the relief of employees and operatives and their families, and the improvement of their physical and moral welfare, which have been adopted by several large industrial establishments and Government works in Japan. Its purpose is to point out "the urgency of embodying in universal labor legislation a minimum of relief measures which shall make sufficient provision for the subsistence of workmen and their families in distress from causes beyond their control."

NATIONAL CIVIC FEDERATION. *Laws of France, 1919. Town planning and reparation of damages caused by the events of the war. Translation by Roscoe Pound. New York, Metropolitan Tower, October, 1919. 51 pp.*

Under the town planning law, enacted March 14, 1919, every city in France of 10,000 inhabitants and more is obligated to work out, prior to March 15, 1922, a comprehensive plan covering all matters of municipal development (roads, squares, playgrounds, parks, monuments, public buildings, etc.), inclusive of works and utilities for the convenience and health of the public (waterworks, sewers, etc.).

NATIONAL INDUSTRIAL CONFERENCE BOARD. *Wartime changes in wages. September, 1914—March, 1919. Boston, September, 1919. 128 p. Research report No. 20.*

A digest of this report appears on pages 141 to 144 of this issue of the MONTHLY LABOR REVIEW.

— *Works councils in the United States. Boston, October, 1919. 135 pp. Research report No. 21.*

An account of the operation of works councils in 225 establishments in the United States. A list of industrial concerns having a form of employee representation and a bibliography are appended. A digest of this report appears on pages 191 and 192 of this number of the MONTHLY LABOR REVIEW.

NATIONAL SAFETY COUNCIL. *Safe practices. No. 30. Trucks and wheelbarrows.* Chicago, 168 N. Michigan Avenue. [1919.] 12 pp. Illustrated. Price, 25 cents.

NATIONAL TRANSPORT WORKERS' FEDERATION. *Report of the eighth annual general council, Newcastle-on-Tyne, June 6th and 7th, 1918.* London, 8, St. Martin's Place, Trafalgar Square, W. C. 2. [1918.] 106 pp.

NATIONAL WOMEN'S TRADE-UNION LEAGUE OF AMERICA. *English women in the labor and cooperative movements. Three speeches delivered before the seventh biennial convention of the National Women's Trade-Union League, Philadelphia, June 2-7, 1919.* Chicago, 64 West Randolph Street. 1919. 27 pp.

The speeches are on Women and the labor world, by Margaret Bondfield; women as cooperators, by Mrs. Eleanor Barton; and Women workers of England, by Mary Macarthur.

— *Women in trade-unions in the United States.* Chicago, 64 West Randolph Street. 1919. 15 pp.

A brief outline of the history of the women's trade-union movement in the United States.

NATIONAL WORKMEN'S COMPENSATION SERVICE BUREAU. *Manual classifications code. Workmen's compensation. Revised April 1, 1919.* New York, 1919. 66 pp.

NEW JERSEY STATE CHAMBER OF COMMERCE. *Bureau of State Research. Joint industrial council for New Jersey.* In 'New Jersey,' Vol. VI, No. 10. Newark, July, 1919. Pp. 133-140.

A tentative plan for a joint council developed through the investigations made by the Bureau of State Research, which proved the need for such a council in the State.

— *Shop committees and industrial councils. Parts I and II.* 'New Jersey,' Section 2, Vol. VI, No. 10. Newark, July, 1919. 63 pp. Consecutive No. 18.

This report, the result of an investigation by the Bureau of State Research, discusses the general need for reorganization and for greater cooperation between the different factors concerned in labor problems and describes the shop committee plans in force in 13 establishments. These plans include examples of all the different types of shop committee systems in force in this country. In the appendixes are given synoptical tables of shop committee systems; plans for the establishment of industrial councils; labor's views on "company unions" and "shop committees," and, under the title of "A new motive in industry," a description of the system at the Rock Island Arsenal and the report of the British building trades. A digest of this report appears on pages 193 and 194 of this number of the MONTHLY LABOR REVIEW.

PICKARD, BERTRAM. *A reasonable revolution. Being a discussion of the State bonus scheme—a proposal for a national minimum income.* London, George Allen and Unwin (Ltd.), 1919. 78 pp.

