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THE POSSIBILITY OF COMPILING A COST OF LIVING INDEX.

BY ROYAL MEEKER, UNITED STATES COMMISSIONER OF LABOR STATISTICS.

[Paper read at the Thirty-first Annual Meeting of the American Economic Association, Richmond, Va., Dec. 27, 1918.]

The high cost of living has nothing to do with high prices. It is merely the common term used to express the relation between the price of labor (wages) and the prices of foods, clothes, houseroom, fuel, etc. The high cost of living stalked through the land even in the days of Charlemagne when a whole beef could be bought for less than the price of a single sirloin steak to-day. Men complained bitterly of the high cost of living in that golden age when eggs sold for 8 cents a dozen instead of 8 cents apiece. Probably we pay at least 20 times as much for the necessities and comforts of life to-day as men paid in the thirteenth century, but the cost of living is no higher now than then, and we undoubtedly live much more comfortably, completely, and healthfully. In fact, we might say that generally the lower the prices the higher the cost of living. In India and China, long the countries of lowest prices, the cost of living is so high as to put life itself beyond the purchasing power of tens of thousands of the people.

The price level is of no consequence, except to the mere historian and antiquarian. It is the changing of price levels which causes distress and is of concern to the economists and all who buy and sell things. This has been recognized from the beginning of history. Efforts have been made from the earliest times to fix prices by royal proclamations, decrees, and by legislative enactments. Some economists have advocated a bimetallic coinage on the ground that prices would thereby be held more stable, the theory being that when gold is plentiful and cheap, silver would be rare and dear, and vice versa, so that fluctuations in the purchasing power of both metals would never be so great as the fluctuations in either one separately.

A good many economists have theorized about a commodity standard of value, setting forth its theoretical advantages. The latest commodity standard plan—and to my mind the only one likely to succeed—is Prof. Irving Fisher's well-known plan for standardizing or stabilizing the dollar. This plan depends absolutely for its workability upon the possibility of computing a reasonably accurate cost-of-living index. Unless this can be done, it is not worth while talking about the great benefits that would result if the impossible were possible

Until quite recently I have felt doubtful about the practicability of changing the present dollar from a most deceptive, inconvenient, and mischievous standard of weight, constantly changing in value, into an approximately unchanging standard of value, constantly changing in weight. My skepticism was due to the staggering difficulties in computing a satisfactory index of the cost of living. It seemed another instance, so familiar to the economist, especially the tariff economist, where a proposal is "all right in theory but won't work in practice." The very foundation of the "stabilized dollar" is the index number of the cost of living. As it is one of my principal jobs to furnish the country and the world with index numbers showing changes in prices of various commodities at wholesale and retail, no one realizes quite so keenly as I just how unstable the basis for the "stabilized dollar" really is or rather was until this present moment. I do not need to waste time in pointing out the absurdity of using a wholesale price index as indicative of changes in the cost of living for the purpose of stabilizing the dollar. Retail prices of all commodities consumed by the great mass of people are the rock bottom upon which a commodity standard of value must rest. Until now, I have been wholly unwilling to recommend the United States Bureau of Labor Statistics retail price indexes as a suitable foundation for Prof. Fisher's "stabilized dollar." The retail price index published every month in the MONTHLY LABOR REVIEW is an index number of the retail prices of food commodities only. Expenditures for food make up more than 40 per cent of the total budget of the families of shipyard workers, but I think it would be wholly inadvisable to change the gold content of the "stabilized dollar" to conform with changes in the prices of food alone. This would not be a fair test of the underlying principle in Prof. Fisher's scheme. I, for one, would not be willing to risk the stability of the "stabilized dollar," stabilized on less than half the total family expenditure. It so happens that the percentage changes in the cost of the family food budget during the period since 1913 do conform rather closely with changes in the cost of the whole family budget as shown in our studies of cost of living in shipbuilding centers. But this is largely fortuitous and somewhat fictitious. When prices come down, as they probably will some day, we can not assume that food prices will move in unison with the prices of other commodities consumed by workers' families. If we are to advocate a "stabilized dollar" (which is merely another name for a commodity standard of value, or what Prof. Fisher picturesquely calls the "market basket" standard) we must be able to put our case so as to command the confidence and support of the manufacturers, the business men, and especially the workers. No amount of eloquence explaining how the prices of the necessities of life actually vary in close conformity with food prices will satisfy

the horny-handed laborer and the equally horny-headed business man with a *food index* represented as showing changes in *cost of living*. Both will rightly demand to be shown and we must be in a position to show them.

The question doubtless is in the minds of many of you: Why not use the cost of living figures for shipbuilding centers? There are four reasons why I am not willing to use these indexes to show changes in the cost of living either for the whole country or for geographical districts:

1. The shipbuilding centers are too few in number and they are quite abnormal industrial communities.

2. The haste with which we were obliged to make the cost-of-living survey in those centers did not permit us to get retail prices of miscellaneous items of expenditure so as to enable us to compute accurately changes in the cost of this large part of the family budget. Next, after food, miscellaneous expenses are by far the most important group in the family budget. The cost of miscellaneous items of expenditure was of course obtained in the shipbuilding study, but the retail prices of these items were not obtained. In computing indexes for the different shipbuilding centers, it was assumed that miscellaneous items fluctuated exactly the same on the average as all other items of expense. This assumption gave all the advantage to the workingman during the period of violently ascending prices since 1916, for undoubtedly miscellaneous items have remained much more stable than the average of other items.

3. There was no time to calculate new weights based on the quantities of each article consumed in the average workman's family to-day, so the old and rather imperfect weights obtained in the 1901 study had to be used. We can and ought to revise these weights, using the facts as to the family consumption which we are finding in the present study. Except for articles of food, the individual items of consumption are not weighted within each group or class, according to their importance in the family budget. In the clothing group, for instance, suits, nightshirts, socks, caps, shoes, neckties, shirts, and handkerchiefs all have equal weight. Quite possibly weighting within the groups will not change the percentage change in cost of the groups as wholes, but we have no ground for assuming this to be the case. To be sure, all experience has shown that it makes but little difference what methods are used in computing an index number. However, science, common sense, and expediency all require the extension of the weighting of individual items to all groups of the family budget.

4. The lists of articles for which retail prices were obtained in shipbuilding centers are not so satisfactory as it is possible to make them. In the cost of living study now in progress, we are getting retail prices for a larger number of articles, and, profiting by our

experience, we are using greater care to secure identification marks so we can get prices in the future for the identical articles or the nearest thing to them. The retail price schedules for food; men's, women's, and children's clothing; fuel and lighting; housing; furniture and house furnishings; and miscellaneous items have all been carefully revised and greatly improved.

As a rule, there is but little difference between a weighted and the so-called unweighted index number. This general rule does not seem to apply to family budget indexes. We know that there are great differences between the weighted and the unweighted food budget, and it seems inevitable that similar differences will be shown for the clothing group and the miscellaneous group when we get weightings for them. In the food group, potatoes, because of their great importance in consumption, exercise a great influence over the food index and the total budget index. Sometimes potatoes carry the whole food index against the current of food prices in general. The preponderance of potatoes and their sudden and enormous price variations in the autumn and more especially in the spring, make them most unpopular with the makers of cost of living index numbers. At a former meeting of this association, I warned wayfaring statisticians and economists of the deeply deceptive character of the potato. Apparently the potato is merely an innocent and astonishingly prolific and wholesome member of the vegetable kingdom; but statistically it is a ravening wolf masquerading as a humble tuber. It is undoubtedly an invention of the devil for the purpose of making the way of the statistician hard and his life a burden. The malignant power of the potato may yet defeat the benignant plan to stabilize the dollar, for the potato does not submit kindly to the yoke of the index number. The story of the potato is very difficult to record statistically. The enormous seasonal changes in prices are due to the difference between new and old potatoes, which make them in reality entirely different economic commodities. I think a special joint committee of the American Economic Association and the American Statistical Association should be named to study potatoes and determine when a new potato becomes what we may call a tabulatable potato and when an old potato ceases to be a potato at all.

The prices of several other articles of food fluctuate just as capriciously and as violently as potato prices, but these other articles are relatively unimportant so we can ignore them or set down their price vagaries with a calm, unruffled spirit. Nor need our equanimity be disturbed by the wildly varying price of wearing apparel, such as, for instance, women's hats; for although each feminine hat is a distinct and separate economic entity and there are violent seasonal and cyclical variations in the prices, shapes, material, and qualities

of hats, yet the total effect of women's hats on the cost of living index number and consequently on the "stabilized dollar" is negligible, compared to the devastating effect of the potent potato.

For the purposes of a cost of living index number to be used in making wage adjustments and as the standard of value or "stabilized dollar" it is necessary to get more detailed information about the quantities of articles consumed and their retail prices than have been obtained in former studies. These surveys in shipbuilding centers were made hurriedly to meet a war emergency. Consequently short cuts were used and the large assumption regarding miscellaneous prices was made to save an enormous amount of field work and office tabulations which would otherwise have been necessary.

The apportionment of family expenditures in the New York shipbuilding district and the percentage changes in the several classes of expenditure since December, 1915, are as follows:

APPORTIONMENT OF FAMILY EXPENDITURES AND PER CENT OF INCREASE AT SPECIFIED DATE, OVER DECEMBER, 1914, IN NEW YORK SHIPBUILDING DISTRICT.

Group.	Average expenditures per family.		Per cent of increase over December, 1914, in—			
	Amount.	Per cent of total.	December, 1915.	December, 1916.	December, 1917.	October-November, 1918.
Food.....	\$607.02	45.01	1.34	16.26	55.28	77.70
Clothing.....	200.07	14.84	4.82	22.31	54.21	129.74
Housing.....	174.14	12.91	1.10	1.05	2.63	5.89
Fuel and light.....	62.21	4.61	1.06	10.98	19.92	37.26
Furniture, etc.....	43.58	3.23	8.43	27.60	56.47	122.91
Miscellaneous.....	261.62	19.40	1.97	14.91	44.68	75.28
Total.....	1,348.64	100.00	1.97	14.91	44.68	75.28

¹ Decrease.

A brief examination reveals why the increase in all items conforms so closely with the increase in the food budget. First, food is much the most important single item of expense. Second, its preponderating influence is increased by assuming that changes in miscellaneous items always equal the average of all other articles. Third, it so happened that changes in the prices of clothing and of housing when averaged together show an increase approximately the same as the increase in the price of food. These two groups constitute approximately 30 per cent of the total budget. The four groups mentioned (food, clothing, housing, and miscellaneous) make up more than 90 per cent of the entire budget. It would certainly be quite unwarranted to assume that price changes are always going to take place in such a way that the changes in prices of clothing and housing will always average approximately the same as changes in food prices. It is even more unwarranted to assume that miscellaneous items

change in like manner and degree with the prices of the other items of the budget. If, for example, we found, as is quite likely the case, that miscellaneous items weighted according to importance in consumption increased only 10 per cent, then the cost of living index for October, 1918, for New York, would be only about 161 per cent instead of 175 per cent, a difference that is by no means negligible.

The showing for Seattle, Wash., is as follows:

APPORTIONMENT OF FAMILY EXPENDITURES AND PER CENT OF INCREASE AT SPECIFIED DATES OVER DECEMBER, 1914, IN SEATTLE SHIPBUILDING DISTRICT.

Group.	Average expenditures per family.		Per cent of increase over December, 1914, in—			
	Amount.	Per cent of total.	December, 1915.	December, 1916.	August, 1917.	June, 1917.
Food.....	\$576.38	36.75	¹ 2.75	8.46	38.65	51.87
Clothing.....	240.70	15.34	1.19	11.31	36.44	¹ 62.26
Housing.....	211.54	13.48	¹ 2.42	¹ 5.41	¹ .55	16.70
Fuel and light.....	73.19	4.66	¹ .19	2.93	23.85	45.96
Furniture, etc.....	73.87	4.71	8.52	27.43	52.29	82.67
Miscellaneous.....	393.45	25.08	¹ 1.02	7.40	31.08	49.24
Total.....	1,569.10	100.00	¹ 1.02	7.40	31.08	49.24

¹ Decrease.

The proportion of expenditure for the miscellaneous group is much larger in Seattle than in New York, and for food much lower. Clothing and housing are approximately the same for both cities. Again these four groups make up more than 90 per cent and miscellaneous items alone constitute more than one-fourth of the entire budget. If investigation proved that the increase in the cost of miscellaneous items of expenditure in June, 1918, over December, 1914, was actually only 10 per cent instead of 49.24 per cent, as assumed, then the index number for the entire family budget would be only 139.46 per cent instead of 149.24, a difference of 9.78 points or more than 6½ per cent less than the index compiled by the Bureau of Labor Statistics for the use of the Labor Adjustment Board. It may be that our present studies will not reveal the wide discrepancies I have assumed for illustration, but we can not expect either employers or employees to accept our index number unless it reflects the actual price changes, weighted according to importance in consumption, of all the principal items of family consumption.

The wide variation in the average family budgets of the shipyard workers in New York and in Seattle emphasizes the absolute necessity for establishing standard budgets for typical workmen's families composed of husband, wife, and three children under 15 years of age. These standard budgets are needed most urgently by the wage adjustment board for the purpose of fixing wages so as to insure a

minimum of decency and health to the workers. After all these years of investigation and statistical toil in the cost of living field, we don't know clearly the difference between the higher costs of living and the costs of higher living. By examining the schedules carefully we could tell approximately whether the Seattle family expending \$576.38 per annum for food is sufficiently well fed, but we could scarcely tell whether the New York family spending \$607.02 per annum for food is any better fed. Except for food scarcely any attempts have been made to determine what are proper standards of decency, health, and comfort. We can not, to save our lives, tell whether the Seattle family with an income of \$1,569.10 is better or worse off than the New York family with \$1,348.64 income. We do know that most workmen's families in the United States spend all their income. Does that mean that American families are extravagant or does it mean that they are living at or below the margin of decency and health?

Standard budgets for the different geographical sections of the country giving due recognition to climatic differences, personal and family idiosyncracies and commonly accepted differences in social requirements, are indispensable if we are to measure with accuracy changes in the cost of living. We can take the annual budgets as we find them in different communities and measure changes in the costs of these budgets from time to time. But changes in the cost of an actual budget may differ quite markedly from changes in the cost of a sufficient budget properly balanced.

It is a task of enormous difficulty and of endless and infinite detail to collect the retail prices of the more important articles of family consumption, weight them according to their importance in consumption as determined by our budget studies and compute therefrom a refined index number of cost of living. The task is not, however, impossible as I at one time feared. In fact agents of my bureau have already collected the prices necessary for the computation of the refined cost of living index number for Washington and Baltimore, and the work is well under way in half a dozen other cities. All that is needed now is about a thousand competent clerks to carry through the copying, sorting, tabulation and computation of the budget items and retail prices so as to make the index number so long yearned for. I here, for the first time, publicly proclaim that not only is an index number of the cost of living a theoretical possibility but it is a practical fact in process of coming into being as rapidly as the Bureau of Labor Statistics can push the work along.

Once such an index number has been achieved it will be necessary to bring it up to date at least every six months; preferably, I think, every three months. It will cost money to do this. The studies in

shipbuilding centers and the present countrywide study were undertaken by direct authorization of President Wilson and were paid for out of his special fund. If the results of these studies are to be fully realized, Congress must be awakened to the significance and value of this information. Much larger appropriations to the Bureau of Labor Statistics will be necessary to enable the retail prices to be collected and tabulated rapidly enough and frequently enough for the purposes of a usable index number of the cost of living.

A word of explanation of the methods used in getting the family budgets and retail prices seems necessary. The present study includes large, medium-sized, and small industrial towns located in the different geographical sections. All but three States are represented. Agents of the Bureau of Labor Statistics visit the housewives and obtain from them at a single interview, if possible, an estimate of the quantities of the different articles consumed by their families during the past year and the cost of each item. This seems absurd. Not one housewife in 10,000 can tell you offhand the quantity and cost of beef, pork, potatoes, beans, cabbage, hats, shoes, shirts, shirtwaists, dresses, suits, chiffoniers, coal, kerosene, car rides, movie tickets, newspapers, etc., which her family has consumed for an entire year. I felt very skeptical of this method of getting at the cost of living. I tested it out in the District of Columbia study by having more than a hundred families representing the different income groups keep itemized accounts of all expenses for a month. This gave us an excellent check on the expenditures for food, but not for other classes of expenditures. The two methods tallied very closely on food consumption as to kinds, quantities, and costs. This convinced me that it is possible to get accurate estimates of itemized family expenses by the interview method. The family expense account method may perhaps be better, but it is of course utterly impossible because of the time required. It is also very difficult to get a proper representation of the different income groups.

The expenditures are estimates, but they are, I am convinced, very accurate estimates. The housewife knows what she spent for food to-day and this week. With the help of an experienced agent armed with the Bureau of Labor Statistics family budget schedule containing 474 items the housewife does estimate very accurately what she has bought and what she has paid. All discrepancies are noted by the agent and must be explained or corrected. The total family income from all sources is ascertained. If the income seems too large or too small for the kind of work performed by the wage earners, it is checked with pay envelopes or the wage rates paid by the shops. I was asked by the arbitrator in a wage hearing if the housewives did not pad their expenses so as to show a higher cost of living than really exists, for the purpose of helping their husbands to

get a larger increase in wages. My reply was that it is impossible for the housewife to fool our experienced agents. Our agents have many checks on the accuracy of the housewife. A padded budget of expenditures would be discovered at once because of the discrepancies between income and outgo. If income is padded, that is checked by the methods referred to above. A few schedules have been rejected because of evident errors. Above all, American housewives almost without exception are not only honest and truthful, but immensely interested to go over their expenditures for the purpose of finding out where and how the money went.

A large number of families are keeping daily-expense accounts for the bureau. These expense records will give us very useful checks on the family budgets for a year, obtained by interview. The domestic-science departments in some of our universities and colleges are giving invaluable assistance in obtaining these daily-expense records. Some of these accounts will be kept for two periods of five weeks each at different seasons of the year. Some we hope to keep running throughout the year with the assistance of the domestic-science students. These daily-expense accounts should give us very valuable facts which will enable us to check and perhaps modify our family budgets.

Granted that budgets obtained by interview are estimates, there is no other way under heaven of getting at the cost of living with any possibility of accuracy. The English have just completed a survey of cost of living by the questionnaire method. Schedules were handed out to housewives by the agents in charge of the employment offices. These were filled out by the housewives without any supervision or assistance whatsoever. Needless to say, the information is not detailed enough to enable a weighted budget to be made up without which a cost-of-living index number is utterly impossible. For myself I have no faith in the questionnaire method of studying cost of living. I would not bother to tabulate the misinformation gathered in that way.

Quite as important as the obtaining of family budgets is the obtaining of accurate retail prices of a sufficient number of the more important standard articles bought by the families studied to represent fairly the kind of articles consumed by these families, so that changes in prices of these representative articles may be translated readily and with approximate accuracy into changes in family expenditure. The articles priced must be accurately described so that in future prices may be obtained of the same articles or some other article approximately identical. I am confident that both the family budgets and the retail prices being secured by agents of the Bureau of Labor Statistics are accurate and thoroughly dependable.

STABILIZING THE DOLLAR.

BY IRVING FISHER, DEPARTMENT OF POLITICAL ECONOMY, YALE UNIVERSITY.

[Paper read at the Thirty-first Annual Meeting of the American Economic Association, Richmond, Va., Dec. 28, 1918.]

Monetary standards throughout the world have been disrupted by the war. Inflation in various forms, such as paper money inflation and bank-credit inflation among the countries at war, and gold inflation among other countries, has everywhere caused a depreciation of monetary units. Consequently we have high prices the world over, even where there is no scarcity of goods. Already before the war there was world-wide complaint of the high cost of living, but the rise in this country before 1914 was small compared to what it has been since. Between 1913 and 1918 prices had increased 107 per cent, whereas between 1896 and 1913 the increase was only 50 per cent.

Prior to 1896, partly because of a disproportion between the increase in the amount of currency and the more rapid increase in the demands of business, there had been a decrease in the price level. This had caused as much complaint as the present rising prices. The situation had become so serious that various alleged remedies were suggested to stop or offset the fall.

As to the future, the general expectation seems to be of a decline in prices, which would, however, if sharp, be just as great an evil as the present high prices. A rapid contraction of the currency would be a grave danger in times of reconstruction. A fall in prices (or appreciation of the dollar) would put a heavy burden on the debtor, who must repay so much more than he borrowed. However, this fall is not certain, and the very uncertainty is itself an evil.

The truth is, the purchasing power of the dollar and other monetary units has always been and, until some radical remedy is applied, always will be, unstable. The dollar is, to be sure, stable in weight, for by definition it is 25.8 gr. of gold, .900 fine. But for that very reason it fluctuates in value-in-exchange, according to the various forces affecting gold and the various forces affecting the volume of currency, such as methods of gold mining, changes in the use of credit, and so on. Other units—the pound, the yard, the bushel—once fluctuated as the “unit of value” now does, but with the progress of civilization they have, one after another, been standardized. Our unstable and unstandardized monetary units are among the last remnants of barbarism, and are out of place in present day civilization.

The fundamental reason why the dollar has not hitherto been standardized in value is that only within a generation have we had the

means of measuring its value. Before the pound weight could be stabilized scales had to be invented, and before any other units could be stabilized the proper instruments for measuring them had to be devised. For measuring changes in the price level we now have the "index number" of prices.

This use of the index number would carry one step further the transition in our conception of money which began with the bullion report. At that time the public was educated up to the point of recognizing gold as the standard for measuring paper money, although in the market, paper was the standard in terms of which the price of gold was recorded. But it still remains to grasp the concept of measuring gold in goods instead of, as at present, goods in gold. It is as great an advance in thought to think in terms of goods instead of in terms of gold, as it was a century ago to think in terms of gold instead of in terms of paper. Whether in the future we shall find a still more absolute standard of value need not concern us now. The point is that we now have, in the index number, a means of measuring gold appreciation and depreciation in terms of goods.

In connection with the proposal to stabilize the dollar, two main questions need to be asked: (1) At what price level do we want to start a stable dollar? (2) How can that price level be kept?

In regard to the first question, the present price level is so abnormally high that it seems doubtful wisdom to launch a plan which would fix the dollar at its present low purchasing power. At the same time it would be absurd to go back to 1896, the low-water mark of prices, for the debts existing then have almost all been paid, and wages and salaries have become adjusted to a higher level. We can not now do justice to all those who suffered by past price movements. The chief object of stabilization is to provide a stable yardstick for contracts to serve future generations of business. Next in importance is the object of preventing injustice, in the immediate future, to those who are now debtors or creditors or who would otherwise be affected by any impending unforeseen fluctuation in monetary standards. It may, therefore, be necessary to endure some injustice at the time of inaugurating the new plan for the sake of bringing about the ultimate reform, but by a careful study of existing contracts, practical justice can be attained.

Most existing contracts and understandings were made during the war. A rough estimate which I have made of existing indebtedness—bonds, notes, mortgages, bank loans, and other obligations—seems to indicate that their average duration is approximately two years. If then the price level should soon become what it was two years ago, say in 1916-17, it would seem wise to adopt that level as the start-off.

As to the second question, how to keep this price level, or in other words how to stabilize the dollar, there may be other solutions than the one I have been active in advocating. The important point is to find *some* solution. The evils of an unstable dollar are intolerable. The solution of the problem is one of the tasks of reconstruction. One of the simplest and yet one of the greatest reforms that we economists can advocate is this one. It is as simple as daylight saving and a million times as important. Stabilizing the dollar affects not simply money, but relates itself to the whole question of the distribution of wealth and labor unrest. The disproportion between the level of wages and the soaring price level has, for instance, been responsible for much of the recent labor agitation.

The particular plan which I am about to discuss is somewhat associated with my name, but I am not its sole author. It was worked out independently before me, in some detail, by Aneurin Williams, M. P.; Prof. (now Dean) Smith, of the University of Washington; D. J. Tinnes, of Hunter, N. Dak.; and Henry Heaton, of Atlantic, Iowa; and in its general idea by President Woodrow Wilson, Simon Newcomb, Alfred Russel Wallace, Prof. Alfred Marshall, William C. Foster, of Watertown, Mass., and others.