An amplification of the State bonus idea originally put forward by Dennis Milner in his pamphlet, *Scheme for a State Bonus*. The author, however, states that in some parts of the book the method of presentation is colored by his own personal valuation of the State bonus scheme. The proposals contained in this scheme are summarized in the words of Mr. Milner as follows:

(a) That every individual, all the time, should receive from a central fund some small allowance in money which would be just sufficient to maintain life and liberty if all else failed.

(b) That as every one is to get a share from this central fund, so every one who has any income at all should contribute a share each in proportion to his capacity.

PLUMB PLAN LEAGUE. *Labor's plan for Government ownership and democracy in the operation of the railroads. Based on statements by Glenn E. Plumb before the Interstate Commerce Committee of the United States Senate, with additional material.* Washington, 447-453 Munsey Building, 1919. 32 pp. Pamphlet No. 1.

PORTLAND CEMENT ASSOCIATION. *Accident prevention bulletin. Vol. 5, No. 6, November-December, 1919.* Chicago, 111 West Washington Street, 1919. Pp. 79-150.

This issue contains the proceedings of the cement sectional meeting of the National Safety Council's eighth annual congress held in Cleveland, October 1 to 4, 1919.

PROTESTANT EPISCOPAL CHURCH. *Joint commission on social service. Third triennial report submitted to the General Convention, 1919.* New York, Church Missions House, 1919. ix, 191 pp.

Greatest prominence is given to a consideration of the problem of industrial relations, which is placed foremost among the special problems examined on account of its "urgent and intrinsic importance." The history of social and industrial movements in the United States is traced and analyzed, and the report finds that we are "confronted with a larger issue than we have yet commonly or consciously faced. It revolves about the question of what is or should be after all the proper relation between work, religion, and life."

STEELE, RUFUS. *Aces for industry.* Boston, Houghton Mifflin Company, 1919. 93 pp.

An argument, in the form of a narrative, for the establishment of apprentice schools in industrial plants, the claim being that industrial intelligence, skill, and loyalty could be developed through this means.

WADIA, B. P. *A memorandum on labor problems in India.* London, Victoria House Printing Co. (Ltd.), July, 1919. 12 pp.

The author is president of the Madras Labor Union and fraternal delegate from the first trade-union in India to the British Labor Party and the Parliamentary Committee of the Trades-Union Congress. The exceptional labor conditions in India are explained in the text of the memorandum and emphasized by appendixes containing letters from Indian trades-unions.

— *Statement submitted to the joint committee on Indian reforms.* London, Indian Parliamentary Committee, 1 Robert Street, Adelphi, WC 2, 1199. 8 pp. Price, 2d.

Brief exposition of the conditions surrounding labor in India, concluding with an earnest "appeal to the Joint Committee to enable the Indian laborer to obtain some political power, to set his feet on the road of political advancement, and thereby of his own uplift."

WARREN, KATHERINE. *List of references on labor turnover. In Special Libraries, Industrial number.* Boston, Mass., October, 1919. Pp. 198-203.

WEEKS, ESTELLA T. *Reconstruction programs. A comparative study of their content and of the viewpoints of the issuing organizations. Prepared for the Research section, Industrial committee, War work council of the National Board, Young Women's Christian Associations.* New York, The Womans Press, 1919. 95 pp. Chart.

Various reconstruction programs are analyzed and their chief points compared without any attempt being made to argue for or against them. There is a foreword by Herbert N. Shenton, of the Council of National Defense; an introduction entitled "What is reconstruction?"; four parts, in which the material analyzed is grouped under the heads of Working men and women—their life and work. Collective bargaining, Individual Democracy, and International labor problems; a postscript headed A new spirit and a new road; and a bibliography of programs of reconstruction.

SERIES OF BULLETINS PUBLISHED BY THE BUREAU OF LABOR STATISTICS.

[The publication of the annual and special reports and of the bimonthly bulletin was discontinued in July, 1912, and since that time a bulletin has been published at irregular intervals. Each number contains matter devoted to one of a series of general subjects. These bulletins are numbered consecutively beginning with No. 101, and up to No. 236 they also carry consecutive numbers under each series. Beginning with No. 237 the serial numbering has been discontinued. A list of the series is given below. Under each is grouped all the bulletins which contain material relating to the subject matter of that series. A list of the reports and bulletins of the Bureau issued prior to July 1, 1912, will be furnished on application. The bulletins marked thus * are out of print.]