Briefly, this particular proposal is to shift the weight of the dollar (or the amount of gold bullion exchangeable for a gold certificate) up or down according as the purchasing power of the dollar (as measured by the index number of prices) goes down or up. Thus the purchasing power of the gold certificate will be kept constant in terms of goods while the weight of the gold dollar is allowed to fluctuate.

I shall assume that the plan, in a general way, is understood.¹ None of the technical difficulties in such a plan are, in any way, serious. I shall refer to only a few.

First, as to the gold reserve behind the proposed gold certificates, or, as they would better be called under the new system, the gold-dollar certificates. If the gold-dollar certificates outstanding are now equal, dollar for dollar, to the gold in the Treasury, but next month, because of a change in weight of the dollar, they call for 1 per cent more gold, must the Treasury find the additional bullion and if so, how? It would, of course, be perfectly possible (though not necessary) to maintain, as at present, a 100 per cent reserve against these certificates, the Government making up the deficit when gold depreciated, perhaps through taxation. If, on the other hand, gold were appreciating, the Government would reap a profit. This gain and loss, however, are not really new phenomena resulting

¹ See American Problems of Reconstruction, E. P. Dutton & Co., 1918, article by Irving Fisher, "Stabilizing the dollar in purchasing power;" and forthcoming book by same title, to be published by Macmillan,

from stabilizing the dollar. They exist today. But, under our present system, the loss (or gain) falls on the individual holder of gold certificates instead of on the Government. Stabilizing the dollar simply affords a specific measure of this loss, if it be a loss, and maintaining the reserve translates that loss into taxes.

It would be more simple, however, to allow the reserve gradually to fall below par, say to 50 per cent, before replenishing the supply of bullion. Any surplus above this 50 per cent which might exist at a time of falling prices or decreasing dollar weight could be put to work to earn interest which would to a large extent provide against loss when prices began to rise again. This could be done by investing this "surplus" in Government bonds.

A second technical point in the plan is the choice of the index number which is to be the basis of the changes in the "dollar weight." Although the method of computing the index number has surprisingly little effect in general on the resulting figures, nevertheless differences do appear; and it is therefore worth while to construct an index number as nearly perfect as possible. The main factors are the markets from which prices are collected; the kind of prices, i. e., wholesale or retail; the list of commodities included; the frequency of calculation; and the formula for calculation.

For the first, the markets should be the chief public markets of the United States, such as those now used by the United States Bureau of Labor Statistics, and the prices should be secured through Government agents and trade journals.

I am at present rather inclined to think that wholesale prices should be used, first because of the greater ease they offer in standardizing certain grades of goods, and secondly because of their greater sensitiveness to the influences which affect price levels.

This same consideration is important in selecting the list of commodities, which should exclude the sluggish commodities in order to be promptly responsive to price changes. This difference is illustrated by the contrast between street railway fares, which remained the same through two decades of price upheavals which affected all other prices, and silver, which is rarely quoted the same on two successive days. I have had an index number of such responsive commodities calculated through the help of Mr. C. A. Bell, of the Bureau of Labor Statistics, and it shows a rise greater and prompter since 1914 than that of the regular index number, including, as it does, sluggish and price-fixed articles.

I believe that, if wholesale prices are stabilized, retail prices will also be stable. The present discrepancy between the movement of retail and wholesale prices is due to the lagging behind of the retail prices whenever the wholesale prices move more swiftly up or down.

But there can be no lagging behind when prices are stable. I am much gratified, however, as well as surprised to learn that Commissioner Meeker has worked out a satisfactory index for cost of living based on retail prices. This should certainly be used for wage adjustment, so long as we have no stabilization of money.

The frequency of calculating the index number (which means the frequency of adjusting the dollar weight) depends on the time required to calculate an index number and that required for such an adjustment to be felt. Judging from the rapidity with which some of the commercial index numbers are calculated and published, I believe an index number could easily be calculated within two or three days after the date for which the prices are quoted. How quickly the index number responds to a change in the monetary supply has never been fully demonstrated. A lag of from one to three months is most probable.

So much for some of the points of this particular plan.

There are a number of other details which will have to be considered when, if ever, this plan comes up for legislative adoption and which will be treated in my book. But those which have been mentioned are those of most importance.

A LEGAL DISMISSAL WAGE.

BY EDWARD ALSWORTH ROSS, PROFESSOR OF SOCIOLOGY, UNIVERSITY OF WISCONSIN.

[Paper prepared for meeting of American Association for Labor Legislation, Richmond, Va., Dec. 27, 1918.]

The Czar's government withheld from Russian workmen the right to strike by requiring them to give their employer two weeks' notice before quitting his employ. On the other hand, the law required the employer likewise to give the man two weeks' notice, or, if he dismissed him abruptly, to pay the dismissed employee for two weeks beyond the term of employment. The enforcement of the law was in the hands of the government factory inspectors and the workmen appear not to have derived much benefit from it. I did hear, however, of a peppery manufacturer, who paid a fortnight's extra wages to men he had "fired," and who declared that his quick temper would bankrupt him.

After the revolution of March, 1917, an endeavor was made to enforce this law and to secure for the dismissed workman a month's wages instead of a fortnight's wages. In a number of industries the month of leeway was established by joint agreement. In the typographic industry masters and men agreed to a three months' minimum term of employment. When I was at Baku, in October, 1917, the hundred-odd oil firms were concluding an agreement with their 70,000 employees which stipulated, among other things, that on dismissal an employee should receive a month's pay for every year he had been in the service of the firm. The employers made no protest on this point for it simply made general a practice which long had been followed by the best oil companies.

In some cases the demands went very far. A large American manufacturing concern near Moscow was asked by its men to pay three months' dismissal wages for every year of service. On the break-up of the office force of a certain American life insurance company with headquarters in Petrograd the men put in a claim for six months' pay all around.

I do not know how the dismissal wage idea has fared under the soviet régime in Russia and I have little information as to its actual working during the troublous time in 1917 before the old order was broken up. But I believe that it rests on a sound principle and deserves to be considered seriously as a means of stabilizing industrial relations in this country.

In a mature and humane civilization great importance is attached to the economic security of the individual. As the civil service de-

velops, the public employee is protected in various ways against abrupt and arbitrary dismissal. In universities it is customary to notify the instructor a considerable time in advance of the termination of his employment. The professor is usually given a year's notice or else his salary is continued for at least half a year after his services are dispensed with. School boards, hospitals, churches and nongainful organizations generally feel that it is unjust to cut off a faithful servant without giving him a reasonable time to look around for another place. Even from private employers, professional men are usually able to secure an agreement not to end relations without a month or more of notice.

On the other hand, the common practice of American industrial employers is really amazing in its lack of consideration for the worker found superfluous. No doubt many firms take pride in building up and maintaining a stable labor force and give serious attention to the plight of the men they have to drop. But the average employer seems to give himself not the slightest concern as to what is to become of the worker dismissed through no fault of his own. I have heard of a firm, long aware of the necessity of curtailment of the laboring forces, waiting till half an hour before the evening whistle blew to post a notice throwing hundreds of men out of a job for an indefinite time.

Since Americans are not generally inhumane, the barbarous "firing" policy so characteristic of our industries can be accounted for only as a survival from the time of the small concern when the competent workman dismissed could walk around the corner and get a job just as good. That such is not the case to-day may be learned by simply interviewing workingmen as to what loss of job has meant to them. What tales of tramping the streets looking for work, of rushing hither and thither on a rumor that this firm or that is taking on men, of returning night after night worn out and discouraged to an anxious family, of the frantic cutting down of household expenses, the begging of credit from butcher and grocer, the borrowing of small sums from one's cronies, the shattering of hopeful plans for the children! Here are real tragedies, hundreds, nay thousands, of them a year in our larger centers, yet the general public goes its way quite unconscious. No wonder among wage earners the bitter saying runs, "A workingman is a fool to have a wife and kids."

What of the far greater number who are employed continuously but who are always worrying lest they lose their jobs without warning? From conversation with wage earners one gathers that in countless cases the fear of finding a blue slip in the pay envelope is always present. As long as many employing concerns follow their present practice of not giving their men any advance notice of what

will happen to them, there will be resentment and unrest in the ranks of labor, no matter how reasonable the hours and pay.

The tragedy in the situation of the wage earner in the modern industrial organization has been his insecurity. Step by step we have lessened this. Mechanics' lien laws did away with the risk of losing his pay, postal savings bank with the risk of losing his savings, "safety first" with the risk of preventable industrial accidents, accident compensation with the risk of losing livelihood through injury received while at work, pensions with the risk of a destitute old age. The chief insecurity remaining is that of losing one's job. How can we lessen that?

There is no merit in the suggestion that the law should require either party to give a fortnight's notice before terminating relations. The workman who received notice would be of little use the ensuing two weeks, and the average employer would prefer to make him a present of his wages and let him go. On the other hand, if the workmen were obliged to give notice two weeks before quitting, they would lose their most effective weapon—the sudden strike.

The best policy is to establish for the workman who has been with the employer long enough to warrant the presumption that he is of value—say six months—the legal right to a fortnight's free wages when he is dismissed without fault on his part. This would give him two weeks to look about and find himself another job. Even if he had no savings and no credit it would be a month or more before his family came into acute distress. There are few competent men who can not find a job in a month unless times are hard, and for hard times the remedy will be altogether different, viz., unemployment insurance. Still more important, however, is the consideration that the man who made good on the job and continued to make good would be relieved of the haunting fear of offhand dismissal. It would not pay his employer to fire him for trivial reasons, and, if business were slack, the men let out would be those recently taken on, who had not yet established the right to the dismissal wage.

The dismissal wage should not be looked upon as something held back out of wages which a man will never get unless he is "fired." It should be regarded in the light of the "compensation for disturbance" which some countries allow the evicted tenant who has farmed the land well.

Of course the man who "fires himself" by persistent negligence or misconduct should get no dismissal wage, and, since an unscrupulous employer might charge fault when there is none, there would have to be local boards to hear complaints on this score.

The employee who quits of his own free will to take a better job or do something else would have no claim. But, since such an em-

ployee might "soldier" or grow careless simply to get himself "fired," the employer must have the right to relief from payment of the dismissal wage upon proving to the local board that the employee is "soldiering." As a matter of fact no workman could afford to get a reputation of this kind among employers.

Until we have accident, sickness, and old-age insurance, incompetency arising from accident, sickness, or old age would not, of course, release the employer from the obligation to pay a dismissal wage. The dismissal wage might be combined with a system of unemployment insurance by providing that the unemployment allowance should not begin until the end of the term for which free wages are paid.

The legal dismissal wage should not become involved with strikes and lockouts. Let the rule be that the striker has not relinquished his job any more than the man who has been absent on account of sickness. When the man resumes his job—whether on his terms or those of the employer—he should have whatever rights he had when he struck. Only in case he applies for his job and is refused should he be entitled to a dismissal wage. If he never applies, he should get nothing.

Let the lockout be looked upon as if it were a temporary stoppage owing to a fire or a dearth of fuel or raw material. When the men are taken on again all is as before. If they stay away, they should get nothing. If they are refused their old jobs, they should get the dismissal wage.

If the employer goes bankrupt his men's dismissal wages should constitute precisely the same kind of claim on his assets as their back wages.

Since an employer could always avoid dismissing a man by cutting his wages to so low a point that the man would quit of his own accord, the cutting of a competent workman's pay below the "going" wage for the time and place should be construed as dismissal. Likewise, when an employee without fault is reduced to a lower position in the works or is shifted permanently to harder or more onerous work, the workman should have the option of staying on or claiming dismissal pay and leaving.

What of "lay off" when, on account of slack business, the men dismissed are not replaced? Instead of dismissing men, let the employer cut down hours uniformly in the shop and not until he cuts them below half time shall the men have the option of staying or of taking their dismissal wage and leaving. When a man is laid off because there is not enough work to keep him busy but the job is supposed to be held open to him, let the dismissal wage payment be paid in installments over a period of six weeks. If the employee is

taken back before the expiration of the six weeks the employer saves himself something.

A board of three members to decide all such questions should be created in each industrial community. One member should represent employees, another employers and the third should be named by the State Industrial Commission.

How would the legal dismissal wage affect employers?

It is agreed by all that the amount of labor turnover in American industries is scandalous. I know of an industry employing 28,000 men which not long ago hired and "fired" at least that many men a year. Fifty-seven Detroit plants took on and dismissed, in 1917, two and a half times as many men as they carried on the pay roll. Few employers have any conception of what they lose by such a turnover. The inquiries of Magnus W. Alexander show that the hiring of 22,031 unneeded employees in 12 factories involved an economic waste of nearly a million dollars—3½ per cent of the total wage bill!

The obligation to pay a dismissal wage would give such employers a motive to make their practice conform to that of those thoughtful and humane employers who have reduced their annual turnover—in some cases to 30 per cent—with profit to themselves and contentment to their employees. They would find that it would pay to give attention to human engineering, to install employment managers to investigate why an employee is doing badly and find a way to remove the cause. Before letting a man go with a fortnight's free wages they would try him out in different positions or departments in the hope of finding the right place for him, or would even provide him with the instruction which would enable him to make good on the job. In time of slack business they would put their men on part time rather than turn some of them off.

Just as the burden of accident compensation sinks to the minimum in the case of the employer who takes the most pains and goes to the most expense to eliminate accidents from his mill, so the burden of a legal dismissal wage will be least on the employer who picks his men most carefully, tries them out most speedily and gives the most care to building up a permanent labor force. By providing the worker with an added inducement to keep a good job and the employer with an added inducement to keep a good man it would tend to stabilize American industry and favor the survival of the types of employer and worker society ought most to encourage.

COMPARISON OF "ARITHMETIC" AND "RATIO" CHARTS.

BY LUCIAN W. CHANEY.

The use of charts for the interpretation of statistical facts has been in vogue for many years. Their universal use is due to the fact that a chart usually presents a quick, forceful, and convenient picture of the matter under consideration, whether this be population of cities, wheat production, bank deposits, wages, or industrial accidents. There are, however, certain limitations upon the value of such charts as accurate interpreters of statistical data. Their value depends not only upon the particular kind of graphs employed but upon the specific idea it is intended to convey. For example, the ordinary arithmetic chart is well adapted to express fixed relationships, but when it is employed, either consciously or unconsciously, to denote rate of change in any given series of facts it produces misleading and inaccurate impressions. To express changing relations or rate of change it is necessary to use other graphic methods. Probably the best method devised for this purpose is the so-called "ratio" chart expounded by Prof. Irving Fisher, of Yale University, in the July, 1917, issue of the publications of the American Statistical Association.

The present paper attempts to compare the ordinary "arithmetic" and "ratio" charts, to indicate under what conditions each may be employed, and to illustrate the use of the ratio chart as employed by the United States Bureau of Labor Statistics in its studies of accident data.

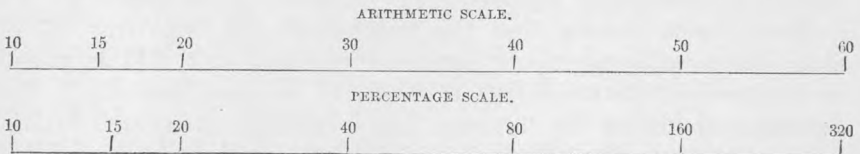
As already noted, in any series of statistical magnitudes there are two matters of interest, (1) fixed relations and (2) rate of change. To illustrate: The population of a city in a series of years was respectively 50,000, 75,000, and 100,000. The fixed relation could then be expressed as the arithmetic difference between them, namely, 25,000 between the first and second years, and also 25,000 between the second and third years. On the other hand, the rate of change could be expressed by the percentage of difference between the populations, namely, 50 per cent between the first and second years and $33\frac{1}{3}$ per cent between the second and third years. The first of these expressions brings out the fixed relation while the second directs attention to the rate of change.

COMPARISON OF SCALES.

In order to give graphic presentation to these two distinct relations an appropriate choice of scales and graphic methods is essential. This may be accomplished by using for fixed relations the

ordinary "arithmetic" chart constructed on an "arithmetic" scale and for rate of change the "ratio" chart constructed on a "percentage" scale.

For the purposes of this discussion these charts and scales may be defined as follows: (1) An "arithmetic" chart is one in which the magnitudes are plotted on an arithmetic scale—an arithmetic scale being a series of numbers so spaced that their linear distances correspond to their arithmetic differences. (2) A "ratio" chart is one in which the magnitudes are plotted on a "percentage" scale—a percentage scale being a series of numbers so spaced that percentage difference is represented by a constant linear distance. The following illustration will bring out the fundamental characteristics of each scale.



It will be noted that in the arithmetic scale equal linear distances represent equal arithmetic differences, whereas in the percentage scale equal linear distances express equal percentage differences. In the case of the arithmetic scale one space represents 10 units; in the percentage scale one space represents 100 per cent difference.

If it is desired to introduce intermediate numbers in the above arithmetic scale, the space between any two of these will be divided into 10 equal parts. Eleven would then be one unit from 10, while 15 would be midway between 10 and 20, since points having equal arithmetic differences are always equidistant. The construction of a complete percentage scale, on the other hand, is more complicated because the relation of any magnitude as compared with an ascending or descending series of magnitudes is a constantly changing percentage. To illustrate: From 100 to 110 is a 10 per cent increase, whereas from 200 to 210 the increase is only 5 per cent. Therefore, on a percentage scale the linear distance from 200 to 210 will be less than that from 100 to 110. Thus it is seen that in passing up the percentage scale numbers separated by the same difference as regards magnitude will be represented as drawing closer together on account of the decreasing percentage of difference.

Suppose it is desired to locate the intermediate number 15 on the percentage scale given above. In order to do this the fundamental method is to find from logarithmic tables the logarithms of 10, 15, and 20 and then place 15 in a position representing the relation between its logarithm and those of 10 and 20. When this is done

it will be found that 15 is not equally distant from 10 and 20 as in the arithmetic scale, but is nearer to 20, as shown. This accords with the fact already shown by illustration that the relation of a given value to an increasing series is a constantly decreasing percentage.

However, the production of such percentage scales by this method would be a laborious and time-consuming process. In practice all this is avoided by using scales already prepared. It is now possible to obtain in the market paper ruled on a percentage basis, or, as commonly designated, "logarithmic" paper. The use by engineers of the slide rule on which are engraved percentage scales and by which logarithmic computations can be readily made has contributed to fix among them the name "logarithmic" as the proper designation for the percentage scale herein discussed.

Thus it will be seen that the arithmetic scale is clearly one of fixed relations between the numbers composing it and is useful in measuring and projecting relations of a fixed character. The percentage scale, on the contrary, has constantly changing relations between the numbers composing it and is convenient for expressing rates of change.

USE OF ARITHMETIC CHARTS.

It has seemed advisable for purposes of elucidation to discuss at some length the construction of the scales upon which charts are based. The primary purpose of this paper, however, is not to discuss scales but to compare different kinds of charts and to illustrate their proper uses.

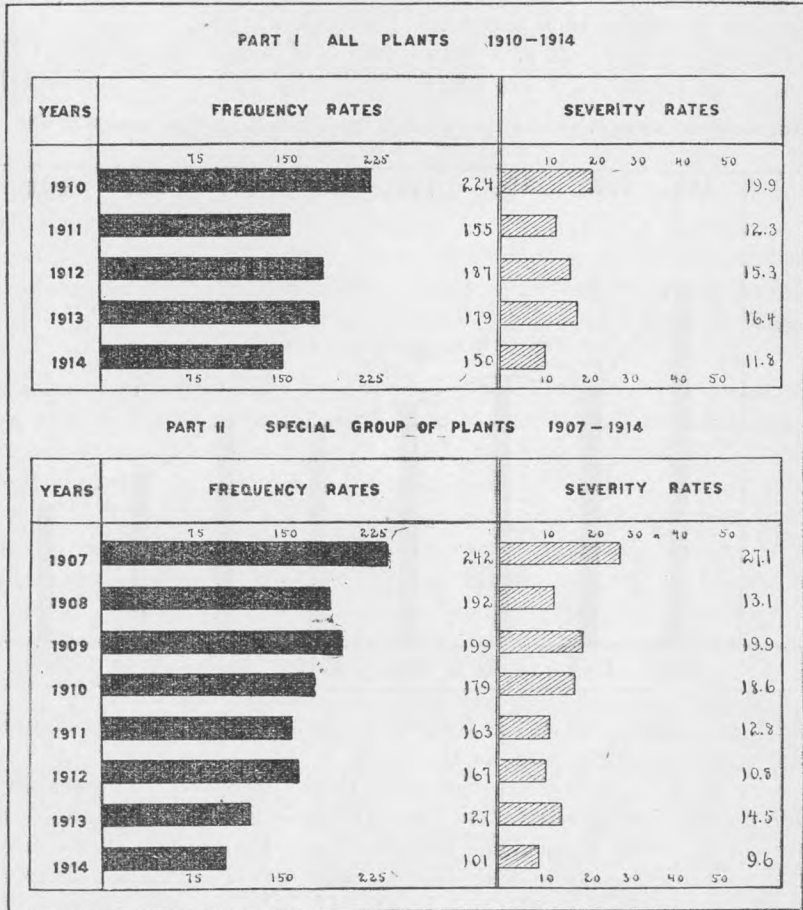
The general principle to which all charts should conform is that the appeal to the eye should be in such form that it is naturally, even inevitably, interpreted in accordance with the facts. Various forms, such as circles, cubes, bars, and lines, have been employed for the ocular presentation of statistical facts. Certain of these representations are better suited to this purpose than others, while some are positively deceptive and misleading. The results of experiment confirm the reasoned conclusion that areas and cubes, for example, do not appeal to the eye in correct proportion to their area or volume. There was the widest diversity in the estimates of relative size on the part of different observers. Further inquiry developed the fact that the only thing which is interpreted by the eye in any close relation to its relative size is linear distance. A bar chart, therefore, is the graphic method best adapted for conveying correct information as to fixed relations existing between the statistical facts under consideration. Moreover, the bars should be placed horizontally rather than vertically because the horizontal position is more favorable for purposes of comparison. This is due to the fact

that reading and many common measurements are on the horizontal. Thus everyone has some practice in judging horizontal distances.

The following chart, showing a comparison of accident rates for different years, is a good example of the proper use of the arithmetic chart.

It should be noted: (1) That such a chart presents the fixed relations between the items and is not adapted to indicate with any

CHART 1.—ACCIDENT RATES IN THE IRON AND STEEL INDUSTRY OVER A PERIOD OF YEARS.



precision the trend of events. (2) That the scale always begins with zero. This insures having before the eye the things which should be compared, namely, the distances from zero to the end of the bars. (3) That the bars are placed in a horizontal position, which facilitates accurate ocular comparisons. (4) That the vertical position of the time elements, in this case years, tends to give the impression of distinct units rather than a connected series.

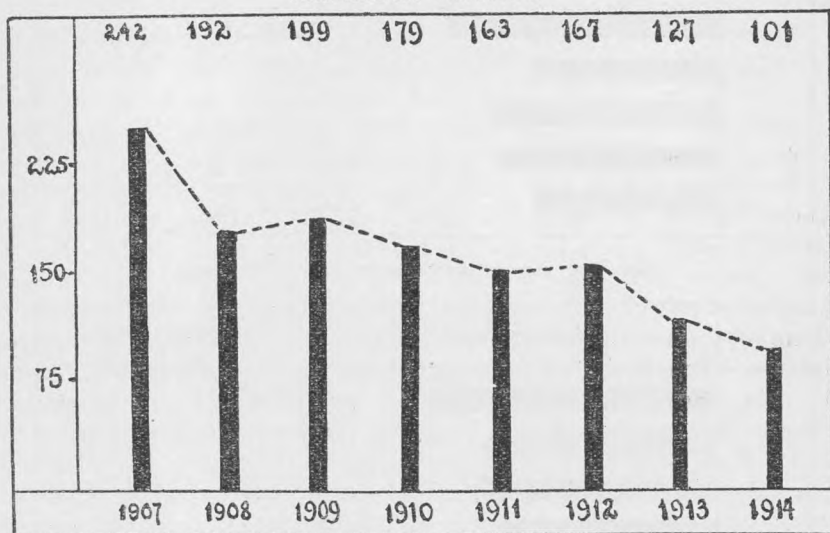
It may therefore be said that for the projection of fixed relations in such a manner as to afford the most exact possible ocular impression of the relative size of the magnitudes charts similar to Chart 1 are to be recommended.

ERRONEOUS USE OF ARITHMETIC LINE CHARTS.

The most common and also the most deceptive of statistical graphs is the ordinary arithmetic line chart. This chart is projected by plotting the magnitudes in the appropriate time spaces opposite the corresponding figures of the scale, and the points thus determined are then joined in each series by distinctive lines.

The following chart is a combination of a bar chart with a line chart. In it the bars are placed vertically instead of horizontally

CHART 2.—COMBINATION OF BAR AND LINE CHART TO SHOW INCORRECT USE OF ARITHMETIC PLOTTING.



and a so-called "curve" is formed by introducing the line connecting the points at the ends of the bars.

Now it is evident that the only things properly comparable in such a chart are the distances from the base line to the points determined—in other words, the length of the bars. The introduction of the distinctive connecting line at once diverts attention from the proper comparison to the line itself. If, as is usually the case, the bars be not introduced the gradient or steepness of the line becomes then inevitably the basis of judgment and all notion of the distances as the real subject of comparison is lost. Unconsciously the line is erroneously interpreted as expressing rate of change. But rate of change, as will be explained later, can only be accurately represented by a ratio chart in which percentage differences and not arithmetic differences are plotted.

Moreover, it often happens that a large part of the scale has no points assigned to it. In that case it is common practice to omit the lower portion of the scale. This at once and completely renders impossible the only significant comparison. Suppose the smallest magnitude in a given group be 75 and a larger magnitude be 100. It would then be in accord with common practice to cut away the lower portion of the scale to, say, 70. The ocular comparison of the two magnitudes will now, of necessity, be that between 5 and 30 and not between 75 and 100. The chart then becomes not only useless but positively deceptive. Furthermore, when the series of magnitudes or number of lines becomes increased beyond two it becomes difficult, if not impossible, to compare the distances even though the entire scale be given. If this is further complicated by an abbreviated scale the situation becomes one of obscurity multiplied by deception.

An example of incorrect and deceptive charting is shown in the following chart (chart 3) which is based upon actual data assembled by the United States Bureau of Labor Statistics in its accident studies, and is the ordinary arithmetic projection of the experience of plants producing various steel products.

This chart has all the confusing and deceptive features specified above, namely, (1) the abbreviated scale, (2) confusing multiplicity of items, and (3) guide lines diverting attention to themselves for the only proper comparison. To test its deceptive capacity a large number of people were requested to state the impression conveyed to them by the line for fabrication as compared with that for tube manufacture. Practically all were agreed that in the earlier years covered by the chart conditions improved more rapidly in fabrication than in tube manufacture. Only one person called attention to the fact that the omission of the lower portion of the scale made impossible the only valid comparison for which such a chart is constructed. It developed constantly that the judgment rested upon the relative steepness of the downward gradients of the two lines.

It is evident that to be correctly interpreted the line must be a curve representing the rate of change. The so-called curves in this chart are not really curves at all but are merely guide lines by which the eye may follow from point to point. As already noted, when a given point is reached the line must be forgotten while the real comparison is made of the relative distances from the base line. Since in practice it is entirely impossible to ignore the guide lines and pass to the only valid comparison, the need of some form of charting from which the rate of change may be correctly judged becomes strikingly apparent. This need is fulfilled by the "ratio" chart.

Chart 4 shows the same data plotted as a "ratio" chart and it will at once be seen that the rate of change in tube manufacture was greater than any of the others although the arithmetic chart showed the tube manufacture line as almost horizontal.

CHART 3.—ARITHMETIC PLOTTING OF ACCIDENT FREQUENCY RATES.

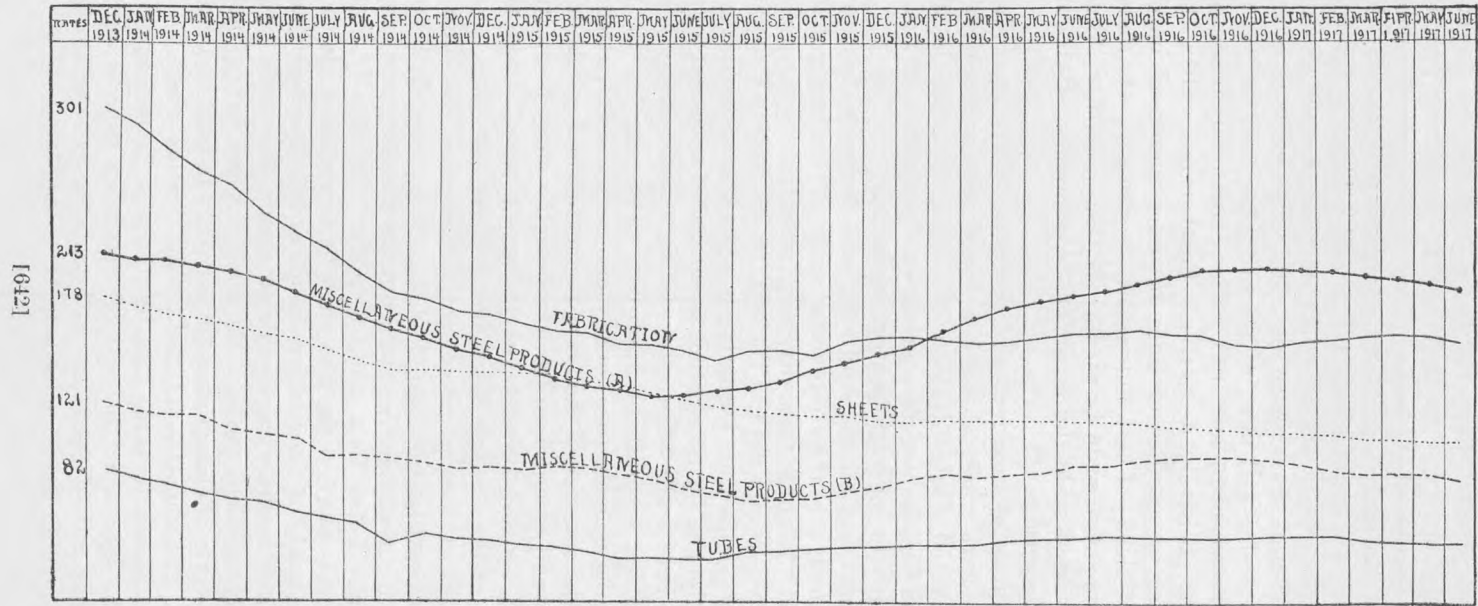
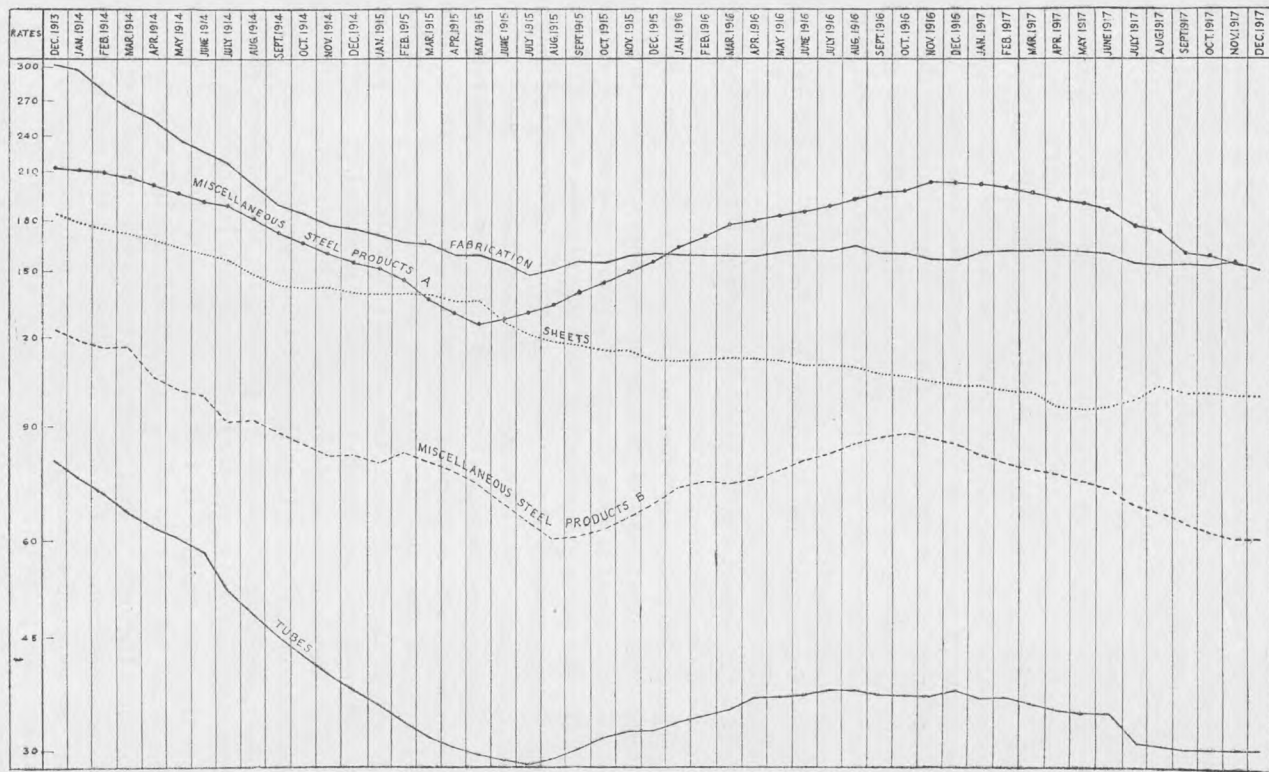


CHART 4.—A "RATIO" CHART OF THE DATA SHOWN IN CHART 3.



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CHARACTERISTICS AND USE OF RATIO CHARTS.

To recapitulate: A comparison of arithmetic differences is best accomplished by means of the horizontal bar chart. An arithmetic line chart is wholly unsatisfactory because (1) it, in itself, can not express satisfactorily arithmetic differences, and (2) because it functions erroneously and deceptively as an indicator of rate of change. An accurate conception of rate of change can only be expressed by a "ratio" chart.

A "ratio" chart, as we have seen, is one in which the magnitudes are plotted on a percentage scale. The construction of this chart is simple. After a percentage scale of appropriate dimensions for the plotting paper is produced, the further steps differ in no respect from those taken in plotting an ordinary arithmetic line chart. A point is determined in each time space for each magnitude and the points are then connected by distinctive lines. The result is to give true curves whose direction, and the rapidity of whose rise and fall, are the significant matters.

Several important characteristics and functions of the ratio chart may be pointed out.

1. In a ratio chart a given linear distance on the scale always represents the same percentage difference.

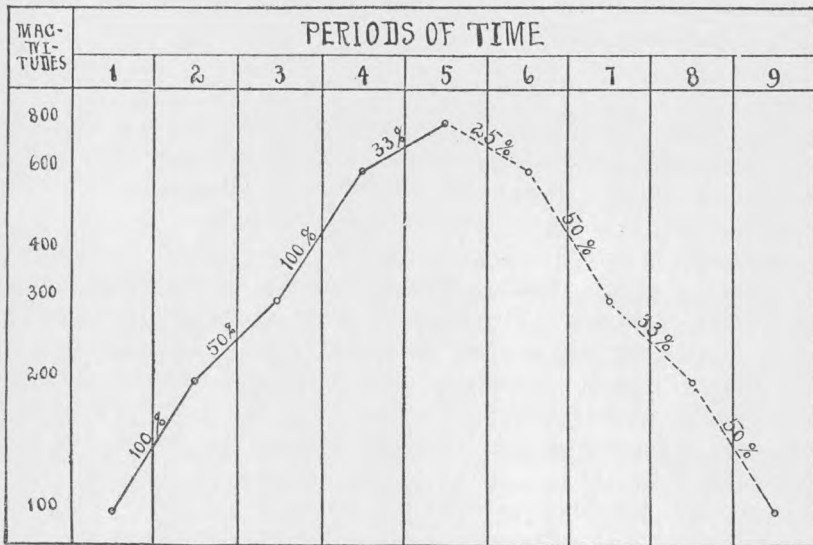
2. The gradient or steepness of the lines always and inevitably expresses the exact rate of change in any series of statistical facts. Consequently equal rates of change or equal percentages of difference will have the same gradients. If two magnitudes vary 10 per cent upward their curves will run parallel however far separated they may be on the chart. For example, if one magnitude increases from 10 to 11 while another increases from 100 to 110 the curves corresponding to the change will be parallel, indicating the same rate of change. It is evident that plotting the same magnitudes on an arithmetic scale would show ten times the amount of difference in the second case although the percentage difference is identical.

3. The percentage scale in the ratio chart has no zero. A moment's consideration will show that this must necessarily be true. As long as there are magnitudes to be plotted, no matter how small, the percentage decrease can never be 100 and thus can never theoretically reach the zero point. It has already been noticed that an arithmetic scale, in order to afford correct information, must extend to zero, since the only things properly comparable on such a scale are the distances from that point. The absence of the zero in the ratio chart is sometimes misapprehended as a disadvantage. On the contrary the particular value of the scale is related to this fact. Because of the absence of the zero, attention is necessarily and properly centered upon the relations of the various magnitudes to each other and particularly upon the rates of change.

4. The ratio chart makes possible a direct and correct comparison of increases and declines. The usual method of expressing changes up or down is to say, for example, that a rise of 50 per cent was followed by a decline of 30 per cent. This mode of expression is used without realization that it involves expressions which can not be compared one with the other. Comparatively few persons at once recognize that an increase of 100 per cent is exactly balanced by a decline of 50 per cent. Percentages of increase can be properly compared with other percentages of the same sort and percentages of decline are similarly comparable, but no direct comparison can be made between a percentage of increase and a percentage of decline.

The following simple chart will best illustrate the incomparability of these two series of percentages.

CHART 5.—CHART TO ILLUSTRATE IN COMPARABILITY OF PERCENTAGES OF INCREASE AND DECREASE.



For purposes of illustration a series of nine magnitudes have been plotted, namely, 100, 200, 300, 600, 800, 600, 300, 200, 100, each occurring in successive periods of time. It will be noted that, whereas the absolute decreases are in exact reverse order of the increases, the percentage decreases by no means coincide with the corresponding percentage increases. Thus, from 100 up to 200 is an increase of 100 per cent, while from 200 down to 100 is a decrease of 50 per cent; from 200 up to 300 is a 50 per cent increase, while from 300 down to 200 is a decrease of 33 per cent; from 300 up to 600 is a 100 per cent increase, from 600 down to 300 is a 50 per cent decrease; from 600 up to 800 is a 33 per cent increase, from 800

down to 600 is a 25 per cent decrease. Comparison of such series is impossible except by a memory of relations beyond the powers of the ordinary mind or by mathematical adjustment in each case so time consuming as to be out of the question.

The incomparability of these two series is due to the necessary shift of bases whenever there is a change from increase to decline or the reverse. For example, going up from 100 that number is the base and 200 is reached by a 100 per cent step; declining to the former level 200 becomes the base and 100 is reached by a 50 per cent step. It is evident that in any case where there is frequent reversal the tangle of incomparable percentages would be entirely unintelligible.

The "ratio" chart untangles the incomparables and presents the facts directly and accurately and in a form perfectly understandable merely by inspection. It will be evident from the foregoing that the ordinary form of expression fails utterly to convey any proper notion of the real relation of events.

SPECIAL APPLICATIONS.

In the course of applying the method of the ratio chart to accident data several collateral matters were considered, and inasmuch as the charts which embody them serve still further to illustrate the utility of ratio charting it is appropriate to present them here.

In the study of rate of change it often becomes desirable to increase the number of points on the curve in order to determine its course with greater exactness. This may be done by considering smaller periods of time, such as months instead of years. The objection to this is that with such a reduction in the unit of time the volume of events becomes correspondingly reduced and local and temporary causes may influence them so much as seriously to obscure the real trend.

Charts 3 and 4 avoid this difficulty by applying the well-known process of "curve smoothing." Each point represents not the condition of a single month but of the year ending with that month. This increases the number of points in each curve without decreasing the volume of events corresponding to each point. The method here employed differs from that ordinarily employed in two particulars: (1) No averages are used but the full amount corresponding to each point is employed. (2) By modifying the plotting slightly it is possible to keep the chart showing conditions right up to the last full month which has been reported. The result of plotting these overlapping 12-month periods side by side is to give an effect not unlike that secured by the successive pictures of a moving-picture film.

A sense of continuous change is imparted not possible to secure without the use of some such device.

It is frequently desirable to compare series of magnitudes which fall in widely separated portions of the scale. To do this in the manner already illustrated would sometimes require an impossible amount of space, or, if spaces were available, the curves might be so far separated as to make satisfactory comparison inconvenient.

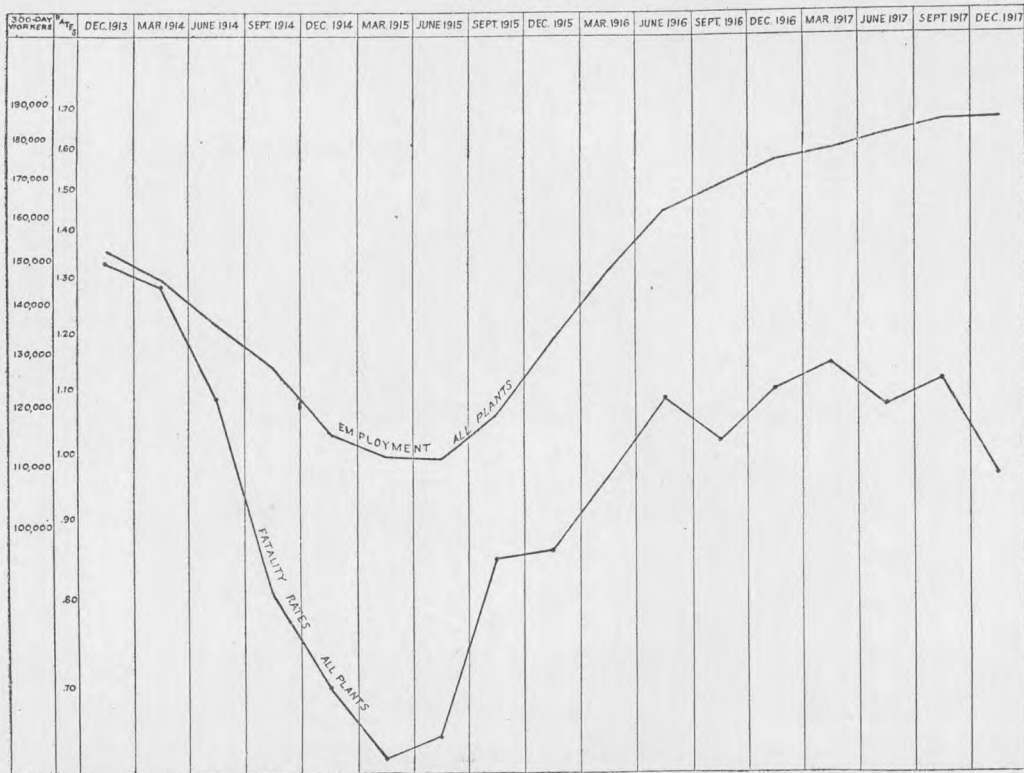
Chart 6 illustrates a method of overcoming these difficulties. Each curve is plotted on its own portion of the scale and then the portions are so adjusted that the initial point of each curve falls at or near the same point. That the scales used in the chart are portions of a single scale may be demonstrated by noting that the distance from 1.00 to 1.10 is the same as that from 100,000 to 110,000, representing 10 per cent in each case. It will be readily understood that the extension of the scale in a linear fashion to accommodate the extremes is quite out of the question. The marginal numbers in this case afford some indication of the arithmetic relations, though this information is probably better secured by reference to the original tables. The number of curves which can be adjusted by this means for the purposes of comparison is necessarily limited. Probably it would rarely be justifiable to treat more than two in this manner.

When the degree of fluctuation is the matter of primary interest and the number of curves it is desired to compare is considerable, the method illustrated in Chart 7 has a field of usefulness. The figures of each series are reduced to the first figure of index numbers, each series being regarded as 100. This brings the starting point of each curve to the same place. Their further course is determined by plotting on an appropriate percentage scale.

Some emphasis must be placed upon the fact that this form of chart discloses variations exclusively. It can not be assumed that the curve which occupies the upper part of the chart is based upon figures larger numerically than those appearing lower down. This limitation must be constantly kept in mind in interpreting such a chart. The numerical relations can only be known by reference to the tables whose elements have been reduced to an exclusively relative basis by the process applied.

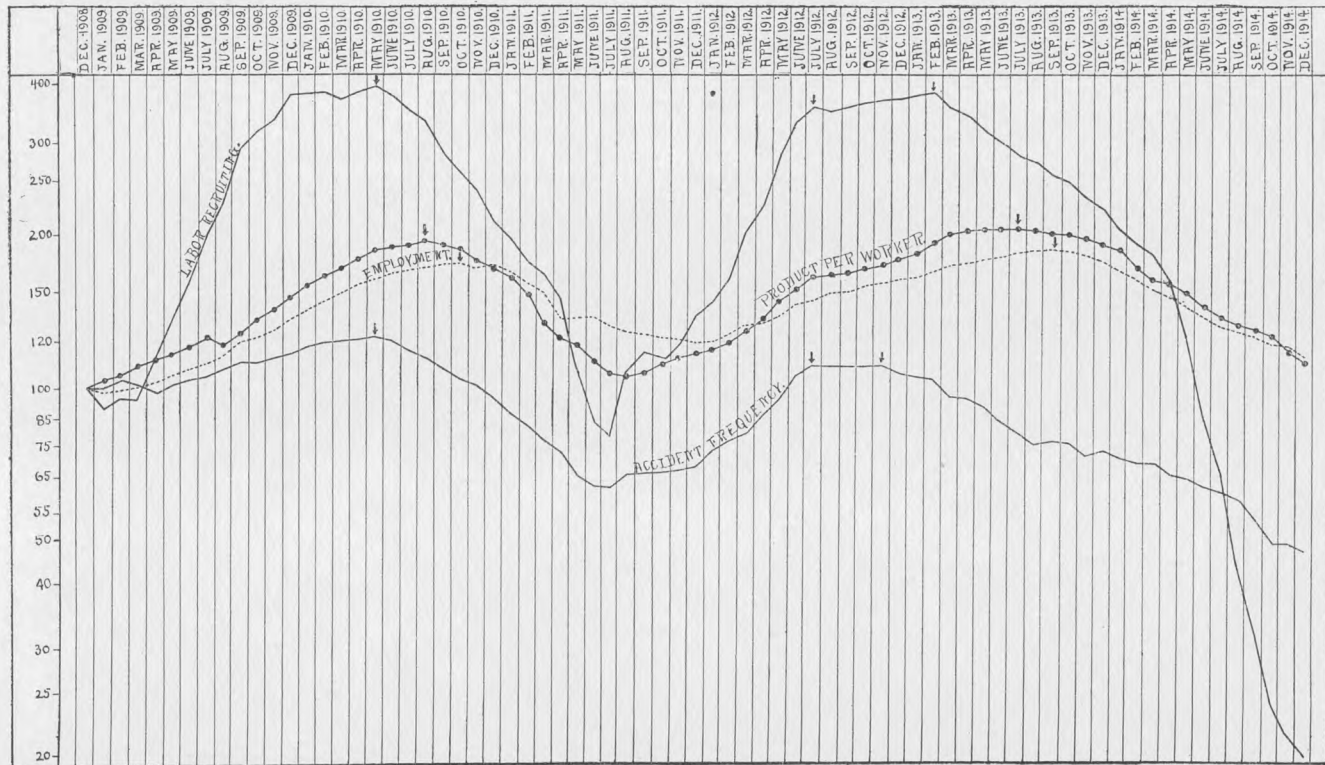
The purpose of this particular chart is to follow the rates of change in four series by means of "smoothed curves" and the use of the percentage scale. It was particularly the purpose to observe the relation of labor recruiting, production, and employment to accident frequency during the years covered, involving two periods of high industrial stress with an intervening period of depression. It is noteworthy that the summit of accident frequency

CHART 6.—EMPLOYMENT AND FATALITY RATES IN IRON AND STEEL INDUSTRY ADJUSTED FOR COMPARISON.