Wholesale Prices

- * Bul. 114. Wholesale prices, 1890 to 1912.
- Bul. 149. Wholesale prices, 1890 to 1913.
- * Bul. 173. Index numbers of wholesale prices in the United States and foreign countries.
- Bul. 181. Wholesale prices, 1890 to 1914.
- Bul. 200. Wholesale prices, 1890 to 1915.
- Bul. 226. Wholesale prices, 1890 to 1916.
- Bul. 269. Wholesale prices, 1890 to 1918. [In press.]

Retail Prices and Cost of Living.

- * Bul. 105. Retail prices, 1890 to 1911: Part I.
Retail prices, 1890 to 1911: Part II—General tables.
- * Bul. 106. Retail prices, 1890 to June, 1912: Part I.
Retail prices, 1890 to June, 1912: Part II—General tables.
- Bul. 108. Retail prices, 1890 to August, 1912.
- Bul. 110. Retail prices, 1890 to October, 1912.
- Bul. 113. Retail prices, 1890 to December, 1912.
- Bul. 115. Retail prices, 1890 to February, 1913.
- * Bul. 121. Sugar prices, from refiner to consumer.
- Bul. 125. Retail prices, 1890 to April, 1913.
- Bul. 130. Wheat and flour prices, from farmer to consumer.
- Bul. 132. Retail prices, 1890 to June, 1913.
- Bul. 136. Retail prices, 1890 to August, 1913.
- * Bul. 138. Retail prices, 1890 to October, 1913.
- Bul. 140. Retail prices, 1890 to December, 1913.
- Bul. 156. Retail prices, 1907 to December, 1914.
- Bul. 164. Butter prices, from producer to consumer.
- Bul. 170. Foreign food prices as affected by the war.
- * Bul. 184. Retail prices, 1907 to June, 1915.
- Bul. 197. Retail prices, 1907 to December, 1915.
- Bul. 228. Retail prices, 1907 to December, 1916.
- Bul. 266. A study of family expenditures in the District of Columbia. [In press.]
- Bul. 270. Retail prices, 1913 to 1918. [In press.]

Wages and Hours of Labor.

- Bul. 116. Hours, earnings, and duration of employment of wage-earning women in selected industries in the District of Columbia.
- Bul. 118. Ten-hour maximum working-day for women and young persons.
- Bul. 119. Working hours of women in the pea canneries of Wisconsin.
- * Bul. 128. Wages and hours of labor in the cotton, woolen, and silk industries, 1890 to 1912.
- * Bul. 129. Wages and hours of labor in the lumber, millwork, and furniture industries, 1890 to 1912.
- * Bul. 131. Union scale of wages and hours of labor, 1907 to 1912.
- * Bul. 134. Wages and hours of labor in the boot and shoe and hosiery and knit goods industries, 1890 to 1912.
- * Bul. 135. Wages and hours of labor in the cigar and clothing industries, 1911 and 1912.
- Bul. 137. Wages and hours of labor in the building and repairing of steam railroad cars, 1890 to 1912.
- Bul. 143. Union scale of wages and hours of labor, May 15, 1913.
- Bul. 146. Wages and regularity of employment and standardization of piece rates in the dress and waist industry of New York City.

Wages and Hours of Labor—Concluded.