[6481]

CHART 7.—COMPARISON OF THE TREND OF SEVERAL RELATED ITEMS BY REDUCTION TO INDEX NUMBERS, SMOOTHING THE CURVES AND PLOTTING ON A PERCENTAGE SCALE.



[649]

in each case corresponds with the period when labor recruiting was at its height rather than the time when employment and production reached their maximum.

It is believed that these discussions and illustrations give some added force to the following quotation from Prof. Fisher, in which he says of the "ratio" chart, "It never misleads, but always pictures a multitude of ratio relations at a glance with absolute fidelity and without the annoyance of reservations and corrections."

LABOR TURNOVER IN CINCINNATI.

BY EMIL FRANKEL.

On account of the vital importance of the subject, the Bureau of Labor Statistics has, for some months past, conducted comprehensive studies of the extent and causes of labor turnover and of the methods and policies adopted for the stabilization of the working force. Partial findings of some of these studies have already been published.¹ Cincinnati was one of the industrial centers chosen for such an inquiry, and this article presents, briefly, the results of the study, dealing principally with the nature and extent of labor turnover during the war period.

The selection of establishments from which definite labor turnover data could be secured was necessarily limited to those which had complete employment records, found usually in establishments which have either functionalized employment departments or in which the hiring and dismissal functions are more or less centralized. Thus in 11 of the 28 establishments covered there were employment departments in charge of employment managers, in 15 establishments the employment functions were centralized in the hands of one of the officials of the company, and in only 2 establishments was the power of hiring and discharging vested in individual foremen.

EXTENT OF LABOR TURNOVER.

The extent of labor turnover is shown by the ratio which the total separations for all causes—quits, discharges, lay-offs, and entrances into military service—are to the daily average number of employees actually at work.² Care has been exercised in the collection and grouping of figures to make possible comparison of different establishments and industrial groups, and permit uniform interpretation of the various figures.

¹ "Labor turnover of seamen on the Great Lakes," MONTHLY LABOR REVIEW, U. S. Bureau of Labor Statistics, June, 1918, pp. 46-53.

"Labor turnover and employment policies of a large motor vehicle manufacturing establishment," MONTHLY LABOR REVIEW, U. S. Bureau of Labor Statistics, October, 1918, pp. 1-18.

"Labor turnover in Cleveland and Detroit," MONTHLY LABOR REVIEW, U. S. Bureau of Labor Statistics, January, 1919, pp. 11-30.

"Labor turnover in the San Francisco Bay region," MONTHLY LABOR REVIEW, U. S. Bureau of Labor Statistics, February, 1919, pp. 45-62.

² The "standard definition of labor turnover and method of computing the percentage of labor turnover," as adopted by the National Conference of Employment Managers, Rochester, N. Y., May 9 to 11, 1918, served as a basis for the computation and interpretation of labor turnover in this study. It prescribes that:

The percentage of labor turnover for any period considered is the ratio of the total number of separations during the period to the average number of employees on the force report during that period. The force report gives the number of men actually working each day as shown by attendance records. * * * To compute the percentage of labor turnover for any period, find the total separations for the period considered and divide by the average of the number actually working each day throughout the period.

For details see MONTHLY REVIEW, U. S. Bureau of Labor Statistics, June, 1918, pages 168-177.

The general volume of labor turnover of the 28 establishments from which figures have been obtained, covering a variety of industries, is summarized in the following table:

TABLE 1.—NUMBER AND PER CENT OF ESTABLISHMENTS HAVING EACH CLASSIFIED PER CENT OF ANNUAL LABOR TURNOVER.

Classified per cent of turnover.	Establishments.	
	Number.	Per cent.
Under 50.....	2	7
50 and under 100.....	4	15
100 and under 150.....	6	21
150 and under 200.....	6	21
200 and under 250.....	2	7
250 and under 300.....	5	18
300 and under 350.....	.....	.....
350 and under 400.....	2	7
400 and under 500.....	1	4
Total.....	28	100

It will be seen that nearly one-fourth of the establishments covered had a turnover of less than 100 per cent, a little over two-fifths a turnover of 100 and under 200 per cent, almost one-third a turnover of 200 and under 400 per cent, and in only one establishment was the turnover greater than 400 per cent.¹

¹ Indications are that Cincinnati was less seriously affected by the shiftings of labor during our own war period than other important industrial centers because in this city the manufacture of articles of war began soon after the outbreak of the European war; the transition from peace-time to complete war-time manufacturing, necessitated by the entrance of the United States into the world struggle, extended over a longer period, and was more in the nature of an adaptation and expansion of the already existing industrial establishments, causing no such far-reaching changes in either the product of manufacture or in the manufacturing processes as was the experience of other important industrial centers in the United States producing war materials.

The somewhat less extensive labor turnover in Cincinnati, as compared with two other important war work centers, may be observed in the following table:

Comparative extent of labor turnover in Cincinnati, Cleveland, and Detroit.

Classified per cent of turnover.	Number of establishments having classified turnovers.			Per cent of establishments having classified turnovers.		
	Cincinnati.	Cleveland.	Detroit.	Cincinnati.	Cleveland.	Detroit.
Under 50.....	2	.....	1	7	.....	2
50 and under 100.....	4	4	3	15	10	7
100 and under 150.....	6	5	3	21	14	7
150 and under 200.....	6	5	3	21	14	7
200 and under 250.....	2	7	6	7	19	14
250 and under 300.....	5	7	8	18	19	19
300 and under 350.....	.....	5	4	.....	14	10
350 and under 400.....	2	4	5	7	10	12
400 and under 500.....	1	.....	6	4	.....	14
500 and over.....	.....	.....	3	.....	.....	7

The proportion of Cincinnati's establishments having a turnover of 200 per cent and over is a little over one-third, that of Cleveland is nearly two-thirds, and that of Detroit is more than three-fourths. For a discussion of labor turnover in Cleveland and Detroit, see MONTHLY LABOR REVIEW, January, 1919, pp. 11-30.

Details of the extent of turnover in each of the 28 establishments are given in Table 2:

TABLE 2.—LABOR TURNOVER FOR YEAR ENDING JUNE 1, 1918, IN 28 ESTABLISHMENTS IN CINCINNATI, OHIO.

Es- tab- lish- ment No.	Num- ber hired.	Separations.					Aver- age daily work- ing force.	Per cent of turn- over for year.	Industry or nature of business.
		Dis- charged.	Laid off.	En- tered mili- tary ser- vice.	Quit.	Total.			
1	2,146	261	.....	130	1,591	1,982	1,194	166	Machine tool manufacturing.
2	1,363	116	10	110	930	1,166	883	132	Do.
3	622	76	.....	110	406	592	575	102	Do.
4	1,020	193	.....	64	723	980	602	163	Do.
5	786	(¹)	(¹)	(¹)	(¹)	815	310	263	Do.
6	103	17	.....	7	49	73	127	57	Do.
7	2,444	(¹)	(¹)	(¹)	(¹)	2,396	1,443	166	Electrical machinery.
8	2,030	(¹)	(¹)	(¹)	(¹)	1,989	1,150	173	Engineering (specialties).
9	847	107	.....	80	674	861	669	129	Machinery (specialties).
10	1,051	228	11	76	588	903	418	216	Do.
11	502	85	.....	21	461	567	407	139	Machinery.
12	1,138	98	18	33	960	1,109	440	252	Foundry (stoves and furnaces).
13	636	128	.....	77	642	847	1,330	64	Public utilities (trainmen—street rail- way).
14	777	74	40	64	536	714	1,769	40	Public utilities (telephone service).
15	361	(¹)	.....	(¹)	(¹)	382	721	53	Public utilities (gas and electricity).
16	4,046	(¹)	(¹)	(¹)	(¹)	3,270	1,797	182	Soap, glycerine, etc.
17	1,924	(¹)	(¹)	(¹)	(¹)	1,834	400	459	Do.
18	82	2	1	18	98	119	244	49	Printing and publishing (books).
19	667	24	.....	35	752	811	767	106	Printing and publishing (miscellane- ous).
20	2,212	64	.....	105	2,059	2,228	617	361	Printing and publishing (including paper boxes).
21	354	15	.....	10	344	369	330	112	Textiles (cotton manufacturing).
22	675	26	.....	30	649	705	275	256	Millwork (building material).
23	2,062	(¹)	(¹)	(¹)	(¹)	1,658	708	234	Ink manufacturing.
24	187	(¹)	(¹)	(¹)	(¹)	180	234	77	Clothing (women's).
25	728	268	.....	19	599	886	467	190	Leather goods.
26	304	(¹)	(¹)	(¹)	(¹)	300	110	273	Rubber goods.
27	1,850	(¹)	(¹)	(¹)	(¹)	1,969	529	372	Tin cans.
28	716	83	.....	21	566	670	262	256	Food (bakery products).

¹ Not reported.

In the effort to ascertain the reason for the particular volume of turnover in each of the establishments shown in Table 2, it was at once apparent that there were numerous factors having a decided bearing on labor turnover, and that the degree in which each of these factors influenced the extent of turnover, could be definitely determined only through a very exhaustive inquiry, which was entirely beyond the scope of the present study. It was found, however, that there were certain definite factors appearing quite commonly in nearly all the establishments, and they are briefly commented upon here.

One of these factors, which may seem obvious, but is nevertheless of great importance, was the nature of the labor force; that is, the extent to which an establishment employed unskilled, semiskilled, or skilled workers, or whether the working force consisted largely of clerical employees, or persons engaged in nonmechanical occupa-

tion. Cincinnati, no doubt, has, in common with other centers, the experience that the greatest labor shiftings usually occur among unskilled laborers, and the least among skilled mechanics and clerical workers. During the war period it was found, however, that there was also considerable shifting among skilled mechanics and machine specialists because of the widespread demand for this type of labor, not only in Cincinnati, but in other industrial centers in the United States. The nature of the work, too, exerted considerable influence on the volume of labor turnover, because there was extensive shifting among employees who were engaged in work the nature of which was disagreeable, and who were exposed to great heat, dust, noxious odors, dampness, etc. Another factor having a decided bearing on the volume of turnover was the proportion of long-time employees in an establishment, because, generally speaking, such employees were less influenced by the favorable employment opportunities offered by the unusual labor situation, and the tendency to shift was found to be less marked among them.

In what degree centralization of the employment functions influences the extent of turnover is, in view of the numerous factors which must needs be considered, difficult of very exact determination. It was the opinion of the managements of nearly all of the plants covered in this study, however, that it was only because of the fact that their employment machinery was either wholly or partially centralized that they were enabled to cope with the unusual labor situation and to maintain some check on the increasing volume of turnover during the war period. In this connection it may be of interest to note that the greatest centralization of the employment functions and the most highly organized employment departments were found in establishments belonging to the metal trades group (establishments Nos. 1 to 12, inclusive), most of which are strong adherents of the "open-shop" principle, and insist upon dealing with their employees on an individual basis.

Service or welfare work of some sort is carried on by most of the establishments under consideration in this study, and emphasis is placed by the different establishments upon one or another of its branches. The managements were of the opinion that the extent of welfare work carried on by an establishment will have a definite bearing upon the labor turnover, though they do not think it possible to determine its definite relation by means of statistics. Welfare work is considered to be largely "prophylactic" in its nature. In a number of establishments medical work has been highly developed, the aim being to link it up with all other service activities in the shop. These establishments believe that the physician, because of his intimate contact with employees seeking medical ad-

vice, is enabled to detect maladjustments lying outside of the sphere of medicine, and to bring them to the attention of the management for remedial action.

Among the plants of the metal trades group, the lowest turnover—57 per cent—is found in establishment No. 6. The company ascribes this to the fact that its shop, is rather small and close personal contact with the men can be established and existing maladjustments easily detected and remedied. According to the management, it was better enabled to hold its old employees because its policy was to pay wages “considerably above the general average in Cincinnati,” and because it endeavored, “as far as possible, to increase the pay of the men before they asked for it.” The highest turnover in this group—263 per cent—is found in establishment No. 5, which the management believes to be due to the fact that during the period for which figures are shown the hiring and discharging of workers was left to individual foremen. Establishments Nos. 7, 8, 9, 11, and 12, with a turnover of 166, 173, 129, 139, and 252 per cent, respectively, stated that their turnover was increased considerably because of the great shifting of common laborers working in their foundries.

The low turnover of establishments Nos. 13, 14, and 15 (public utilities), 64, 40, and 53 per cent, respectively, is due principally to the exclusion in the turnover figures of the maintenance and construction forces, with a large proportion of unskilled laborers.

Establishment No. 17 shows such a high turnover (459 per cent) because the figures cover the great labor changes occasioned by a portion of the working force engaged on outside construction work. The shifting of common laborers likewise is stated to have been responsible for the relatively high turnover of establishments Nos. 22, 23, 25, 26, and 28—256, 234, 190, 273, and 256 per cent, respectively.

Establishments Nos. 20 and 27 found women employees to have been responsible for their high turnover—361 and 372 per cent, respectively. Dissatisfaction with wages among the women engaged as wrappers, assorters, packers, etc., and the company's inability to pay the higher wages offered by near-by concerns, are stated by the management of establishment No. 20 to have been the cause for their great shifting. The high turnover of establishment No. 27 is ascribed largely to the shifting of certain women employees caused by their dislike for jobs which require frequent changes in the nature of their work and which necessitate also standing and a great deal of stooping.

Establishment No. 24 believes that its turnover—77 per cent—would be less extensive were it not for the seasonal character of its work, which necessitates temporary lay-offs of a portion of the work-

ing force. This establishment operates under a trade-union agreement, which provides for the collective determination of wages, hours of labor, and machinery for the adjustment of grievances, etc. In order to overcome the seasonality of production and minimize layoffs, attempts have been made by this company toward regularization of employment by obtaining orders for the manufacture of related products in the dull season.

It is apparent from the preceding discussion of the extent of turnover that turnover percentages as expressed for each establishment as a whole do not quite accurately reflect the conditions in the particular establishment, for the reason that the turnover may be largely confined to a single occupation or a group of occupations, department, or shift, the number employed in which may be very small in comparison to the total number employed. While it would be desirable to show the exact distribution of the volume of turnover among the working force, few establishments were able to furnish such definite information. It was possible, however, to obtain accurate data permitting more definite determination of the responsibility for the particular extent of turnover in a number of establishments, and such figures are shown in detail in Tables 3, 4, and 5; further data on turnover responsibility is presented in connection with the discussion of the length of service of employees.

The responsibility of the day and night forces for the turnover is shown in the table following, and is based upon the three-year experience of establishment No. 1, a representative machine tool manufacturing plant:

TABLE 3.—ANNUAL LABOR TURNOVER OF DAY AND NIGHT FORCES OF ESTABLISHMENT NO. 1 (MACHINE TOOL MANUFACTURING), 1916-1918.

Year.	Day force.				Night force.				Total working force.			
	Number hired.	Separations.	Average daily working force.	Per cent of turnover for year.	Number hired.	Separations.	Average daily working force.	Per cent of turnover for year.	Number hired.	Separations.	Average daily working force.	Per cent of turnover for year.
1916.....	1,251	955	806	119	838	764	225	339	2,089	1,719	1,031	167
1917.....	1,124	956	892	108	816	749	220	340	1,940	1,705	1,112	153
1918.....	1,087	1,283	950	135	662	803	257	312	1,749	2,086	1,207	173

This table clearly shows the turnover of the night force to be about three times greater than that of the day force, and that the former is responsible for a turnover entirely out of proportion to its strength in the organization. Over the three-year period, the night force constituted about 20 per cent of the total working force, but is chargeable with nearly 45 per cent of the total separations.

The greater shifting among the night workers causes the turnover figures for the establishment as a whole to appear from 28 to 40 per cent higher than they would be if the changes among the night force were in equal proportion with those of the day force. General dislike for night work, in spite of the fact that wages have been about 20 per cent higher, and the exercise of a somewhat less strict supervision, are stated to have been responsible for the greater turnover of the night force.

It may be mentioned in this connection that in spite of the unusual labor situation prevailing during the three-year period for which figures are shown, the labor turnover generally has remained about the same, and would even be lower in 1918, had it not been for the lay-off of a considerable number of employees after the signing of the armistice. The management believes this favorable record to be due chiefly to its well-organized employment department and its extensive service and welfare work.

Table 4 shows seasonal fluctuations in turnover of day and night forces of establishments Nos. 1 and 2 (machine tool manufacturing).

The second half of the table shows what the yearly turnover would be if each specified monthly rate prevailed throughout the year.

TABLE 4.—MONTHLY LABOR TURNOVER OF DAY AND NIGHT FORCES OF ESTABLISHMENTS NOS. 1 AND 2 (MACHINE TOOL MANUFACTURING) FOR THE YEAR 1918.

Month.	Actual monthly turnover. ¹				Yearly turnover on basis of actual turnover for each specified month. ²			
	Day force.		Night force.		Day force.		Night force.	
	Establishment No. 1.	Establishment No. 2.	Establishment No. 1.	Establishment No. 2.	Establishment No. 1.	Establishment No. 2.	Establishment No. 1.	Establishment No. 2.
January.....	8.6	9.2	29.3	11.5	103	110	352	138
February.....	6.4	11.3	19.2	8.8	77	135	230	106
March.....	10.8	13.2	15.3	8.9	129	158	184	107
April.....	17.1	11.5	24.5	13.4	205	138	294	161
May.....	11.5	14.6	26.7	17.6	138	175	320	211
June.....	10.8	6.8	24.1	13.1	130	82	289	157
July.....	11.3	9.7	26.0	10.8	135	116	312	130
August.....	16.8	18.2	33.1	20.0	202	218	397	240
September.....	12.2	10.3	19.1	22.2	146	124	229	266
October.....	6.7	12.6	16.3	13.1	80	151	196	157
November.....	18.0	14.3	57.3	84.9	216	172	687	1,019
December.....	4.6	16.1	14.8	(³)	55	193	177	(³)
Average for year.	11.3	12.2	26.0	17.4	135	146	312	209

¹ Represents ratio of total separations for each month to the average daily working force for the same months.

² These percentages were changed to a yearly basis by multiplying the actual monthly percentages by 12. This is in accordance with the "standard definition of labor turnover and method of computing the percentage of labor turnover" which recommends that "all turnover percentages * * * for any * * * period should always be reduced to a yearly basis and be reported in terms of percentages per annum."

³ Night work discontinued.

It will be observed that although there is only a slight difference in the annual turnover figures of the day forces—135 and 146 per cent, respectively—each establishment shows great variations in

individual monthly figures, and when the figures of the two establishments for the same months are compared, equally pronounced variations are seen. This is interesting in view of the fact that both plants have about an equal number of employees in their day forces and employ the same type of labor. The turnover of the night force of establishment No. 2 is generally less extensive than that of establishment No. 1. Discontinuance of night work of establishment No. 2, and considerable reduction of the night force in establishment No. 1, accounts for the high turnover figures shown for the month of November.

Probably the most significant classification of turnover, and one which best brings out the exact distribution of the turnover among the working force, is that based upon occupations or jobs. The advantage of such classification lies in the fact that it makes it possible to particularize the analysis of existing conditions in the plant, and trace the influence of the nature of the work and the general conditions of employment of each occupation upon the turnover.

In one establishment, No. 4, it has been possible to obtain data giving the turnover by occupations. This is shown in Table 5:

TABLE 5.—LABOR TURNOVER OF ESTABLISHMENT NO. 4 (MACHINE TOOL MANUFACTURING), BY OCCUPATIONS, FOR YEAR ENDING JUNE 1, 1918.

Occupation.	Number of full-time positions. ¹	Number hired.	Number of separations.				Per cent of turnover for year.
			Discharged.	Entered military service.	Quit.	Total.	
Planer hands.....	75	148	35	3	101	139	135.3
Lathe hands.....	86	150	20	15	118	153	177.9
Drill press hands.....	43	92	15	3	55	73	169.8
Milling machine hands.....	32	62	10	7	47	64	200.0
Scraper hands.....	16	18	5	2	7	14	87.5
Visé hands.....	116	205	39	14	151	204	175.9
Polishers.....	5	1	.....	.....	1	1	20.0
Painters.....	30	26	5	.....	16	21	70.0
Carpenters.....	10	8	2	.....	3	5	50.0
Toolmakers.....	53	84	11	7	74	92	173.6
Millwrights.....	20	67	9	.....	44	53	265.0
Blacksmiths.....	2	1	1	.....	2	3	150.0
Inspectors.....	10	9	1	3	10	14	140.0
Stock keepers.....	38	98	29	4	47	80	210.5
Porters, etc.....	17	14	2	1	13	16	94.1
Draftsmen.....	22	14	3	3	23	29	131.8
Clerks.....	27	23	6	2	11	19	70.4
Total.....	602	1,020	193	64	723	980	162.8

¹ This number was arrived at by dividing the total annual labor hours of all employees, exclusive of overtime hours, by the number of hours worked during the year by one fully employed person.

This table shows considerable variations in the extent of turnover as between different occupations. The company states that in occupations showing a relatively low turnover, such as scraper hands, polishers, painters, and carpenters, there is a comparatively large proportion of long-time employees. Good management on the part

of the foremen, who aim to develop their own men, and who make every effort to retain them, is also responsible for the greater stability of this group of employees. Reference has been made above to the experience of metal trades plants, who found that because of the unusual employment opportunities offered to skilled mechanics and machine specialists during the war period there has been considerable shifting among this type of labor. This is clearly reflected in the comparatively high turnover figures of planer hands, lathe hands, drill press hands, milling machine hands, and vise hands. The relatively high turnover of millwrights the company states to have been due to dissatisfaction with wages and the company's inability to compete in this matter with other concerns.

NATURE OF SEPARATIONS.

Table 6 shows in detail the nature of separations in 18 establishments which furnished definite data. Discharges usually include dismissal for cause, which presupposes either defect in workmanship or in character of the employee, so regarded by the management. Under "Laid off" are grouped those who were let go temporarily either because of the completion of the job or because of shortage of work. "Quits" take in all voluntary separations, including withdrawals due to death, marriage, and so forth.

TABLE 6.—NUMBER AND PER CENT OF SEPARATIONS FOR EACH SPECIFIED REASON IN 18 ESTABLISHMENTS.

Estab- lishment No.	Number.					Per cent.				Industry or nature of business.
	Dis- charged.	Laid off.	En- tered milit- ary serv- ice.	Quit.	Total.	Dis- charged.	Laid off.	En- tered milit- ary serv- ice.	Quit.	
1	261	.....	130	1,591	1,982	13	.....	7	80	Machine tool manufacturing.
2	116	10	110	930	1,166	10	(¹)	9	80	Do.
3	76	.....	110	406	592	13	.....	18	69	Do.
4	193	.....	64	723	980	20	.....	6	74	Do.
6	17	.....	7	49	73	23	.....	10	67	Do.
9	107	.....	80	674	861	12	.....	9	79	Machinery (specialties).
10	228	11	76	588	903	25	1	8	65	Do.
11	85	.....	21	461	567	15	.....	4	81	Machinery.
12	98	18	33	960	1,109	9	2	3	86	Foundry (stoves and furnaces).
13	128	.....	77	642	847	15	.....	9	76	Public utilities (trainmen, street railway).
14	74	40	64	536	714	10	6	9	75	Public utilities (telephone service).
18	2	1	18	98	119	2	1	15	82	Printing and publishing (books).
19	24	.....	35	752	811	3	.....	4	93	Printing and publishing (miscellaneous).
20	64	.....	105	2,059	2,228	3	.....	5	92	Printing and publishing (including paper boxes).
21	15	.....	10	344	369	4	.....	3	93	Textiles (cotton manufacturing).
22	26	.....	30	649	705	4	.....	4	92	Millwork (building material).
25	268	.....	19	599	886	30	.....	2	68	Leather goods.
28	83	.....	21	566	670	12	.....	3	85	Food (bakery products).
Total	1,865	80	1,010	12,627	15,582	12	(¹)	6	81	

¹ Less than 1 per cent.