- Bul. 147. Wages and regularity of employment in the cloak, suit, and skirt industry.
- Bul. 150. Wages and hours of labor in the cotton, woolen, and silk industries, 1907 to 1913.
- Bul. 151. Wages and hours of labor in the iron and steel industry in the United States, 1907 to 1912.
- * Bul. 153. Wages and hours of labor in the lumber, millwork, and furniture industries, 1907 to 1913.
- Bul. 154. Wages and hours of labor in the boot and shoe and hosiery and underwear industries, 1907 to 1913.
- Bul. 160. Hours, earnings, and conditions of labor of women in Indiana mercantile establishments and garment factories.
- Bul. 161. Wages and hours of labor in the clothing and cigar industries, 1911 to 1913.
- Bul. 163. Wages and hours of labor in the building and repairing of steam railroad cars, 1907 to 1913.
- Bul. 168. Wages and hours of labor in the iron steel industry, 1907 to 1913.
- Bul. 171. Union scale of wages and hours of labor, May 1, 1914.
- Bul. 177. Wages and hours of labor in the hosiery and underwear industry, 1907 to 1914.
- * Bul. 178. Wages and hours of labor in the boot and shoe industry, 1907 to 1914.
- Bul. 187. Wages and hours of labor in the men's clothing industry, 1911 to 1914.
- * Bul. 190. Wages and hours of labor in the cotton, woolen, and silk industries, 1907 to 1914.
- * Bul. 194. Union scale of wages and hours of labor, May 1, 1915.
- Bul. 204. Street railway employment in the United States.
- Bul. 214. Union scale of wages and hours of labor, May 15, 1916.
- Bul. 218. Wages and hours of labor in the iron and steel industry, 1907 to 1915.
- Bul. 221. Hours, fatigue, and health in British munition factories.
- Bul. 225. Wages and hours of labor in the lumber, millwork, and furniture industries, 1915.
- Bul. 232. Wages and hours of labor in the boot and shoe industry, 1907 to 1916.
- Bul. 238. Wages and hours of labor in woolen and worsted goods manufacturing, 1916.
- Bul. 239. Wages and hours of labor in cotton goods manufacturing and finishing, 1916.
- Bul. 245. Union scale of wages and hours of labor, May 15, 1917.
- Bul. 252. Wages and hours of labor in the slaughtering and meat-packing industry.
- Bul. 259. Union scale of wages and hours of labor, May 15, 1918.
- Bul. 260. Wages and hours of labor in the boot and shoe industry, 1907 to 1918. [In press.]
- Bul. 261. Wages and hours of labor in woolen and worsted goods manufacturing, 1918.
- Bul. 262. Wages and hours of labor in cotton goods manufacturing and finishing, 1918. [In press.]
- Bul. 265. Industrial survey in selected industries in the United States, 1919. Preliminary report. [In press.]

Employment and Unemployment.

- * Bul. 109. Statistics of unemployment and the work of employment offices.
- Bul. 116. Hours, earnings, and duration of employment of wage-earning women in selected industries in the District of Columbia.
- Bul. 172. Unemployment in New York City, N. Y.
- Bul. 182. Unemployment among women in department and other retail stores of Boston, Mass.
- Bul. 183. Regularity of employment in the women's ready-to-wear garment industries.
- Bul. 192. Proceedings of the American Association of Public Employment Offices.
- * Bul. 195. Unemployment in the United States.
- Bul. 196. Proceedings of the Employment Managers' Conference held at Minneapolis, January, 1916.
- Bul. 202. Proceedings of the conference of the Employment Managers' Association of Boston, Mass., held May 10, 1916.
- Bul. 206. The British system of labor exchanges.
- Bul. 220. Proceedings of the Fourth Annual Meeting of the American Association of Public Employment Offices, Buffalo, N. Y., July 20 and 21, 1916.
- Bul. 223. Employment of women and juveniles in Great Britain during the war.

Employment and Unemployment—Concluded.

- Bul. 227. Proceedings of the Employment Managers' Conference, Philadelphia, Pa., April 2 and 3, 1917.
- Bul. 235. Employment system of the Lake Carriers' Association.
- Bul. 241. Public employment offices in the United States.
- Bul. 247. Proceedings of the Employment Managers' Conference, Rochester, N. Y., May 9-11, 1918.

Women in Industry.

- Bul. 116. Hours, earnings, and duration of employment of wage-earning women in selected industries in the District of Columbia.
- * Bul. 117. Prohibition of night work of young persons.
- Bul. 118. Ten-hour maximum working-day for women and young persons.
- Bul. 119. Working hours of women in the pea canneries of Wisconsin.
- * Bul. 122. Employment of women in power laundries in Milwaukee.
- Bul. 160. Hours, earnings, and conditions of labor of women in Indiana mercantile establishments and garment factories.
- * Bul. 167. Minimum-wage legislation in the United States and foreign countries.
- Bul. 175. Summary of the report on condition of woman and child wage earners in the United States.
- Bul. 176. Effect of minimum-wage determinations in Oregon.
- Bul. 180. The boot and shoe industry in Massachusetts as a vocation for women.
- Bul. 182. Unemployment among women in department and other retail stores of Boston, Mass.
- Bul. 193. Dressmaking as a trade for women in Massachusetts.
- Bul. 215. Industrial experience of trade-school girls in Massachusetts.
- Bul. 217. Effect of workmen's compensation laws in diminishing the necessity of industrial employment of women and children.
- Bul. 223. Employment of women and juveniles in Great Britain during the war.
- Bul. 253. Women in the lead industry.