In this table a considerable range will be observed in the discharge percentages. The proportion of lay offs is exceedingly small because of the great activities of the war and also because few of the industries shown in this table are of a very seasonal character. It is interesting to note that only 6 per cent of the total separations were due to entrances into military service, which is considerably lower than the importance of this factor in the industrial situation would seem to indicate.

Important changes in the relative proportion of discharges and voluntary separations during the last few years were found in establishment No. 1. The percentages of employees leaving voluntarily, as against the total number of separations, for the three years ending June 30, 1916, 1917, and 1918, and for the three-month period July to September, 1918, inclusive, for the day force, were 79.9, 80.9, 85.7, and 92.3, respectively. The ratios of voluntary separations of the night force covering the same periods were 77, 81.8, 90.7, and 95.5 per cent, respectively. The ratio of discharged employees of the day force for the years ending June 30, 1916, 1917, and 1918, and for the three-month period, July to September, 1918, inclusive, were 20.1, 19.1, 14.3, and 7.7 per cent, respectively. During the same periods the night force showed the following percentages of discharges: 23, 18.2, 9.3, and 4.5, respectively.

In obtaining data on the nature of separations an effort has been made to secure figures which would show the underlying causes of such separations. A number of employment departments, chiefly those connected with the metal trades, have attempted to obtain and record the specific reasons for voluntary separations, and have also kept a record of the specific causes which have led to the discharge of certain of their employees. Employment managers state that in a case of voluntary separation, the action proceeding from the individual workman, it has been rather difficult to obtain in all cases the fundamental reason for the severance of connections because of a certain reluctance of the employee to reveal these reasons. The experience of employment managers has also been that even where the reason has been obtained it has not always been easy to reduce to a single classifiable reason the manifold motives which may have animated the individual in his desire to change. In the case of discharges employment managers believe the cause to be known more definitely, for the reason that the action of discharge proceeds from the management.

For the reasons enumerated figures presented below can not be regarded as more than an indication of existing conditions, though employment managers have expressed the opinion that in many cases they point definitely toward prevailing maladjustments. Table 7

gives the classified reasons for voluntary separations and the causes for discharge, of nearly 10,000 employees in six metal trades establishments. Some of the reasons or causes listed in a number of these groups¹ have been briefly amplified.

TABLE 7.—REASONS ADVANCED FOR VOLUNTARY SEPARATION FROM SERVICE OF 8,140 EMPLOYEES AND CAUSES FOR DISCHARGE OF 1,439 EMPLOYEES, IN 6 METAL TRADES ESTABLISHMENTS.

Reason for leaving.	Number.	Per cent.	Cause for discharge.	Number.	Per cent.
Wages—dissatisfied with wage rate, etc.	2,001	24.6	Incompetent.....	478	33.2
Obtained better job or returned to former job.....	984	12.1	Unreliable.....	422	29.3
Nature of work—too hard, heavy, wet, dusty, dirty.....	410	5.0	Lazy.....	148	10.3
Dissatisfied.....	674	8.3	Careless.....	66	4.6
Monotony.....	218	2.7	Insubordination.....	93	6.5
Physical inability—sickness, injuries, etc.....	461	5.7	Misconduct.....	54	3.7
Leaving town.....	453	5.6	Trouble breeder.....	105	7.3
Return to school.....	131	1.6	Liquor.....	73	5.1
All other known reasons.....	58	.7			
Military service.....	737	9.0			
Unknown—failed to report.....	2,013	24.7			
Total.....	8,140	100.0	Total.....	1,439	100.0

Dissatisfaction with wages is the largest single reason for voluntary separation, and no doubt it is safe to assume that the wage motive in one form or another enters into most of the reasons for leaving listed. For those classified under "better jobs" the question of wages is not supposed to have been the prime motive for making the change, but the governing causes for leaving were said to have been more desirable work, location of plants, etc. Under "nature of work" are classed a considerable number of workers who under the stimulus of higher wages or the "work-or-fight" order entered mechanical occupations, but not being accustomed to the grease, dirt, noise, etc., inherent in the nature of the work, have shifted constantly in the hope of finding more pleasant work. It has been stated that the relative ease with which a job could be secured during the war period made workers more ready to throw up jobs which seemed undesirable to them but which in normal times they would be reluctant to leave.

For those classified under "dissatisfied" no one specific reason seems to have been applicable. Employment managers believe that the question of wages or work is seldom a factor with this type of labor, but that its desire to shift is due largely to an inherent instability and that persons of this type are unable to assign any specific or logical reason for their desire to change. Employment managers believe these considerations to be equally true of a large number of

¹ Such large grouping was made necessary to permit combining the records of the various establishments, each of which put a somewhat different interpretation upon their recorded reasons for leaving or causes for discharge.

those who failed to report before leaving. It is said that the number of employees leaving in this manner during the war period was greater than at any previous time. This is explained by the fact that the shortage of help necessitated the employment of the so-called "floater," a type of workman which in normal times would not be employed by these plants. It has been found to be characteristic of this type of men that they never stay on a job for more than a brief period, soon dropping out, without giving notice, to accept work elsewhere.

Under "incompetent," employment managers have classified certain workers who after a trial have been found to be unfit or unsuited for the work for which they were hired. It was pointed out that although these persons were willing to work they were found to be incapable of learning the work and were responsible for a great deal of spoiled work. This group also included workers who misrepresented their occupational skill when taken on by using acquired phrases that would indicate familiarity with the kind of work required of them. The number discharged for incompetency, it is asserted, increased during the war period because the urgent need of men made careful selection less possible. The management has classified those as "unreliable" whose attendance record was bad, who were habitually late in the morning, or who were prone to lay off too frequently and for trivial reasons. A good many of those discharged for being unreliable are suspected by employment managers of having looked for jobs, and possibly of having tried out jobs in other plants, while absent.

Employment managers have classified as "trouble breeders" those who have attempted to create dissatisfaction among their fellow workers by inducing or intimidating them into concerted action of some sort, as for instance unionizing of the shop or the making of demands for wage increases, revision of piece or premium rates, etc. The relatively large number discharged for being "trouble breeders" may, perhaps, be explained by the fact that it is the policy of the establishments from which the figures of the above table have been secured to deal with their workers only as individuals.

LENGTH OF SERVICE.

In the preceding discussion on the extent of turnover, detailed figures have been cited with the aim of showing the distribution of the turnover and the occupational responsibility for the greater or smaller volume of turnover. It is apparent, however, that even within certain divisions—shifts, departments, occupations—of the working force the turnover responsibility is not equally distributed because of the varying frequency with which the normal number of

jobs in each such division may be abandoned by employees. The length of time which jobs have been held by individual employees who have separated is, of course, a very important factor in the turnover distribution, for the shorter the service of the separated employees has been, the more frequent replacements they occasion, and this condition would naturally reflect itself in higher turnover figures. It is the purpose in this part of the study to establish a more definite relation between the length of service and labor turnover, and the figures shown in the following tables are the experience of ten establishments which were able to furnish accurate data on both the length of continuous service of persons in their employ on June 1, 1918, and the length of continuous service of those who left their employ during the year ending June 1, 1918. The figures obtained are summarized in Table 8.

TABLE 8.—NUMBER AND PER CENT IN EMPLOY IN 10 ESTABLISHMENTS ON JUNE 1, 1918, AND OF SEPARATIONS DURING THE YEAR ENDING JUNE 1, 1918, CLASSIFIED BY LENGTH OF SERVICE.

Length-of-service group.	Number in each group.		Per cent in each group.	
	Em- ployed, June 1, 1918.	Separated during year.	Em- ployed, June 1, 1918.	Separated during year.
1 week or less.....	167	1,533	3	20
Over 1 week to 2 weeks.....	159	853	3	11
Over 2 weeks to 1 month.....	272	1,178	5	15
Over 1 month to 3 months.....	527	1,591	9	21
Over 3 months to 6 months.....	527	871	9	11
Over 6 months to 1 year.....	669	692	12	9
Over 1 year to 2 years.....	812	364	14	5
Over 2 years to 3 years.....	539	182	10	3
Over 3 years to 5 years.....	439	120	8	2
Over 5 years.....	1,534	221	27	3
Total.....	5,645	7,605	100	100

This table shows that among the active working force 29 per cent had a continuous-service record of six months or less, 12 per cent worked continuously over six months to one year, 32 per cent served continuously between one and five years, and the service record of 27 per cent of the total number was over five years. The influence of war conditions on the stability of the labor force may be seen in the figures of those who separated, which show that 46 per cent served one month or less, 41 per cent had worked over one month to one year, 10 per cent between one to five years, and 3 per cent had been in the employ over five years at the time of separation.

The turnover responsibility of short or of long term employees may be established by comparing the percentage of separations in classified service groups with the percentage of persons employed in the identical length-of-service groups. This comparison is made

under the assumption that the distribution of those employed on June 1, 1918, as shown in the above table, was, throughout the year, approximately the same as on the day in which the count was made. It follows that the short-service groups were responsible for an extent of separations entirely out of proportion to their relative strength in the organization. The first three groups, those having had a service record of one month or less, representing only 11 per cent of the total employed, were responsible for 46 per cent of the total separations. In contrast, the last three groups, those having had a service record of over 2 years, constituting 45 per cent of those in the employ, were responsible for but 8 per cent of the total separations.

Table 9 presents in detail the number and per cent of persons on the payrolls June 1, 1918, and of separations during the year ending June 1, 1918, for each of the ten establishments.

TABLE 9.—NUMBER AND PER CENT IN EMPLOY ON JUNE 1, 1918, AND OF SEPARATIONS DURING THE YEAR ENDING JUNE 1, 1918, IN 10 ESTABLISHMENTS, CLASSIFIED BY LENGTH-OF-SERVICE GROUPS.

Number in each classified group.

Establishment No.	On pay roll at end of year.										Separated from service during year.										Industry or nature of business.		
	One week or less.	Over 1 wk. to 2 wks.	Over 2 wks. to 1 mo.	Over 1 mo. to 3 mos.	Over 3 mos. to 6 mos.	Over 6 mos. to 1 yr.	Over 1 yr. to 2 yrs.	Over 2 yrs. to 3 yrs.	Over 3 yrs. to 5 yrs.	Over 5 years.	Total.	One week or less.	Over 1 wk. to 2 wks.	Over 2 wks. to 1 mo.	Over 1 mo. to 3 mos.	Over 3 mos. to 6 mos.	Over 6 mos. to 1 yr.	Over 1 yr. to 2 yrs.	Over 2 yrs. to 3 yrs.	Over 3 yrs. to 5 yrs.		Over 5 years.	Total.
2.....	25	34	55	126	146	156	152	103	160	191	1,148	212	125	179	257	150	130	48	36	16	13	1,166	Machine-tool manufacturing.
4.....	18	18	34	92	58	129	136	89	38	9	621	172	94	140	230	141	114	60	19	8	2	980	Do.
6.....	2	3	3	7	17	30	33	19	5	28	144	7	5	8	23	14	8	8	8	8	2	73	Do.
8.....	21	20	40	106	120	128	187	116	28	339	1,105	519	242	289	439	196	153	82	22	6	41	1,989	Engineering (specialties).
9.....	41	35	51	81	57	68	87	58	25	158	661	102	98	154	219	131	94	33	15	8	7	861	Machinery (specialties).
11.....	16	12	22	22	19	27	41	47	82	104	392	133	73	136	97	46	34	19	14	8	7	567	Machinery.
18.....	.....	.....	1	.....	2	15	12	4	7	178	219	9	8	17	.....	7	19	1	2	12	44	119	Printing and publishing (books).
19.....	23	12	24	54	54	46	107	64	56	281	721	160	34	89	129	84	78	82	51	42	62	811	Printing and publishing (miscellaneous).
21.....	11	15	12	14	19	20	30	22	34	194	371	42	36	61	59	44	28	22	21	14	42	369	Textiles (cotton manufacturing).
28.....	10	13	30	25	35	50	27	17	4	52	263	177	138	105	138	58	34	9	2	6	3	670	Food (bakery products).
Total.	167	159	272	527	527	669	812	539	439	1,534	5,645	1,533	853	1,178	1,591	871	692	364	182	120	221	7,605	

Per cent in each classified group.

2.....	2	3	5	11	13	13	13	9	14	17	100	18	11	16	22	13	11	4	3	1	1	100	Machine-tool manufacturing.
4.....	3	3	6	15	9	21	22	14	6	1	100	18	10	14	23	14	12	6	2	1	(1)	100	Do.
6.....	1	.....	2	5	12	21	23	13	4	19	100	10	7	11	32	19	11	11	.....	.....	.....	100	Do.
8.....	2	2	4	10	11	11	17	10	2	31	100	26	12	15	22	10	8	4	1	(1)	2	100	Engineering (specialties).
9.....	6	5	8	12	9	10	13	9	4	24	100	12	11	18	25	15	11	4	2	1	1	100	Machinery (specialties).
11.....	4	3	6	6	5	7	10	12	21	26	100	24	13	24	17	8	6	3	3	1	1	100	Machinery.
18.....	.....	.....	(1)	.....	1	7	5	2	3	81	100	7	7	14	.....	6	16	1	2	10	37	100	Printing and publishing (books).
19.....	3	2	3	7	7	7	15	9	8	39	100	20	4	11	16	10	10	10	6	5	8	100	Printing and publishing (miscellaneous).
21.....	3	4	3	4	5	6	8	6	9	52	100	11	10	17	16	12	8	6	6	3	11	100	Textiles (cotton manufacturing).
28.....	4	5	11	10	13	19	10	6	2	20	100	26	21	16	21	9	5	1	(1)	1	(1)	100	Food (bakery products).
Total.	3	3	5	9	9	12	14	10	8	27	100	20	11	15	21	11	9	5	3	2	3	100	

¹ Less than 1 per cent.

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Rather marked variations in the relative proportions of those in the employ and those separated may be seen when comparison is made as between different establishments. On the other hand, a comparison of the relative proportion of separations in classified service groups with the proportion of persons employed in the identical length-of-service groups for each establishment will show considerable similarity in the disproportionate turnover responsibility of the short and of the long service employee.

In considering the figures of those on the pay roll at the end of the year given in Table 9, it is apparent that the active working force of each establishment contains a group of long-time employees who occasioned no labor changes during the period for which labor turnover figures have been shown. It is of interest, therefore, to find out more definitely the unstable part of the working force and determine its responsibility for the greater or smaller extent of turnover during this period. Such an attempt has been made in the following table, by making the base for computing the turnover that part of the working force which directly contributed to the turnover. The figures were obtained by deducting from the normal working force the number of employees who on June 1, 1918, had a continuous-service record of over one year, and who therefore did not figure in the labor turnover for the period from June 1, 1917, to June 1, 1918:

TABLE 10.—COMPARATIVE EXTENT OF LABOR TURNOVER OF TOTAL WORKING FORCE AND OF UNSTABLE PART OF WORKING FORCE IN 10 ESTABLISHMENTS, FOR THE YEAR ENDING JUNE 1, 1918.

Establishment.	Total working force. ¹	Unstable working force.		Number of separations. ⁴	Annual per cent of turnover of total working force. ⁵	Annual per cent of turnover of unstable working force. ⁶
		Num-ber. ²	Per cent. ³			
	1	2	3	4	5	6
2.....	883	277	31	1,166	132	421
4.....	602	330	55	980	163	297
6.....	127	42	33	73	57	174
8.....	1,150	480	42	1,989	173	414
9.....	669	341	51	861	129	252
11.....	407	133	33	567	139	426
18.....	244	43	18	119	49	277
19.....	767	259	34	811	106	313
21.....	330	50	15	369	112	738
28.....	262	162	62	670	256	414

¹ Figures represent average daily working force as shown in Table 2.

² These figures have been arrived at by deducting from the average daily working force the number of employees, who, on June 1, 1918, had a continuous-service record of over one year.

³ Represents the ratio which the unstable working force is to total working force.

⁴ Includes total separations from all causes as shown in Table 2.

⁵ Represents the ratio which the total separations are to the total working force.

⁶ Represents the ratio which the total separations are to the unstable working force.

The figures in column 3 show the percentage of the part of the working force which has actually been responsible for the turnover.

A comparatively low percentage indicates the presence in the working force of a relatively large proportion of old-time employees and concentration of the labor turnover in a small group of short-service employees. Conversely, a relatively higher percentage points towards a smaller proportion of old-time employees and a more even distribution of the turnover. The extent of turnover among that part of the working force which has actually contributed to the labor changes during the period covered is shown in column 6. A comparison of these turnover ratios with those arrived at through the standard method of computing turnover (see p. 35) shows considerable differences, the percentage of turnover of the shifting labor force being from more than one and a half to nearly seven times as great as the turnover based upon the entire working force.

Further figures establishing more definitely the relation of length of service to turnover, and the degree in which certain jobs were subject to labor changes, are shown in Table 11.

TABLE 11.—LABOR TURNOVER BY LENGTH-OF-SERVICE-GROUPS.

[Based upon records of 6,718 persons who at time of separation had continuous-service records of one year or less, in 10 establishments, and calculated on the mean length of service in each group.]

Length-of-service group.	Separated employees who served continuously each classified period.	Mean length of service (days). ¹	Number of man-days worked during the year.	Consequent number of full-time jobs in each group.	Corresponding percentage of turnover for each service group.
One week or less.....	1,533	4	6,132	17	9,025
Over 1 week to 2 weeks.....	853	11	9,383	26	3,218
Over 2 weeks to 1 month.....	1,178	22	25,916	71	1,559
Over 1 month to 3 months.....	1,591	60	95,460	262	508
Over 3 months to 6 months.....	871	135	117,585	322	170
Over 6 months to 1 year.....	692	274	189,608	519	33
Total.....	6,718	.....	.....	1,217	552

¹ These figures represent the average length of service of each group shown, and are the arithmetic mean between the minimum and maximum time in each group. While these averages are based upon an assumption, figures have been obtained which confirm them. A tabulation made of the actual length of service of 1,990 employees of various occupations in two establishments who separated during the year 1918, resulted in the following averages: One week or less, 3.6; over 1 to 2 weeks, 10.7; over 2 weeks to 1 month, 21.5; over 1 month to 3 months, 55.4; over 3 months to 6 months, 129.0; and over 6 months to 1 year, 252.6.

In order to arrive at a basis on which the turnover for each service group could be computed, the mean length of service (days) and the number of separated employees were multiplied, which gave the number of man-days worked during the year; these figures were divided by 365, to reduce the total number of man-days worked to those of one fully employed person, which, of course, corresponds to the number of full-time jobs in each group, subject to turnover.¹ The results of these calculations show enormous variations in the extent of turnover as between different length-of-service groups and

¹ While the time of a fully employed person is less than 365 days, it was necessary to divide the total number of man-days worked during the year by 365, because in recording the length of service of individual employees days not actually worked, such as Sundays and holidays, were included.

reveal the responsibility of the short-service employees for a large proportion of the turnover. In the "one week or less" group, 17 jobs had to be manned in the course of the year by 1,533 persons, which is a turnover of 9,025 per cent, while 519 jobs in the "over six months to one year" group were occupied by only 692 persons, representing a turnover of 33 per cent. As pointed out in a preceding article,¹ the number of job holders required to fill a position for any period must always be one more than the number of separations. In other words, in the "one week or less" group, where there were 90 separations on the average for each job, it took 91 persons to keep one job fully occupied during the year; likewise it took 33 persons in the "over one week to two weeks'" group, more than 16 persons in the "over two weeks to one month" group, 6 persons in the "over one month to three months" group, and 2.7 and 1.3 persons in the "over three months to six months," and in the "over six months to one year" groups, respectively.

¹ Labor turnover in the San Francisco Bay region, Monthly Labor Review for February, 1919, pp. 60 and 61.

RECONSTRUCTION.

COMMISSION OF EMPLOYERS TO STUDY LABOR CONDITIONS IN EUROPE.

On January 25, 1918, there sailed from New York for Europe a commission of six under appointment by the Secretary of Labor, to study all phases of labor conditions, including the problem of unemployment now so acute, and governmental policies relating thereto in Great Britain, France, and other countries. The Secretary of Labor is making every effort to interest States and municipalities in starting public works, and to induce wage earners to build homes, and it is with a view to obtaining first-hand information as to what foreign Governments are doing or planning to do along these lines that the commission has been sent abroad. The personnel of the commission is drawn entirely from the ranks of employers, and includes the following:

Dorr E. Felt, Chicago, the machinery industry; R. J. Caldwell, New York, the textile industry; W. H. Ingersoll, New York, the watch industry; Eldon B. Keith,¹ Boston, shoe-manufacturing industry; R. R. Otis, Atlanta, the building industry; E. T. Gundlach, Chicago, the publishing industry. Mr. Gundlach was connected with the war service of the Department of Labor during the war.

Dr. Royal Meeker, United States Commissioner of Labor Statistics, has accompanied the commission as economic adviser, and James R. Hawkins, of New York, and George E. McIlwain, of Boston, have gone as fiscal agent and secretary, respectively. Assistants to the commission are Benjamin M. Squires, of New York, and Edgar N. Phillips and John A. Witt, of Chicago.

RECONSTRUCTION CONFERENCE OF GOVERNORS HELD AT ANNAPOLIS, MD., DECEMBER 16-18, 1918.

Most of the important phases of reconstruction including a State educational policy, a State labor policy, workmen's compensation, a State land policy, and a State agricultural policy, engaged the attention of the chief executives of more than a score of States, who gathered at Annapolis, Md., December 16-18, 1918. Addresses were delivered by Gov. Emerson C. Harrington, of Maryland; Gov.

¹ Died in London, England, Feb. 24, 1919.

Richard I. Manning, of South Carolina; Gov. Martin G. Brumbaugh, of Pennsylvania; Gov. Emmett D. Boyle, of Nevada; Gov. R. L. Williams, of Oklahoma; and governor-elect Campbell, of Arizona.

An important feature of the conference was consideration of the problem of unemployment presented by demobilization of the forces, and by the sudden release of many thousands of industrial workers from essentially war industries. This matter was called to the attention of the conference by the War Labor Policies Board of the Department of Labor, by means of a chart which had been sent to the governors prior to the meeting, the object of which was to show the importance of the problem of the rate at which demobilization is to be affected, to analyze it, and to indicate the contingencies upon which its successful solution depends. In this connection the Department of Labor, through its representatives at the conference, urged the adoption of emergency public works legislation to permit the expenditure of State funds in the extension of public works during periods of extraordinary unemployment, and outlined a standard act as follows, which, if adopted by the various legislatures, would, in the opinion of the Department, lessen the dangers of unemployment.

1. To provide for the development of public works by the State during periods of unusual unemployment.
2. To persuade the municipalities and counties to adopt a similar policy, and to coordinate all public works within the State.
3. To provide a fund for State use, to be known as the emergency public works fund.
4. To create an emergency public works commission as trustees of the fund.
5. To enable the State, through the emergency public works commission, to cooperate with the Federal Government in carrying out joint Federal-State public works during periods of unemployment.

The possible provisions of the proposed public works act would naturally vary greatly in the different commonwealths. The following suggestions are made by the War Labor Policies Board:

The emergency public works commission should consist of three important State officials, such as the governor, the commissioner of labor and industry, and the highway commissioner.

It should be its duty to secure from the various departments of the State tentative plans for extensions of necessary public works during periods of unemployment. These plans should be complete enough so that work can be begun on such projects on the shortest notice.

It should indicate to the State departments the advantage of saving up portions of their usual public works to be done during periods of unemployment.

It should recommend to the legislature methods by which certain appropriations for public works will become available only during a period of unemployment.

It should recommend methods by which the bond issues for necessary public works, previously authorized for use during periods of unemployment, may become promptly available at such times.

It should be its duty when a period of unusual unemployment is held to exist to distribute the emergency public works fund among the several departments of the State for definite public works as approved by the commission.

It should submit to the Federal Government general information concerning such public works as it may plan, and also at the time that such works are ordered to be executed announce the fact and scope of them to the Federal Department of Labor. The purpose of this latter provision is that the United States Employment Service may be informed of the demand for labor so created, and that this information may be related to demobilization and the movements of war workers.