Workmen's Insurance and Compensation (including laws relating thereto).

- Bul. 101. Care of tuberculous wage earners in Germany.
- Bul. 102. British National Insurance Act, 1911.
- Bul. 103. Sickness and accident insurance law of Switzerland.
- Bul. 107. Law relating to insurance of salaried employees in Germany.
- * Bul. 126. Workmen's compensation laws of the United States and foreign countries.
- Bul. 155. Compensation for accidents to employees of the United States.
- * Bul. 185. Compensation legislation of 1914 and 1915.
- Bul. 203. Workmen's compensation laws of the United States and foreign countries.
- Bul. 210. Proceedings of the Third Annual Meeting of the International Association of Industrial Accident Boards and Commissions.
- Bul. 212. Proceedings of the conference on social insurance called by the International Association of Industrial Accident Boards and Commissions.
- Bul. 217. Effect of workmen's compensation laws in diminishing the necessity of industrial employment of women and children.
- Bul. 240. Comparison of workmen's compensation laws of the United States. *
- Bul. 243. Workmen's compensation legislation in the United States and foreign countries.
- Bul. 248. Proceedings of the Fourth Annual Meeting of the International Association of Industrial Accident Boards and Commissions.
- Bul. 264. Proceedings of the Fifth Annual Meeting of the International Association of Industrial Accident Boards and Commissions.

Industrial Accidents and Hygiene.

- Bul. 104. Lead poisoning in potteries, tile works, and porcelain enameled sanitary ware factories.
- Bul. 120. Hygiene of the painters' trade.
- * Bul. 127. Dangers to workers from dusts and fumes, and methods of protection.
- Bul. 141. Lead poisoning in the smelting and refining of lead.
- * Bul. 157. Industrial accident statistics.
- Bul. 165. Lead poisoning in the manufacture of storage batteries.
- * Bul. 179. Industrial poisons used in the rubber industry.
- Bul. 188. Report of British departmental committee on the danger in the use of lead in the painting of buildings.

Industrial Accidents and Hygiene—Concluded.

- * Bul. 201. Report of committee on statistics and compensation insurance cost of the International Association of Industrial Accident Boards and Commissions. [Limited edition.]
- Bul. 205. Anthrax as an occupational disease.
- Bul. 207. Causes of death by occupation.
- * Bul. 209. Hygiene of the printing trades.
- Bul. 216. Accidents and accident prevention in machine building.
- * Bul. 219. Industrial poisons used or produced in the manufacture of explosives.
- Bul. 221. Hours, fatigue, and health in British munition factories.
- Bul. 230. Industrial efficiency and fatigue in British munition factories.
- Bul. 231. Mortality from respiratory diseases in dusty trades.
- Bul. 234. Safety movement in the iron and steel industry, 1907 to 1917.
- Bul. 236. Effect of the air hammer on the hands of stonecutters.
- Bul. 251. Preventable death in the cotton manufacturing industry.
- Bul. 253. Women in the lead industry.
- Bul. 256. Accidents and accident prevention in machine building. (Revised.)
- Bul. 267. Anthrax as an occupational disease. (Revised.) [In press.]

Conciliation and Arbitration (including strikes and lockouts).

- * Bul. 124. Conciliation and arbitration in the building trades of Greater New York.
- Bul. 133. Report of the industrial council of the British Board of Trade on its inquiry into industrial agreements.
- Bul. 139. Michigan copper district strike.
- Bul. 144. Industrial court of the cloak, suit, and skirt industry of New York City.
- Bul. 145. Conciliation, arbitration, and sanitation in the dress and waist industry of New York City.
- * Bul. 191. Collective bargaining in the anthracite coal industry.
- Bul. 198. Collective agreements in the men's clothing industry.
- Bul. 233. Operation of the Industrial Disputes Investigation Act of Canada.