It should be the means of cooperating with the Federal Government where joint Federal-State undertakings are concerned and act for the State in urging, approving, or rejecting them.

In short, an emergency public works commission should be the stabilizer of public work. By all means in its power it should endeavor to expand necessary public works during periods of unemployment, and to contract them during ordinary years of good business. In good times it should prepare for bad times, and at the first indication of bad times it should throw its influence into the scale to restore the demand for labor and material.

It is emphasized that public work should at all times be necessary, not merely for the sake of creating employment.

In the statement issued by the policies board, urging as a national policy the institution of public works to stabilize employment, it is noted that the State of Pennsylvania was a pioneer in this undertaking. A few months after the United States entered the war, the legislature of that State passed an act creating an emergency public works fund and an emergency public works commission to administer it. This commission has been engaged in gathering from all departments of the State government information concerning the necessary public works which the State might undertake during periods of unemployment and industrial depression. Action by other States along this line is expected.

APPOINTMENT OF STATE RECONSTRUCTION COMMITTEES.

Readjustment of relations between labor and capital which occupies a large place in the attention of the public at the present time, is being considered by commissions in various States. In the State of Wisconsin a special committee was authorized by the legislature at special session early in 1918 to report on "a comprehensive social and economic welfare program of reconstruction after the war to include civilians whose status has been affected by the war as well as soldiers." This report was presented to the legislature in February, 1919.

In matters relating to labor it makes recommendations in regard to improving financial conditions of cooperative organizations; enactment of laws looking to fair wages and good working conditions; housing of workmen and others, including relief of congested dis-

tricts; guarantee by law of the right, both of employers and employees, to organize and bargain collectively; furnishing employment by means of road building; extension of minimum wage law; rehabilitation of victims of industrial accidents; representation of organized labor on educational boards and provision for short industrial courses; teaching English, industrial history, and Americanization to aliens; extra educational opportunity to working boys and girls and enforced schooling of illiterate minors between the ages of 18 and 21; representation of labor on boards of directors of industrial corporations; social insurance; basic eight-hour day; equal pay for women; workmen's compensation; and regulation of private colonization projects in the interests of the settler.

In California a committee has been appointed by the governor to cooperate with Federal, State, county and municipal officials in dealing with unemployment, especially in relation to returned soldiers. The legislature also passed a resolution creating a joint legislative committee to investigate and report on the question of unemployment. The governor of the State of New York has appointed a reconstruction commission of 36 men and women. Massachusetts has a legislative committee of reconstruction and in Michigan an interim committee of 20 men and women has been named by the governor to study unemployment and other problems arising in the transition period between war and peace. This committee will make recommendations, as a result of its investigations, to a reconstruction commission which is to meet in Lansing in March. A State conference was held in Augusta, Me., in January for the purpose of consultation on issues of reconstruction.

FRENCH FARM LOANS.¹

On May 4, 1918, the French Parliament voted a credit of 100,000,000 francs (\$19,300,000) in aid of agriculturists who wished to resume farming on abandoned farms, and placed the supervision of the fund with the Ministry of Agriculture. Up to November 30, 1918, advances of 40,460,000 francs (\$7,808,780), had been granted through distribution by departmental committees.

To farmers who have begun operations on abandoned land, 25,729,676 francs (\$4,965,827) have been allowed, of which sum 19,500,000 francs (\$3,763,500) have been granted to farmers in regions previously invaded.

If to this be added the allowances to various agricultural cooperative societies, the fund has benefited 538 farmers and cooperative

¹ La République Française, Paris, Dec. 20, 1918.

societies, located in 50 Departments. More than 60,000 hectares (148,200 acres) of abandoned land have been placed under cultivation.

The commission, moreover, has aided the replacement of several thousand farmers in agricultural enterprise, which up to the present time is reclaiming over 300,000 hectares (741,000 acres) of land.

It is estimated that the results of the assistance granted by this law will add more than 250,000,000 francs (\$48,250,000) annually to the value of the agricultural production of France.

DEMANDS OF WORKERS IN NORWAY AND SWEDEN.

NORWAY.

The executive committees of the National Federation of Trade-Unions and the Norwegian Labor Party on November 29, 1918, issued a manifesto to its members which embodies practically the economic and political program of the workers of Norway.

The membership of the National Federation of Trade-Unions of Norway, it may be noted in this connection, numbered about 100,000 (99,566) on September 30, 1917. The Norwegian Labor Party in the October, 1918, elections polled about 217,000 votes, or 27.2 per cent out of a total of 798,000. The party is represented in the Storting or Parliament by 18 members, that is, 14.6 per cent, out of 123, and in the Cabinet by a minister without portfolio, who is practically a temporary minister of labor.

The manifesto¹ issued by the representatives of the trade-unions and the Labor Party calls attention to the opportunity which the European revolutions open up for the not distant realization of the demands of the organized workers of Norway. The means at hand are education and organization. The ends to be sought, in the words of the manifesto, are four:

1. Socialization of industry, banking and wholesaling; an effective solution of the land and housing question from the point of view of community interests; lessening the burden of taxes upon the working people, with a stiffer progressive direct tax; universal pensions.
2. A just system of voting with equal franchise rights for all men and women over 21 years of age.
3. Introduction of the eight-hour day.
4. Complete abolition of military service and the transfer of military establishments to the purposes of useful production.

SWEDEN.²

The correspondent of the Berliner Tageblatt in Stockholm points out the influence which the German revolution had upon the Swedish political situation. The first demand for a thorough-going change in the existing system came from the camp of the so-called Young Socialists. On November 11 the party organ, Folkets Dagblad

¹ Meddelselsesblad utgitt av Arbeidernes faglige landsorganisation i Norge. Christiania, November, 1918, (No. 11).

² Data taken from Berliner Tageblatt, December 11, 1918. Evening edition.

Politiken, published a program, the chief points of which were as follows:

1. The formation of a Socialist Government supported by workmen's, soldiers', and peasants' councils.
2. A republican constitution.
3. Abolition of the first or upper chamber of the Riksdag.
4. Immediate summoning of a national constituent assembly elected on the basis of an unrestricted general right of suffrage of both men and women over 20 years of age.
5. Immediate cessation of military training and recruiting.
6. A general increase in wages of both industrial workers and civil service employees.
7. Immediate introduction of an eight-hour workday.
8. Labor control over industry.
9. Transfer of all right in land held by corporations, agricultural estates and industries under control of the State, to the tenants, farmers, cottagers, agricultural laborers, farmers' sons, and forest workers.

The largest organized group of wage earners in Sweden had a membership of 177,081 on September 30, 1917. This general federation of trade-unions on its political side constitutes, with other labor elements, the voting strength of the two political labor groups—Social Democratic Labor Party and the Young Socialists. At the latest elections of 1917 the labor groups received the largest proportion of the votes cast, namely, 288,020, or 39.2 per cent of the total, 734,947. The Young Socialists, or minority, polled 59,243 of the labor votes and elected 11 members to the Riksdag. The Social Democratic Labor Party has 86 members in the Riksdag. Together the labor groups control 97, or 42 per cent, of the 230 members of the Riksdag.¹

A general labor demonstration took place in Stockholm on November 10, and while the meeting was orderly, cries were heard of "Long live the Republic."

Among the forces working against the development of extremism are to be noted the fact that the historical socialists who command much of the support of the working classes in Sweden are in a coalition government with the liberal group in Parliament; it is also to be noted that the effects of the increasing cost of living have probably not been as great in Sweden as, for instance, in Germany, and there is also, finally, a disposition on the part of the Government to make concessions to the radical element.

Among the concessions which the Government has already made is that of the eight-hour day, which was introduced November 13 in certain State establishments. The Government has also promised a limited program of reform including: (a) Equal municipal suffrage, (b) immediate abolition of the electoral college (*Landsting*) and election according to the new principle of direct voting, (c) franchise for women, (d) sanction of the Riksdag for declaration of war and peace and control over foreign policies. Many of these reforms are

¹ Tiden; tidskrift for socialistisk kritik or politik, utgiven av Sveriges socialdemokratiska arbetarparti. Stockholm, 1918, No. 5, p. 195.

supported by the historical Social-Democratic Party and its group in the Riksdag.

The Young Socialists refer to the promised reform as a "mess of pottage to buy off the workingman." Conservatives and liberal circles seem to favor a referendum of the measures.

While the correspondent scouts the idea of the establishment of the dictatorship of the proletariat in Sweden, he observes that developments in Germany will have a considerable influence on the course of events in Sweden.

RECENT ECONOMIC DEVELOPMENT OF SPAIN.¹

The period since 1900 has been one of great economic development for Spain. This development has taken the form of growth of foreign trade, of great increase in building construction and in manufactures of various kinds, in the establishment of new industries, and in the expansion and development of the metallurgical industries.

Adoption of modern agricultural methods and machinery and the use of fertilizer have resulted in greatly increased crops. During the 10 years, 1908 to 1917, the production of grains increased 24 per cent; that of olive products, 150 per cent; and that of oil, 160 per cent. The sugar beet yield of 1917 was double that of 1913. The total value of farm products in 1917 was about \$2,000,000,000.

Extensive development of mines has resulted in an increase of production. The amount of coal mined in 1916 was reported as being 5,600,000 metric tons,² an increase of nearly 44 per cent over that mined in 1907. The production of coal now more nearly than formerly approaches its consumption, which in 1917 amounted to 7,500,000 metric tons. The value of iron produced increased from \$49,460,000 in 1907 to \$76,600,000 in 1916; the value of steel increased during the same period from \$54,000,000 to \$115,800,000.

The growth in the products of industry and agriculture and in foreign and domestic trade has been accompanied by some development of transportation facilities. Owing to the topography of the country, railroad extension presents peculiar difficulties. Nevertheless, during the 10-year period 1908 to 1917 the railroad mileage was increased from 13,953 kilometers (8,669 miles) to 14,853 kilometers (9,228.2 miles). In 1917 measures were taken to increase the tonnage of the merchant marine. Existing shipyards were enlarged and modernized and new yards were established, with the result that during 1917, not including vessels of less than 500 tons, 110,000 tons of new shipping were constructed.

Wages.—Considerable data as to wages during 1916 and 1917 in certain districts are available.

¹ El Comercio Hispano-Británico, October, 1918.

² A metric ton = 2,204.6 pounds.

It is reported that the supply of farm laborers is insufficient, and there has been a slight increase in wages. The following table shows wages paid per day for farm labor in three Provinces:

DAILY WAGES PAID FOR FARM LABOR IN 1916 AND 1917, BY PROVINCES.

Province.	1916			1917		
	Mini- mum.	Maxi- mum.	Average.	Mini- mum.	Maxi- mum.	Average.
	Cents.	Cents.	Cents.	Cents.	Cents.	Cents.
Alicante.....	24.1	67.6	38.6	33.8	72.4	48.3
Cuenca:						
Male laborers.....			29.0			38.6
Female laborers.....			14.5			19.3
Castellon.....	24.1	57.9	43.4	29.0	67.6	48.3

In the following table are given the wages received in the various occupations in the city of Alicante during 1916 and 1917:

WAGES PAID IN THE CITY OF ALICANTE, SPAIN, IN 1916 AND 1917, BY OCCUPATION AND SEX.

[Boletín del Instituto de Reformas Sociales, November, 1918.]

Occupation.	1916						1917					
	Number of employees.		Daily wages.				Number of employees.		Daily wages.			
			Male.		Female.				Male.		Female.	
	Male.	Female.	Maxi- mum.	Average.	Maxi- mum.	Average.	Male.	Female.	Maxi- mum.	Average.	Maxi- mum.	Average.
Chemical fertilizer workers.	900		\$1.158	\$0.867			600		\$1.158	\$0.867		
Bricklayers.....	900		.867	.674			900		.867	.674		
Sandal makers (fiber).....	50		.772	.481			50		.926	.579		
Sawyers.....	40		1.351	.965			40		1.553	1.108		
Embroiderers.....		140			\$0.288	\$0.193		140			\$0.288	\$0.193
Calkers.....	20		1.158	.772			60		2.316	1.544		
Lime burners.....	8		.481	.386			8		.481	.386		
Waiters.....	150		.867	.579			150		.867	.579		
Stonemasons.....	60		.965	.674			60		1.110	.776		
Carpenters.....	100		.965	.674			273		.965	.674		
Wagon makers.....	100		(¹)	.579			200		(¹)	.674		
Potters.....	1,220	50	.772	.674	.341	.193	220	22	.722	.481	.241	.193
Locksmiths.....	18		1.351	.772			18		1.351	.772		
Wagoners, coachmen.....	180		(¹)	.579			180		(¹)	.579		
Canners.....	75	370	.579	.674	.386	.288	50	170	.579	.674	.386	.288
Warehousemen.....	200		1.351	.965			300		1.351	.965		
Electricians.....	45		.772	.579			45		.926	.695		
Railroad employees:												
M-Z-A.....	200		.867	.637			200		.867	.637		
Andalucia.....	150		.772	.579			150		.722	.579		
La Marina.....	50		.772	.579			50		.722	.579		
Gas makers.....	80		.579	.481			60		.579	.481		
Lace goods makers.....		14			.288	.193		14			.288	.193
Millers.....	30		.674	.481			30		.674	.481		
Timbers.....	18		.772	.481			18		.772	.481		
Lithographers.....	40		1.737	.965			40		1.737	.965		
Canvas makers.....	9	50	.772	.481	.481	.193	9	50	.772	.481	.288	.193
Marble cutters.....	45		.965	.579			45		.965	.579		
Metal workers.....	500		1.351	.772			500		1.351	.772		
Mosaic workers.....	32		.772	.481			32		.772	.481		
Cabinetmakers.....	140	25	.965	.674	.288	.241	140	25	.965	.674	.288	.241
Bakers.....	140		.772	.481			140		.888	.554		
Oil well employees.....	143		.579	.481			143		.579	.481		
Painters.....	80		.965	.674			80		1.206	.843		
Tailors.....	100	150	.772	.627	.288	.193	100	150	.772	.627	.288	.193
Cigar makers.....	112	3,020	.772	.579	.965	.674	112	3,000	.772	.579	.965	.674
Cleaners and dyers.....	15	15	.579	.481	.339	.241	15	15	.926	.579	.405	.288
Printers.....	147		.674	.579			147		.674	.579		
Coopers.....	350		1.351	1.060			350		1.351	1.060		
Harbor workers.....	800		1.448	1.158			1,200		1.448	1.158		
Jute workers.....	240	400	.772	.481	.288	.193	240	400	.772	.481	.288	.193
Shoemakers.....	125		1.930	.965			125		2.200	1.110		

¹ Not reported.

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Retail prices.—The following table furnishes data relative to the retail prices of the principal articles of consumption in three Provinces of Spain for the periods October, 1914, to March, 1915, and April to September, 1918. The Provinces of Granada, Guadalajara, and Leon, situated, respectively, in the southern, central, and northern parts of the country, have been selected as representative.

AVERAGE RETAIL PRICES FOR EACH OF THE PRINCIPAL ARTICLES OF CONSUMPTION, OCTOBER, 1914, TO MARCH, 1915, AND APRIL TO SEPTEMBER, 1918, BY PROVINCES.

[Data are from Boletín del Instituto de Reformas Sociales for September, 1915, and November, 1918.]

Article.	Unit.	Granada.		Guadalajara.		Leon.	
		October, 1914, to March, 1915.	April to September, 1918.	October, 1914, to March, 1915.	April to September, 1918.	October, 1914, to March, 1915.	April to September, 1918.
Bread.....	Lb....	\$0.035	\$0.044	\$0.035	\$0.053	\$0.035	\$0.053
Flour.....	Lb....	.042	.053	.038	.057	.042	.061
Beef.....	Lb....	.263	.394	.193	.....	.105	.175
Mutton.....	Lb....	.132	.175	.....	.263	.105	.175
Cod fish.....	Lb....	.123	.263	.132	.263	.105	.263
Potatoes.....	Lb....	.018	.022	.013	.022	.010	.018
Peas.....	Lb....	.053	.088	.053	.088	.066	.088
Rice.....	Lb....	.053	.070	.053	.070	.053	.088
Beans.....	Lb....	.053	.088	.053	.070	.053	.066
Wine.....	Qt....	.092	.092	.055	.055	.073	.092
Milk.....	Qt....	.073	.092	.073	.073	.073	.092
Petroleum.....	Qt....	.182	.456	.182	.364	.182	.728
Coal.....	Lb....	.011	.019	.008	.015	.010	.015
Coffee.....	Lb....	.525	.525	.525	.525	.438	.525
Eggs.....	Doz...	.232	.386	.241	.386	.193	.386
Sugar.....	Lb....	.088	.175	.088	.175	.088	.175
Soap.....	Lb....	.070	.132	.088	.132	.088	.175
Oil.....	Qt....	.219	.346	.219	.364	.219	.364

Activities and demands of union labor.—The General Union of Workmen of Spain held its thirteenth annual convention in Madrid, September 30, 1918, with 124 delegates present, representing 82,024 workers. This union has 468 branches and 89,601 members.

The chief debate during the congress was relative to the general strike of August, 1917, and the causes of its failure. The argument brought out the fact that the labor organizations of Spain are by no means strong enough or sufficiently well equipped for such ambitious undertakings. Though the laboring classes are fast improving their condition, the organized labor movement has not made the progress in Spain that it has in other countries.

Following are some of the measures urged by the convention:

1. The establishment of a minimum wage based on the cost of living, and approved by the General Union of Workmen.
2. Prohibition of employment of women and children on work out of proportion to their physical strength.
3. Equal pay for the sexes on farm work.
4. Establishment of more schools.

5. Subventions for schools for apprentices.

6. Establishment of technical-agricultural instruction in rural schools.

With regard to accident compensation the convention advocates the following:

1. The amendment of the present workmen's compensation law so as to cover agricultural and all other workers now excluded from the benefits of the law.

2. Compensation for occupational diseases.

3. Payment of full amount of wages during temporary disability.

4. Compulsory State insurance.

RECONSTRUCTION PROGRAMS.

RECONSTRUCTION PROGRAM OF THE AMERICAN FEDERATION OF LABOR.

On January 4 the American Federation of Labor reconstruction program was submitted to the Senate Committee on Education and Labor in connection with the hearings conducted by the committee on S. Res. 382, directing the committee to recommend to the Senate methods of promoting better social and industrial conditions in the country.¹ The program was drafted by the committee on reconstruction appointed by instruction of the conference of the American Federation of Labor, held at St. Paul, Minn., June 10 to 20, 1918, and has been endorsed by the executive council of the Federation. The full text of this reconstruction program is as follows:

The world war has forced all free peoples to a fuller and deeper realization of the menace to civilization contained in autocratic control of the activities and destinies of mankind.

It has caused a world-wide determination to overthrow and eradicate all autocratic institutions, so that a full measure of freedom and justice can be established between man and man and nation and nation.

It has awakened more fully the consciousness that the principles of democracy should regulate the relationship of men in all their activities.

It has opened the doors of opportunity through which more sound and progressive policies may enter.

New conceptions of human liberty, justice, and opportunity are to be applied.

The American Federation of Labor, the one organization representing labor in America, conscious that its responsibilities are now greater than before, presents a program for the guidance of labor, based upon experience and formulated with a full consciousness of the principles and policies which have successfully guided American trade unionism in the past.

DEMOCRACY IN INDUSTRY.

Two codes of rules and regulations affect the workers: The law upon the statute books and the rules within industry.

The first determines their relationship as citizens to all other citizens and to property.

The second largely determines the relationship of employer and employee, the terms of employment, the conditions of labor, and the rules and regulations affecting the workers as employees. The first is secured through the application of the methods of democracy in the enactment of legislation, and is based upon the principle that the laws which govern a free people should exist only with their consent.

The second, except where effective trade-unionism exists, is established by the arbitrary or autocratic whim, desire, or opinion of the employer and is based upon the

¹ See MONTHLY LABOR REVIEW for January, 1919 (p. 49).

principle that industry and commerce can not be successfully conducted unless the employer exercises the unquestioned right to establish such rules, regulations, and provisions affecting the employees as self-interest prompts.

Both forms of law vitally affect the workers' opportunities in life and determine their standard of living. The rules, regulations, and conditions within industry in many instances affect them more than legislative enactments. It is, therefore, essential that the workers should have a voice in determining the laws within industry and commerce which affect them, equivalent to the voice which they have as citizens in determining the legislative enactments which shall govern them.

It is as inconceivable that the workers as free citizens should remain under autocratically made law within industry and commerce as it is that the nation could remain a democracy while certain individuals or groups exercise autocratic powers.

It is therefore essential that the workers everywhere should insist upon their right to organize into trade-unions, and that effective legislation should be enacted which would make it a criminal offense for any employer to interfere with or hamper the exercise of this right or to interfere with the legitimate activities of trade-unions.

UNEMPLOYMENT.

Political economy of the old school, conceived by doctrinaires, was based upon unsound and false doctrines, and has since been used to blindfold, deceive, and defeat the workers' demands for adequate wages, better living and working conditions, and a just share of the fruits of their labor.

We hold strictly to the trade-union philosophy and its developed political economy based upon demonstrated facts.

Unemployment is due to underconsumption. Underconsumption is caused by low or insufficient wages.

Just wages will prevent industrial stagnation and lessen periodical unemployment.

Give the workers just wages and their consuming capacity is correspondingly increased. A man's ability to consume is controlled by the wages received. Just wages will create a market at home which will far surpass any market that may exist elsewhere and will lessen unemployment.

The employment of idle workmen on public work will not permanently remove the cause of unemployment. It is an expedient at best.

There is no basis in fact for the claim that the so-called law of supply and demand is natural in its operations and impossible of control or regulation.

The trade-union movement has maintained standards, wages, hours, and life in periods of industrial depression and idleness. These in themselves are a refutation of the declared immutability of the law of supply and demand.

There is in fact no such condition as an iron law of wages based upon a natural law of supply and demand. Conditions in commerce and industry, methods of production, storing of commodities, regulation of the volume of production, banking systems, the flow and direction of enterprise influenced by combinations and trusts have effectively destroyed the theory of a natural law of supply and demand as had been formulated by doctrinaire economists.

WAGES.

There are no means whereby the workers can obtain and maintain fair wages except through trade-union effort. Therefore, economic organization is paramount to all their other activities.

Organization of the workers leads to better wages, fewer working hours, improved working conditions; it develops independence, manhood, and character; it fosters tolerance and real justice and makes for a constantly growing better economic, social, and political life for the burden-bearing masses.

In countries where wages are best, the greatest progress has been made in economic, social and political advancement, in science, art, literature, education, and in the wealth of the people generally. All low wage-paying countries contrasted with America is proof for this statement.

The American standard of life must be maintained and improved. The value of wages is determined by the purchasing power of the dollar. There is no such thing as good wages when the cost of living in decency and comfort equals or exceeds the wages received. There must be no reduction in wages; in many instances wages must be increased.

The workers of the nation demand a living wage for all wage earners, skilled or unskilled—a wage which will enable the worker and his family to live in health and comfort, provide a competence for illness and old age, and afford to all the opportunity of cultivating the best that is within mankind.

HOURS OF LABOR.

Reasonable hours of labor promote the economic and social well-being of the toiling masses. Their attainment should be one of labor's principal and essential activities. The shorter workday and a shorter work week make for a constantly growing, higher and better standard of productivity, health, longevity, morals and citizenship.

The right of labor to fix its hours of work must not be abrogated, abridged, or interfered with.

The day's working time should be limited to not more than eight hours, with overtime prohibited, except under the most extraordinary emergencies. The week's working time should be limited to not more than five and one-half days.

WOMEN AS WAGE EARNERS.

Women should receive the same pay as men for equal work performed. Women workers must not be permitted to perform tasks disproportionate to their physical strength or which tend to impair their potential motherhood and prevent the continuation of a nation of strong, healthy, sturdy, and intelligent men and women.

CHILD LABOR.

The children constitute the nation's most valuable asset. The full responsibility of the Government should be recognized by such measures as will protect the health of every child at birth and during its immature years.