Labor Laws of the United States (including decisions of courts relating to labor).

- * Bul. 111. Labor legislation of 1912.
- * Bul. 112. Decisions of courts and opinions affecting labor, 1912.
- * Bul. 148. Labor laws of the United States, with decisions of courts relating thereto.
- Bul. 152. Decisions of courts and opinions affecting labor, 1913.
- * Bul. 166. Labor legislation of 1914.
- * Bul. 169. Decisions of courts affecting labor, 1914.
- * Bul. 186. Labor legislation of 1915.
- * Bul. 189. Decisions of courts affecting labor, 1915.
- Bul. 211. Labor laws and their administration in the Pacific States.
- * Bul. 213. Labor legislation of 1916.
- Bul. 224. Decisions of courts affecting labor, 1916.
- Bul. 229. Wage-payment legislation in the United States.
- Bul. 244. Labor legislation of 1917.
- Bul. 246. Decisions of courts affecting labor, 1917.
- Bul. 257. Labor legislation of 1918.
- Bul. 258. Decisions of courts and opinions affecting labor, 1918. [In press.]

Foreign Labor Laws.

- Bul. 142. Administration of labor laws and factory inspection in certain European countries.

Vocational Education.

- Bul. 145. Conciliation, arbitration, and sanitation in the dress and waist industry of New York City.
- Bul. 147. Wages and regularity of employment in the cloak, suit, and skirt industry.
- * Bul. 159. Short-unit courses for wage earners, and a factory school experiment.
- Bul. 162. Vocational education survey of Richmond, Va.
- Bul. 199. Vocational education survey of Minneapolis.
- Bul. 271. Adult working-class education in Great Britain and the United States.

Labor as Affected by the War.

- Bul. 170. Foreign food prices as affected by the war.
- * Bul. 219. Industrial poisons used or produced in the manufacture of explosives.
- Bul. 221. Hours, fatigue, and health in British munition factories.
- Bul. 222. Welfare work in British munition factories.
- Bul. 223. Employment of women and juveniles in Great Britain during the war.
- Bul. 230. Industrial efficiency and fatigue in British munition factories.
- Bul. 237. Industrial unrest in Great Britain.
- Bul. 249. Industrial health and efficiency. Final report of British Health of Munition Workers Committee.
- Bul. 255. Joint industrial councils in Great Britain.

Miscellaneous Series.

- * Bul. 117. Prohibition of night work of young persons.
- Bul. 118. Ten-hour maximum working day for women and young persons.
- * Bul. 123. Employers' welfare work.
- Bul. 158. Government aid to home owning and housing of working people in foreign countries.
- * Bul. 159. Short-unit courses for wage earners, and a factory school experiment.
- * Bul. 167. Minimum-wage legislation in the United States and foreign countries.
- Bul. 170. Foreign food prices as affected by the war.
- Bul. 174. Subject index of the publications of the United States Bureau of Labor Statistics up to May 1, 1915.
- Bul. 208. Profit sharing in the United States.
- Bul. 222. Welfare work in British munition factories.
- Bul. 242. Food situation in Central Europe, 1917.
- Bul. 250. Welfare work for employees in industrial establishments in the United States.
- Bul. 254. International labor legislation and the society of nations.
- Bul. 263. Housing by employers in the United States. [In press.]
- Bul. 268. Historical survey of international action affecting labor. [In press.]

SPECIAL PUBLICATIONS ISSUED BY THE BUREAU OF LABOR STATISTICS.

Descriptions of occupations, prepared for the United States Employment Service, 1918-19.

Boots and shoes, harness and saddlery, and tanning.
Cane-sugar refining and flour milling.
Coal and water gas, paint and varnish, paper, printing trades, and rubber goods.
Electrical manufacturing, distribution, and maintenance.
Logging camps and sawmills.
Medicinal manufacturing.
Metal working, building and general construction, railroad transportation, and ship-
building.
Mines and mining.
Office employees.
Slaughtering and meat packing.
Street railways.
Textiles and clothing.
Water transportation.

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