It must be one of the chief functions of the nation through effective legislation to put an immediate end to the exploitation of children under 16 years of age.

State legislatures should protect children of immature years by prohibiting their employment, for gain, under 16 years of age and restricting the employment of children of less than 18 years of age to not more than 20 hours within any one week and with not less than 20 hours at school during the same period.

Exploitation of child life for private gain must not be permitted.

STATUS OF PUBLIC EMPLOYEES.

The fixing of wages, hours, and conditions of labor for public employees by legislation hampers the necessary exercise of organization and collective bargaining.

Public employees must not be denied the right of organization, free activities and collective bargaining and must not be limited in the exercise of their rights as citizens.

COOPERATION.

To attain the greatest possible development of civilization, it is essential, among other things, that the people should never delegate to others those activities and responsibilities which they are capable of assuming for themselves. Democracy

can function best with the least interference by the state compatible with due protection to the rights of all citizens.

There are many problems arising from production, transportation, and distribution, which would be readily solved by applying the methods of cooperation. Unnecessary middlemen who exact a tax from the community without rendering any useful service can be eliminated.

The farmers through cooperative dairies, canneries, packing houses, grain elevators, distributing houses, and other cooperative enterprises, can secure higher prices for their products and yet place these in the consumer's hands at lower prices than would otherwise be paid. There is an almost limitless field for the consumers in which to establish cooperative buying and selling, and in this most necessary development the trade-unionists should take an immediate and active part.

Trade-unions secure fair wages. Cooperation protects the wage earner from the profiteer.

Participation in these cooperative agencies must of necessity prepare the mass of the people to participate more effectively in the solution of the industrial, commercial, social, and political problems which continually arise.

THE PEOPLE'S FINAL VOICE IN LEGISLATION.

It is manifestly evident that a people are not self-governing unless they enjoy the unquestioned power to determine the form and substance of the laws which shall govern them. Self-government can not adequately function if there exists within the nation a superior power or authority which can finally determine what legislation enacted by the people, or their duly elected representatives, shall be placed upon the statute books and what shall be declared null and void.

An insuperable obstacle to self-government in the United States exists in the power which has been gradually assumed by the Supreme Courts of the Federal and State Governments to declare legislation null and void upon the ground that, in the court's opinion, it is unconstitutional.

It is essential that the people, acting directly or through Congress or State legislatures, should have final authority in determining which laws shall be enacted. Adequate steps must be taken, therefore, which will provide that in the event of a supreme court declaring an act of Congress or of a State legislature unconstitutional and the people acting directly or through Congress or a State legislature should reenact the measure, it shall then become the law without being subject to annulment by any court.

POLITICAL POLICY.

In the political efforts, arising from the workers' necessity to secure legislation covering those conditions and provisions of life not subject to collective bargaining with employers, organized labor has followed two methods; one by organizing political parties, the other by the determination to place in public office representatives from their ranks; to elect those who favor and champion the legislation desired and to defeat those whose policy is opposed to labor's legislative demands, regardless of partisan politics.

The disastrous experience of organized labor in America with political parties of its own amply justified the American Federation of Labor's nonpartisan political policy. The results secured by labor parties in other countries never have been such as to warrant any deviation from this position. The rules and regulations of trade-unionism should not be extended so that the action of a majority could force a minority to vote for or give financial support to any political candidate or party to whom they are opposed. Trade-union activities can not receive the undivided attention of members and officers if the exigencies, burdens, and responsibilities of a political party are bound up with their economic and industrial organizations.

The experiences and results attained through the nonpartisan political policy of the American Federation of Labor cover a generation. They indicate that through its application the workers of America have secured a much larger measure of fundamental legislation, establishing their rights, safeguarding their interests, protecting their welfare and opening the doors of opportunity than have been secured by the workers of any other country.

The vital legislation now required can be more readily secured through education of the public mind and the appeal to its conscience, supplemented by energetic independent political activity on the part of trade-unionists, than by any other method. This is and will continue to be the political policy of the American Federation of Labor if the lessons which labor has learned in the bitter but practical school of experience are to be respected and applied.

It is, therefore, most essential that the officers of the American Federation of Labor, the officers of the affiliated organizations, State federations and central labor bodies and the entire membership of the trade-union movement should give the most vigorous application possible to the political policy of the American Federation of Labor so that labor's friends and opponents may be more widely known, and the legislation most required readily secured. This phase of our movement is still in its infancy. It should be continued and developed to its logical conclusion.

GOVERNMENT OWNERSHIP.

Public and semipublic utilities should be owned, operated or regulated by the Government in the interest of the public.

Whatever final disposition shall be made of the railways of the country in ownership, management, or regulation, we insist upon the right of the workers to organize for their common and mutual protection and the full exercise of the normal activities which come with organization. Any attempt at the denial by governmental authority of the rights of the workers to organize, to petition, to representation and to collective bargaining, or the denial of the exercise of their political rights is repugnant to the fundamental principles of free citizenship in a republic and is destructive of their best interest and welfare.

The Government should own and operate all wharves and docks connected with public harbors which are used for commerce or transportation.

The American merchant marine should be encouraged and developed under governmental control and so manned as to insure successful operation and protect in full the beneficent laws now on the statute books for the rights and welfare of seamen. The seamen must be accorded the same rights and privileges rightfully exercised by the workers in all other employments, public and private.

WATERWAYS AND WATER POWER.

The lack of a practical development of our waterways and the inadequate extension of canals have seriously handicapped water traffic and created unnecessarily high cost for transportation. In many instances it has established artificial restrictions which have worked to the serious injury of communities, owing to the schemes of those controlling a monopoly of land transportation. Our navigable rivers and our great inland lakes should be connected with the sea by an adequate system of canals, so that inland production can be more effectively fostered, the costs of transportation reduced, the private monopoly of transportation overcome and imports and exports shipped at lower costs.

The Nation is possessed of enormous water power. Legislation should be enacted providing that the governments, Federal and State, should own, develop and operate all water power over which they have jurisdiction. The power thus generated should be supplied to all citizens at rates based upon cost. The water power of the Nation, created by nature, must not be permitted to pass into private hands for private exploitation.

REGULATION OF LAND OWNERSHIP.

Agriculture and stock-raising are essential to national safety and well-being. The history of all countries, at all times, indicates that the conditions which create a tenant class of agriculturists work increasing injury to the tillers of the soil. While increasing the price of the product to the consumer these conditions at the same time develop a class of large landowners who contribute little, if anything, to the welfare of the community but who exact a continually increasing share of the wealth produced by the tenant. The private ownership of large tracts of usable land is not conducive to the best interests of a democratic people.

Legislation should be enacted placing a graduated tax upon all usable lands above the acreage which is cultivated by the owner. This should include provisions through which the tenant farmer, or others, may purchase land upon the lowest rate of interest and most favorable terms consistent with safety, and so safeguarded by governmental supervision and regulation as to give the fullest and freest opportunity for the development of land-owning agriculturists.

Special assistance should be given in the direction of allotments of lands and the establishment of homes on the public domain.

Establishment of Government experimental farms, measures for stock-raising instruction, the irrigation of arid lands and reclamation of swamp and cut-over lands should be undertaken upon a larger scale under direction of the Federal Government.

Municipalities and States should be empowered to acquire lands for cultivation or the erection of residential buildings which they may use or dispose of under equitable terms.

FEDERAL AND STATE REGULATION OF CORPORATIONS.

The creation by legislative enactment of corporations, without sufficient definition of the powers and scope of activities conferred upon them and without provisions for their adequate supervision, regulation and control by the creative body, has led to the development of far-reaching abuses which have seriously affected commerce, industry and the masses of the people through their influence upon social, industrial, commercial, and political development. Legislation is required which will so limit, define and regulate the powers, privileges and activities of corporations that their methods can not become detrimental to the welfare of the people. It is, therefore, essential that legislation should provide for the Federal licensing of all corporations organized for profit. Furthermore, Federal supervision and control should include the increasing of capital stock and the incurring of bonded indebtedness with the provision that the books of all corporations shall be open at all times to Federal examiners.

FREEDOM OF EXPRESSION AND ASSOCIATION.

The very life and perpetuity of free and democratic institutions are dependent upon freedom of speech, of the press, and of assemblage and association. We insist that all restrictions of freedom of speech, press, public assembly, association, and travel be completely removed, individuals and groups being responsible for their utterances. These fundamental rights must be set out with clearness and must not be denied or abridged in any manner.

WORKMEN'S COMPENSATION.

Workmen's compensation laws should be amended to provide more adequately for those incapacitated by industrial accidents or occupational diseases. To assure that the insurance fund derived from commerce and industry will be paid in full to injured workers, State insurance must supplant, and prohibit the existence of, employers' liability insurance operated for profit.

IMMIGRATION.

Americanization of those coming from foreign lands, as well as our standards of education and living, are vitally affected by the volume and character of the immigration.

It is essential that additional legislation regulating immigration should be enacted based upon two fundamental propositions, namely, that the flow of immigration must not at any time exceed the Nation's ability to assimilate and Americanize the foreigners coming to our shores, and that at no time shall immigration be permitted when there exists an abnormal degree of unemployment.

By reason of existing conditions we urge that immigration into the United States should be prohibited for a period of at least two years after peace has been declared.

TAXATION.

One of the Nation's most valuable assets is the initiative, energetic, constructive and inventive genius of its people. These qualities when properly applied should be fostered and protected instead of being hampered by legislation, for they constitute an invaluable element of progress and material development. Taxation should, therefore, rest as lightly as possible upon constructive enterprise. Taxation should provide for full contribution from wealth by a tax upon profits which will not discourage industrial or commercial enterprise. There should be provided a progressive increase in taxes upon incomes, inheritances, and upon land values of such a nature as to render it unprofitable to hold land without putting it to use, to afford a transition to greater economic quality and to supply means of liquidating the national indebtedness growing out of the war.

EDUCATION.

It is impossible to estimate the influence of education upon the world's civilization. Education must not stifle thought and inquiry, but must awaken the mind concerning the application of natural laws and to a conception of independence and progress.

Education must not be for a few but for all our people. While there is an advanced form of public education in many States, there still remains a lack of adequate educational facilities in several States and communities. The welfare of the Republic demands that public education should be elevated to the highest degree possible. The Government should exercise advisory supervision over public education and where necessary maintain adequate public education through subsidies without giving to the Government power to hamper or interfere with the free development of public education by the several States. It is essential that our system of public education should offer the wage-earners' children the opportunity for the fullest possible development. To attain this end, State colleges and universities should be developed.

It is also important that the industrial education which is being fostered and developed should have for its purpose not so much training for efficiency in industry as training for life in an industrial society. A full understanding must be had of those principles and activities that are the foundation of all productive efforts. Children should not only become familiar with tools and materials, but they should also receive a thorough knowledge of the principles of human control, of force and matter underlying our industrial relations and sciences. The danger that certain commercial and industrial interests may dominate the character of education must be averted by insisting that the workers shall have equal representation on all boards of education or committees having control over vocational studies and training.

To elevate and advance the interests of the teaching profession and to promote popular and democratic education, the right of the teachers to organize and to affiliate with the movement of the organized workers must be recognized.

PRIVATE EMPLOYMENT AGENCIES.

Essentials in industry and commerce are employee and employer, labor and capital. No one questions the right of organized capital to supply capital to employers. No one should question the right of organized labor to furnish workers. Private employment agencies abridge this right of organized labor.

Where Federal, State, and municipal employment agencies are maintained they should operate under the supervision of joint committees of trade-unionists and employers, equally represented.

Private employment agencies operated for profit should not be permitted to exist.

HOUSING.

Child life, the workers' physical condition, and public health demand that the wage-earner and his family shall be given a full opportunity to live under wholesome conditions. It is not only necessary that there shall be sanitary and appropriate houses to live in, but that a sufficient number of dwellings shall be available to free the people from high rents and overcrowding.

The ownership of homes, free from the grasp of exploitive and speculative interests, will make for more efficient workers, more contented families, and better citizens. The Government should, therefore, inaugurate a plan to build model homes and establish a system of credits whereby the workers may borrow money at a low rate of interest and under favorable terms to build their own homes. Credit should also be extended to voluntary nonprofit-making housing and joint-tenancy associations. States and municipalities should be freed from the restrictions preventing their undertaking proper housing projects and should be permitted to engage in other necessary enterprises relating thereto. The erection and maintenance of dwellings where migratory workers may find lodging and nourishing food during periods of unemployment should be encouraged and supported by municipalities.

If need should arise to expend public funds to relieve unemployment, the building of wholesome houses would best serve the public interests.

MILITARISM.

The trade-union movement is unalterably and emphatically opposed to "militarism," or a large standing army. "Militarism" is a system fostered and developed by tyrants in the hope of supporting their arbitrary authority. It is utilized by those whose selfish ambitions for power and worldly glory lead them to invade and subdue other peoples and nations, to destroy their liberties, to acquire their wealth, and to fasten the yoke of bondage upon them. The trade-union movement is convinced by the experience of mankind that "militarism" brutalizes those influenced by the spirit of the institution. The finer elements of humanity are strangled. Under "militarism" a deceptive patriotism is established in the peoples' minds, where men believe that there is nobility of spirit and heroism in dying for the glory of a dynasty or the maintenance of institutions which are inimical to human progress and democracy. "Militarism" is the application of arbitrary and irresponsible forces as opposed to reason and justice. Resistance to injustice and tyranny is that virile quality which has given purpose and effect to ennobling causes in all countries and at all times. The free institutions of our country and the liberties won by its founders would have been impossible had they been unwilling to take arms and, if necessary, die in defense of their liberties. Only a people willing to maintain their rights and defend their liberties are guaranteed free institutions.

Conditions foreign to the institutions of our country have prevented the entire abolition of organized bodies of men trained to carry arms. A voluntary citizen soldiery supplies what would otherwise take its place—a large standing army. To

the latter we are unalterably opposed as tending to establish the evils of "militarism." Large standing armies threaten the existence of civil liberty. The history of every nation demonstrates that as standing armies are enlarged the rule of democracy is lessened or extinguished. Our experience has been that even this citizen soldiery, the militia of our States, has given cause at times for grave apprehension. Their ranks have not always been free from undesirable elements, particularly the tools of corporations involved in industrial disputes. During industrial disputes the militia has at times been called upon to support the authority of those who through selfish interests desired to enforce martial law while the courts were open and the civil authorities competent to maintain supremacy of civil law. We insist that the militia of our several States should be wholly organized and controlled by democratic principles so that this voluntary force of soldiery may never be diverted from its true purpose and used to jeopardize or infringe upon the rights and liberties of our people. The right to bear arms is a fundamental principle of our Government, a principle accepted at all times by free people as essential to the maintenance of their liberties and institutions. We demand that this right shall remain inviolate.

SOLDIERS AND SAILORS.

Soldiers and sailors, those who entered the service in the Nation's defense, are entitled to the generous reward of a grateful Republic.

The necessities of war called upon millions of workmen to leave their positions in industry and commerce to defend, upon the battle fields, the Nation's safety and its free institutions. These defenders are now returning. It is advisable that they should be discharged from military service at the earliest possible moment; that as civilians they may return to their respective homes and families and take up their peace-time pursuits. The Nation stands morally obligated to assist them in securing employment.

Industry has undergone great changes due to the dislocation caused by war production and transportation. Further readjustments in industry and commerce must follow the rehabilitation of business under peaceful conditions. Many positions which our citizen soldiers and sailors filled previous to enlistment do not exist to-day.

It would be manifestly unjust for the Government after having removed the worker from his position in industry and placed him in military service to discharge him from the Army or Navy without having made adequate provision to assist him in procuring employment and providing sustenance until employment has been secured. The returned citizen soldier or sailor should not be forced by the bitter urgent necessity of securing food and clothing to place himself at a disadvantage when seeking employment.

Upon their discharge, transportation and meals should be supplied to their places of residence. The monthly salary previously paid should be continued for a period not to exceed 12 months if employment is not secured within that period.

The Federal and State employment bureaus should be directed to cooperate with trade-union agencies in securing employment for discharged soldiers and sailors. In assisting the discharged soldier and sailor to secure employment, Government agencies should not expect them to accept employment for less than the prevailing rate of wages being paid in the industry. Neither should any Government agency request or require such discharged men to accept employment where a trade dispute exists or is threatened. Nor should the refusal on the part of any of these discharged soldiers or sailors to accept employment where trade disputes exist or are threatened or when less than the prevailing wage rate is offered, deprive them of a continuance of their monthly pay.

Legislation also should be enacted which will give the Nation's defenders the opportunity for easy and ready access to the land. Favorable inducements should be

provided for them to enter agriculture and husbandry. The Government should assume the responsibility for the allotment of such lands, and supply the necessary capital for its development and cultivation, with such safeguards as will protect both the Government and the discharged soldier and sailor.

CONCLUSION.

No element in our Nation is more vitally concerned with the problems of making for a permanent peace between all nations than the working people. The opportunities now before us are without precedent. It is of paramount importance that labor shall be free and unhampered in shaping the principles and agencies affecting the wage earners' condition of life and work.

By the light that has been given to it the American Federation of Labor has attracted to its fold over three millions of wage earners and its sphere of influence and helpfulness is growing by leaps and bounds. By having followed safe and sound fundamental principles and policies, founded on freedom, justice, and democracy, the American trade-union movement has achieved successes of an inestimable value to the masses of toilers of our country. By adhering to these principles and policies we can meet all problems of readjustment, however grave in importance and difficult of solution, with a feeling of assurance that our efforts will be rewarded by a still greater success than that achieved in the past.

Given the whole-hearted support of all men and women of labor our organized labor movement with its constructive program, its love for freedom, justice, and democracy will prove the most potent factor in protecting, safeguarding, and promoting the general welfare of the great mass of our people during this trying period of reconstruction and all times thereafter.

The American Federation of Labor has attained its present position of dignity and splendid influence because of its adherence to one common cause and purpose; that purpose is to protect the rights and interests of the masses of the workers and to secure for them a better and a brighter day. Let us therefore strive on and on to bring into our organizations the yet unorganized. Let us concentrate our efforts to organize all the forces of wage earners. Let the Nation hear the united demand from the laboring voice. Now is the time for the workers of America to come to the stand of their unions and to organize as thoroughly and completely and compactly as is possible. Let each worker bear in mind the words of Longfellow:

In the world's broad field of battle,
In the bivouac of life,
Be not like dumb, driven cattle.
Be a hero in the strife.

RECONSTRUCTION PROGRAM OF AMERICAN FARMERS.

At the farmers' national conference on reconstruction, held in Washington January 6, 7, and 8, 1919, attended by representatives of State granges, State farmers' unions, the American Society of Equity, the Ancient Order of Gleaners, the National Nonpartisan League, and a number of smaller organizations, a program declaring for economic reconstruction in America and for international reconstruction, was unanimously adopted. This program is said to include the chief measures, legislative and administrative, which united farmers will seek to have adopted as the permanent policy of

the country, and is designated by them as "the fighting reconstruction program of the forward-looking farmers of America." It deals with reconstruction from the standpoint of economic conditions in America and also from an international viewpoint. Only the declarations of the conference relating particularly to labor matters are given here, the problem of demobilization having principal consideration among American economic problems.

To secure the transition from a war basis to an economically sound and ethical peace basis of industry, we believe the following measures are essential:

(a) Every nation of the world, at least our own Nation and those with which we have been associated in this war, should immediately make an inventory of its stocks of essential goods on hand, to ascertain in what industries maximum production is essential, and priority of material, transportation, fuel, and labor should be accorded to these industries.

(b) Those now engaged in industries directly connected with the war should be transferred to the industries essential in peace as rapidly as possible, and plants now engaged in war industries should be converted to peace purposes; while semiessential industries classed as nonessential during the war should be encouraged to maximum production.

(c) In view of the world's shortage of foodstuffs, men in the Army and Navy training camps in this country, and soldiers abroad who have had experience in farming, and those essential to the transportation and distribution of farm products, should be discharged first, and provision made to secure them employment in agriculture at the earliest possible moment. Men not experienced in farming but who wish to farm should be encouraged to do so by the adoption of a system similar to that which has proven so successful in the settlement of soldiers in the Province of Ontario through the provision of training for agriculture, with adequate payment during such period.

(d) Men in the Army and Navy who do not wish to enter in schools established for that purpose should be given vocational training until such time as they can be absorbed by the peace industries of the country. Men in the service overseas should be similarly trained and discharged by industries as industrial opportunity develops.

(e) Federal, State, and local governments should also immediately plan construction of public improvements in order of urgency, so that when due to industrial or economic crises any large number of men or women are unemployed they may find work at fair rates on governmental undertakings. Extension of railroads, reclamation work, reforestation, and land clearing and preparation, the development of highways, waterways, and other public works should be similarly planned in order of urgency to prevent the unemployment which would otherwise follow the end of the war.

With the return of peace and the challenge which it brings to the democratic forces of the world to bring forward plans looking toward the prevention of wars in the future the conference presented the following resolutions as involving principles essential to the successful achievement of this result:

- (1) Recognition of the common interests of the working people of all countries, regardless of the form of political government under which they live.
- (2) International control over international trade and international investment.
- (3) Freedom of production, and uniform and equally free exchange between all peoples.
- (4) Termination of all secret treaties and understandings between nations.
- (5) Gradual reduction of armaments.

- (6) International control over the occupation and development of backward countries, subject always to the right of small and backward peoples to self-determination.
- (7) Complete and direct control by the peoples of every established country, of their own Government.
- (8) Unrestricted passage for legitimate commerce, over land and sea.
- (9) War must be made democratic by the agreement of all nations to declare war only by the majority vote of all, men and women.

International boards which are believed to be essential to the successful working out of the league of nations are an international investment board, board of trade, commerce commission, institute of agriculture, and labor board.

In regard to the question of labor and wages the conference declares that—

The dislocation of industry necessarily occasioned by the wholehearted commitment of this country to the sole purpose of winning the war presents problems requiring careful governmental action. The principle must be fully established and universally recognized that labor is the first fixed charge upon all industry, taking precedence of the claims of property and investment in business and commerce. This is essential to securing the well-being of our people, and the industrial and economic democracy for which our men have striven. Living wages to those engaged in industry, commerce, trade, mining, railroading, and in all other legitimate activities, are a direct benefit to farmers because they increase the purchasing power of those so engaged, and not only increase the efficiency of these workers, but provide the most economic and advantageous market for farm products—a home market.

In addition to the various activities outlined in the program and for the purpose of promoting understanding and good feeling among the different nations, the conference expressed the belief that “the league of nations should foster the holding of international conferences of farmers, organized workers, manufacturers, merchants, bankers, etc. Through frequent international conferences of this nature most of the national misunderstandings that hitherto have been such prolific sources of trouble would be things of the past and be replaced by mutual understanding and respect.”

The people of all nations are looking with prayer on their lips and hope in their hearts to the Peace Conference to deal justly with our enemies and complete their labors, of such vital importance to the world, by providing for the establishment of a league of nations on a foundation economically and ethically democratic. Only as this is accomplished can government of the people, for the people, by the people, spread o'er the earth and wars be made impossible.

We therefore, on behalf of the farmers of America, after careful thought, investigation and consideration, have herein presented the positive convictions of the producers of America as to the essentials of a democratic solution of our international problems, and submit them to the Peace Conference and the democratic people of the world.

**MINIMUM PROGRAM OF THE GENERAL CONFEDERATION OF LABOR
(FRANCE).**

The General Confederation of Labor (*Confédération Générale du Travail*, usually known as the C. G. T.) is the official representative of organized labor in France. The trade-unions (*syndicats*) are the local units of the C. G. T. and bear a twofold relation to one another: (1) Through their national federations of industry or trade; (2) through the *Bourse du Travail* of their locality.

The national federations of industries and trades are divided into industrial and craft unions; while the *bourses* are the labor exchanges of the region. They also provide educational facilities and carry on friendly society activities. Each of these groups of unions forms an integral part of the confederation, which exercises no coercive authority over either. Within the federations the unions enjoy great freedom and are the fighting forces of the organizations.

The affairs of the C. G. T. are administered by the confederal committee (*Comité Confédérale*) which is, generally speaking, made up of one delegate from each of the adhering federations. Its special duties are to execute the decisions of the congresses, to intervene in working-class issues, and to pass on questions of general interest to labor.

Late in November, 1918, the General Confederation of Labor at the request of the French Government issued a minimum program of labor reform to be submitted to such a commission on labor as might be constituted by the Peace Conference. The adoption of the program by about 1,000,000 organized workmen (the estimated present membership of the C. G. T.) is a matter of interest to the political world of France and to communities beyond her borders. It is an elaborated restatement of the principles voiced by the C. G. T. at its various national conferences since 1915, and those included in the memorandum on the French labor movement presented by the C. G. T. and the French Socialist Party to the Inter-Allied Conference, London, February, 1918. It was prepared by M. Jouhaux, the secretary of the confederation, who during the war served on many committees¹ dealing with questions of importance to labor.

INTERNATIONAL PRINCIPLES.

The program opens with renewed adherence to President Wilson's fourteen principles, while assuming that the peace of the world should have the following basic principles:²

(1) The establishment of a League of Nations for a free cooperation of all peoples, having for its aim the elimination of every germ of future war and the establishment of international justice.

¹ *Confédération Générale du Travail. Rapports., 1914-1918. Paris, 1918.*

² Summarized from *L'Information Ouvrière et Sociale*, Nov. 28, 1918, p. 5.

(2) No economic war which would lead to reprisals; freedom of the seas maintained under the protection of the League of Nations; no economic protectionism which would lead to an exploitation of the working class.

(3) Each nation should develop its resources by a wise selection conforming to its physical and material resources, thus producing, by the quickest and most liberal methods of exchange, a world market without prejudicing the expansion of other nations, and without impeding by artifices which produce only a false security, those interchanges which nature has made necessary among men and nations.

To this end an international office of transportation should be created for the better utilization of the agricultural and mineral resources, for the general welfare of humanity, and for the material and moral uplift of native peoples.

(4) No reprisals based upon vengeance, but only reparation for damages. No territorial annexations, but a recognition of the right of the self-determination of peoples.

(5) The League of Nations, acting as an international court of justice, should begin general disarmament and carry it to completion. Thus only will militarism be vanquished. Thus only can international democracy triumph.

SYNDICAL RIGHTS.

Labor demands an official place at the Peace Conference; full publicity of the deliberations of the Peace Conference; an international labor conference; the restoration of constitutional liberties; freedom of speech and assemblage; suppression of censorship; and complete political amnesty.

Believing that labor is not a commodity the C. G. T. demands syndical rights for workers, including Government employees; sailors right to leave their ships when in port; revision of the Maritime Code; the right of labor unions to intervene in labor questions; the standardization of wages in each industry through collective agreements, and under the administration of labor organizations; an 8-hour day; no night work for women and children under 18; and compulsory education to up 14 years of age.

ECONOMIC REVIVAL.

In an application of the principles governing an economic revival the C. G. T. demands the establishment of a national economic council aided by regional councils in which the labor organizations shall have direct representatives responsible to them; the management of unemployment funds; the reconstruction of the invaded regions by new collective organisms endowed with civil and administrative

power by qualified representatives of the producers and consumers; the rebuilding of the cities, communes, and factories in accordance with principles of hygiene, of health, and of beauty.

THE NATIONAL FUTURE.

For the future the C. G. T. claims for organized labor its rightful place in the direction and administration of national production. Economic reorganization should have as its basis the uninterrupted development of the national industrial equipment and the unlimited diffusion of general and technical knowledge; and for this purpose: To permit the use of all talent, to seek the utilization of all material resources and the application of all inventions and discoveries; to stimulate private initiative; to prevent all voluntary restriction of production and all surplus of producers, the consequences of which harm production itself.

STATE CONTROL.

The Confederation believes that nothing necessary to personal, family, or national life should be turned over to private interests unless collective control forces them to direct their efforts in accord with the general interest. This control, exercised in the name of the State for the producers and consumers and chiefly by their delegates, should be sufficiently powerful to maintain continuous control of production, of prices, of technical development, of conditions of labor, wages, and insurance, as well as of the distribution of profits exceeding normal interest or limited dividends. Thus established, this control will assure the functioning of the association of industry and State in enterprises whose dispersion will still permit the play of initiative and free competition.

As the security of individuals is more important than that of property it is essential that measures of education, thrift, and insurance be taken at once. Alcoholism, overcrowding, and bad housing should be guarded against; and social insurance should safeguard the members of the producing class against unemployment, sickness, invalidity, and old age.

FOREIGN LABOR.

The General Confederation of Labor asserts that every workman has a right to work wherever he can find work; that he should enjoy all trade-union guaranties; that he should not be driven from a country because of union activity. Foreign workers should receive the current wage of the district in their particular trades. Labor migrations should be organized and placed under the control of organizations on which the national workingmen's and employers' associations as well as the Government shall be represented.

The recruiting of labor in foreign countries should be under the control of commissions in the countries concerned. Colored labor should be recruited under the same conditions as European labor, and should have the same guarantees. Furthermore, employers of colored labor should organize, at their own expense and under the control of the department of public instruction, courses for the purpose of teaching colored workers to speak, read, and write.

LABOR LEGISLATION.

The General Confederation of Labor believes that legislation should provide full pay for workmen incapacitated by disease; the same basis of compensation for industrial diseases as for accidents; reorganization of old age insurance on lines similar to those of sickness insurance; hygienic conditions and safety devices to protect workers; a statistical department composed of government officials and workmen to collect data on hours, hygiene, and sanitation; an international labor office in connection with the international labor ministry.

THE HIGH COST OF LIVING.

As a protection against the high cost of living the C. G. T. advocates the abolition of duties on food, coal, and lighting material; the establishment of a national communal food administration which should have power to purchase and sell its products without profit, and which should be composed of representatives of labor and of consumers; the levying of a tax on income, war profits, and inheritances to reduce the national debt.

M. Jouhaux, in discussing the National Economic Council which the C. G. T. wishes instituted in order to insure the fundamentals of its minimum program, outlines its task as follows:

The task of the council will comprise two distinct stages: It will first strive to better the economic situation of the country in the present difficult circumstances with which it has to contend. Rapid inquiries will reveal the exact resources of the country, and, for this purpose, the National Economic Council will avail itself of the aid of technical advisers.¹

Furthermore, according to M. Jouhaux, the council intends to deal with the Government through the Premier, in order to avoid friction with ministerial organizations. Its membership will include heads of large industries, workmen, technical advisers, and delegates of the Government. In addition to the foregoing there will also be included "competent authorities on matters of law and political economy, who will, so to speak, represent public opinion."

¹ Christian Science Monitor (Boston), Jan. 29, 1919.

PROVISION FOR THE DISABLED, AND VOCATIONAL EDUCATION.

PROBABILITY OF AN INDUSTRIAL CRIPPLE SUSTAINING A SECOND INJURY.

BY CARL HOOKSTADT.

Discrimination against the employment of handicapped workmen has been widely practiced throughout the country. One reason constantly advanced by employers in justification of this discrimination is that from the workmen's compensation viewpoint such men constitute an extrahazardous risk. It has been argued that not only is a handicapped worker more liable to injury himself and to be a greater source of danger to his fellow workmen than is a normal worker, but the compensation costs resulting from a second injury would be greatly increased. It is highly desirable, therefore, to know just how many crippled employees sustain a second disabling injury and just what the increase in accident compensation cost resulting from the employment of cripples would be. Unfortunately there exists practically no statistical data bearing upon the matter. The psychological effect of this lack of definite information has undoubtedly increased these discriminatory practices. In other words, fear of unknown consequences has influenced employers to play safe.

An attempt is made in the present article to work out as accurately as possible from existing data the probable maximum number of second permanent disabilities sustained by crippled industrial workmen annually and the proportionate increased cost of such accidents to the cost of all the accidents under the workmen's compensation acts. In brief, what would be the probable increase in accident costs to employers who employ physically handicapped workmen?

The computations herein made are largely deductive and are based upon the industrial accident experience of the State of Wisconsin. Only major-disability accidents have been considered, i. e., those resulting in loss of a hand, arm, foot, leg, or eye. Loss means physical loss or loss of use of at least 50 per cent. In cases of doubt estimates have been purposely overstated. The number of accidents and their cost would therefore represent the maximum. It is admitted that in computing the number of exposed cripples some of the factors used were largely conjectural.

The number of accidents is the result of two factors—the accident frequency rate and the number of persons exposed. To obtain the annual number of second major industrial injuries it was necessary simply to find the frequency rate for this class of accidents and multiply the result by the number of exposed cripples.

The Wisconsin accident experience for the three years 1915 to 1917 showed that the frequency rate for major permanent disability accidents was 0.369 per 1,000 industrial employees. The average annual number of such injuries was 124, while the average annual number of employees was 335,942. However, 0.369 represents the frequency rate for normal employees. Would the rate for crippled employees be higher? By crippled employees is meant those who have lost a limb or an eye. The probable decreased ability of a legless man to evade imminent danger and of a one-eyed man to foresee danger would naturally lead to the conclusion that crippled men are more liable to injury than are normal workers. On the other hand, such workmen would in all probability subsequently occupy less hazardous occupations and would also be inclined to exercise more care. According to Dr. C. G. Farnum, chief surgeon of the Avery Co., Peoria, Ill., "when men are properly mated to their jobs after painstaking examination, the worse the physical defect, the less the accident incidence." Moreover, a cripple has fewer members to lose, i. e., he is less exposed. There are many cases on record in which the workman lost an artificial limb or eye through accident. Had he been a normal man he would have sustained a permanent injury. Let us assume for the present, however, that the frequency rate for normal and crippled workers is identical.

The next step is to ascertain the number of exposed industrial cripples. As already stated, the Wisconsin accident data showed that in that State the annual number of major industrial permanent disabilities was 124. But accidents occur outside of a man's employment. They also occur in industries such as agriculture and domestic service, which are not covered by compensation acts. They are also sustained by children and other nonindustrial persons some of whom later enter industry. The number of such nonindustrial accidents is not known. It is hardly probable, however, that among the total number of persons gainfully employed the number of nonindustrial accidents exceeds the number occurring in industry. To obtain the total annual number, therefore, let us double the number of industrial accidents. This would give 248 as the probable total number of major permanent disabilities occurring annually in Wisconsin. But what would be the total number of such cripples at any given time? The yearly addition of 248 would be partially offset by the passing out of those already in existence. The maximum

number would be reached when the separations equaled the additions. It is assumed that the probable annual number, 248, multiplied by 25, or one generation, would probably not be an underestimation of the total number in existence at any given time in the State of Wisconsin. This would give 6,200. More likely this number is an exaggeration. Because of the constant increase in population and manufacturing, it is quite likely that there has been a numerical increase in accidents during the past 25 years; so that the 124 which has been used as the basis for computation is probably higher than the average for the 25-year period. Moreover, there should be constantly borne in mind the fact that we are concerned only with persons gainfully employed. Children, housewives, and others of similar status are, therefore, not taken into account in determining the number of cripples in existence at any given time.

Again, all of these 6,200 cripples are not employees engaged in industries under the compensation act. Many are in agriculture and domestic service; others are employers or independent workers. Undoubtedly there is a certain tendency among cripples injured in industry to gravitate out of industrial employments to nonindustrial employments or to the employing class. On the other hand, there is probably another movement from nonindustrial to industrial employments. The distribution of cripples among employers, nonindustrial employees, and industrial employees would probably coincide with the distribution of the total number of persons in these three groups. The percentage of employees subject to the compensation act in each of the workmen's compensation States has been worked out in Bulletin No. 240 (p. 28) of the United States Bureau of Labor Statistics. Of the total number of persons gainfully employed in the State of Wisconsin, according to the Federal census of 1910, 47 per cent come within the scope of the compensation act. Forty-seven per cent of 6,200 is 2,914—the probable total number of exposed cripples in industrial employment under the compensation act.

We now have the two necessary factors—accident frequency rate and the number of exposed cripples. Therefore, applying the frequency rate of 0.369 per 1,000 to the 2,914 exposed cripples, we obtain 1.075 as the probable annual number of second major injuries. That is, on the basis of the foregoing computations, of all the employees under the compensation act of the State of Wisconsin who had lost a hand, arm, foot, leg, or eye only one would suffer a second major permanent disability in any given year.

Applying the rate for Wisconsin to the 41 compensation States and Territories gives a grand total of 39 second major disabilities for all industries covered by State compensation laws. The distribution

of these 39 disabilities among the several States is shown in the following table:

PROBABLE NUMBER OF SECOND MAJOR DISABILITIES OCCURRING ANNUALLY IN INDUSTRIES UNDER COMPENSATION ACTS IN SEVERAL STATES.

State.	Number.	State.	Number.
Alaska.....	0.03	New Hampshire.....	0.21
Arizona.....	.07	New Jersey.....	2.28
California.....	1.62	New Mexico.....	.05
Colorado.....	.38	New York.....	6.63
Connecticut.....	.85	Ohio.....	2.67
Delaware.....	.10	Oklahoma.....	.22
Hawaii.....	.21	Oregon.....	.26
Idaho.....	.13	Pennsylvania.....	5.70
Illinois.....	2.31	Porto Rico.....	.18
Indiana.....	1.33	Rhode Island.....	.46
Iowa.....	.71	South Dakota.....	.14
Kansas.....	.29	Texas.....	.81
Kentucky.....	.67	Utah.....	.16
Louisiana.....	.37	Virginia.....	.55
Maine.....	.40	Vermont.....	.13
Maryland.....	.50	Washington.....	.51
Massachusetts.....	2.94	West Virginia.....	.54
Michigan.....	1.58	Wisconsin.....	1.07
Minnesota.....	1.00	Wyoming.....	.05
Montana.....	.15		
Nebraska.....	.39	Total.....	38.72
Nevada.....	.07		

The economic consequences resulting from a second major disability are much more serious than those resulting from the first, and the schedule of most of the State compensation laws are based upon this fact. But the total number of such second injuries, in proportion to the total number of all accidents, is infinitesimally small. Assuming that all second major permanent accidents would result in permanent total disability, the increased compensation cost would probably not exceed three-tenths of 1 per cent of the total compensation cost for all accidents under the compensation act. To illustrate:

The average annual total compensation awarded under the Massachusetts act for all accidents during the three-year period ending June 30, 1916, was \$3,182,384. The average annual compensation awarded for the loss of a limb during the same period was \$1,614, while the maximum compensation payable for permanent total disability was \$4,000. The increased cost of a second major disability would be represented by the difference in costs between the loss of one limb and permanent total disability (\$4,000—\$1,614), or \$2,386. According to our previous computation the probable annual number of second major injuries in Massachusetts is three, the increased cost of which would be 3×\$2,386, or \$7,158. This is twenty-two one-hundredths of 1 per cent of the total compensation.

The total compensation awarded under the Wisconsin act for all accidents during the fiscal year 1916-17 was \$1,576,329. The average compensation awarded for a major permanent disability (loss of

limb or eye) was \$1,568, while the average compensation awarded for permanent total disability was \$3,745. The increased cost of a second major disability would therefore be \$3,745 minus \$1,568, or \$2,177. The probable number of such second disabilities in Wisconsin was found to be one. The increased cost of this would be fourteen one-hundredths of 1 per cent of the total compensation cost.

The above deductive computations have received corroboration from the actual experience of California. An investigation made by the California Industrial Accident Commission disclosed the fact that during the four-year period 1914-1917 there were only five cases in which a second permanent injury resulted in permanent total disability. The commission estimated that if these five second injuries had been compensated on the basis of total, instead of partial, disability, the additional cost would have been \$15,895. This additional cost was seventeen one-hundredths of 1 per cent of the total compensation payments, excluding medical payments, made for industrial injuries in California during the same length of time.

In those States which provide life pensions for permanent disabilities the increased cost of second injuries would be somewhat greater. But probably in no case would it be more than three-tenths of 1 per cent.

As stated in the beginning these computations have been arrived at deductively and are largely estimates. But care has been taken to overstate rather than understate the amounts. Even assuming an increased accident frequency rate of 100 per cent over normal workers, the increased compensation costs of second disabilities in the aggregate would still be almost negligible. It must be acknowledged, however, that an individual employer is not particularly concerned with the fact that "in the aggregate" the increased cost of second disabilities is insignificant. When a crippled workman in his employ sustains a second major disability the increased cost to him is much greater than the cost of a similar disability to a normal worker would be; and this notwithstanding the fact that the increased aggregate cost is negligible. The best remedy for this situation would seem to lie in the adoption of the New York plan of compensating for second injuries. Under the compensation act of this State the liability of an employer for a second major disabling injury is limited to the liability resulting from that particular injury without reference to any prior disability. Compensation for the remaining disability is paid out of a special fund, which could be charged to the industry as a whole. The Industrial Commission of Ohio also has put this plan into effect.

But even acknowledging that for individual employers the occurrence of a second injury would materially increase their compensation costs,

the fact that there is little possibility of such an accident occurring at all, as already pointed out, would seem to prove that the widespread discrimination against the employment of crippled men is hardly justified.

SURVEY OF CRIPPLES IN CLEVELAND, OHIO.

A survey of cripples in Cleveland, Ohio, has just been made by the Welfare Federation of that city.¹ The purpose of the investigation was "to discover the economic and educational needs, capacities, and possibilities of children and adults in Cleveland who are handicapped because they lack the normal use of skeleton or skeletal muscles." Practically all persons recognized by themselves or their families as physically handicapped under the above definition, regardless of economic condition, were recorded. No cases were retained in the final count that were not from some point of view seriously handicapped, however well they might have adapted themselves and minimized the handicap.

The number of cripples of all ages found in an enumeration by house-to-house canvas extending over a period of one year from October, 1915, to October, 1916, was 4,186. As the estimated population of Cleveland for 1916 was 674,073, this gives a ratio of about six cripples to 1,000 inhabitants.

The following table shows the number of cripples and the percentage distribution, by age and sex:

NUMBER AND PERCENTAGE DISTRIBUTION OF CRIPPLES IN CLEVELAND, BY AGE AND SEX.

Age at time of survey.	Total.		Males.		Females.	
	Num-ber.	Per-cent.	Num-ber.	Per-cent.	Num-ber.	Per-cent.
Under 5 years.....	165	4	88	3	77	5
5 to 14 years.....	771	18	427	16	344	22
15 to 19 years.....	301	7	169	6	132	9
20 to 49 years.....	1,716	41	1,206	46	510	33
50 to 59 years.....	536	13	363	14	173	11
60 years and over.....	697	17	385	15	312	20
Total.....	4,186	100	2,638	100	1,548	100

¹ Education and Occupations of Cripples, Juvenile and Adult. A survey of all the cripples of Cleveland, Ohio, in 1916, under the auspices of the Welfare Federation of Cleveland. Publications of the Red Cross Institute for Crippled and Disabled Men, series 2, No. 3, New York.

The age distribution at occurrence of disability is shown in the following table:

AGE DISTRIBUTION OF CRIPPLES IN CLEVELAND AT TIME OF OCCURRENCE OF DISABILITY.

Age at occurrence of disability.	Number.	Percent- age distri- bution.
Birth to 4 years.....	1,400	34
5 to 9 years.....	352	8
10 to 14 years.....	294	7
15 to 19 years.....	252	6
20 to 24 years.....	250	6
25 to 29 years.....	259	6
30 to 34 years.....	216	5
35 to 39 years.....	179	4
40 to 44 years.....	188	5
45 to 49 years.....	182	4
50 to 54 years.....	161	4
55 to 59 years.....	133	3
60 years and over.....	273	7
Not stated.....	47	1
Total.....	4,186	100

The following table shows the numbers and percentage distribution of these cripples by nature of disability:

NUMBER AND PERCENTAGE DISTRIBUTION OF CRIPPLES IN CLEVELAND, CLASSIFIED BY NATURE OF DISABILITY.

Nature of disability.	Number.	Percent- age distri- bution.
Loss of one hand or arm.....	188	4.5
Loss of both hands or arms.....	6	.1
Defect of one hand or arm.....	499	11.9
Defect of both hands or arms.....	42	1.0
Loss of one foot or leg.....	466	11.1
Loss of both feet or legs.....	27	.6
Defect of one foot or leg.....	1,546	37.0
Defect of both feet or legs.....	365	8.7
Loss or defect of one or both arms and one or both legs...	332	7.9
Deformity of body.....	199	4.8
Paralysis of body.....	6	.1
Not classified.....	67	1.6
Disability of legs or arms, or of both, and of body.....	443	10.6
Total.....	4,186	100.0

In the "defect of hand," as used in the foregoing table, are included the loss of a thumb or of two or more fingers, as well as congenital or acquired defects and congenital lacks. Similarly, "defect of foot" includes corresponding losses of parts of the foot.

According to the report, "there are practical grounds for counting losses of foot or of leg below the knee as comparatively less disabling than any of the other defects enumerated." This accords with the popular belief that lower limb injuries are less serious than upper limb injuries. It is an interesting and important statement, especially in

view of the fact that the United States Bureau of Labor Statistics has reached contrary conclusions obtained as a result of similar investigations.¹ This statement, however, is hardly borne out by an analysis of the data within the report itself. The following table shows the number and per cent of cripples at work, classified by nature of disability, and it will be noted that there was relatively greater unemployment among the leg cripples than among those who had lost a hand or an arm:

NUMBER AND PERCENTAGE DISTRIBUTION OF CRIPPLES AT WORK IN CLEVELAND, CLASSIFIED BY NATURE OF DISABILITY.

Nature of disability.	Number.		Per cent.	
	At work.	Not at work.	At work.	Not at work.
Loss of one hand or arm.....	147	37	80	20
Loss of both hands or arms.....	3	2	60	40
Defect of one hand or arm.....	341	86	80	20
Defect of both hands or arms.....	20	15	57	43
Loss of one foot or leg.....	314	115	71	29
Loss of both feet or legs.....	14	13	52	48
Defect of one foot or leg.....	721	389	65	35
Defect of both feet or legs.....	81	165	33	67
Loss or defect of one or both arms and one or both legs.....	76	174	30	70
Deformity of body.....	73	53	58	42
Paralysis of body.....	3	2	60	40
Not classified.....	10	27	27	73
Disability of arms or legs, or of both, and of body.....	109	260	29	71
Total.....	1,912	1,338	59	41

The main causes of disability are shown in the following table:

NUMBER AND PERCENTAGE DISTRIBUTION OF CRIPPLES IN CLEVELAND, CLASSIFIED BY CAUSE OF DISABILITY.

Main causes of disability.	Number.			Percentage distribution.		
	Total.	Male.	Female.	Total.	Male.	Female.
Congenital.....	301	136	165	7	5	11
Accident at occupation.....	468	457	11	11	17	1
Other accident.....	1,323	966	357	32	37	23
Infantile paralysis.....	325	289	236	13	11	15
Other diseases.....	1,437	724	713	34	28	46
Not stated.....	132	66	66	3	2	4
Total.....	4,186	2,638	1,548	100	100	100

The hardest obstacles for the cripple to overcome, says the report, are our mistaken ideas about cripples. "An ambitious mechanic, looking for a real job, finds himself classified with the shoestring peddler on the street, just because he has the same disability. A man with crutches hears people 'speaking up loud' to him, exactly

¹ See article on the "Problem of the Crippled Man in Industry," MONTHLY LABOR REVIEW for December, 1918 (pp. 18-30).

as they would to a person with smoked glasses or to foreigners whose language they do not understand. These apparently trivial things are in reality signs of a general inability to see the man behind the handicap, and are the very things that make the cripple think he is helpless. They contribute, without doubt, toward idleness among cripples, and help create the group of sensitive recluses who only wish to come out after dark and the discouraged workman who keeps his crippled hand well hidden in his pocket."

The principal conclusions and recommendations are summarized in the report as follows:

CHILDREN.

1. The problem of the crippled population is first of all a problem of child welfare. Although adults were more numerous than the children—more than three times as many—a fourth of the crippled population were not only under the age of 15 at the time of the survey, but a third of the adult cripples became disabled while under the age of 15. Thus a total of 49 per cent of the whole group were disabled in childhood.

2. As a children's problem it is essentially a medical-educational one. The nature of the causes and the form of the crippled condition, the consequent length of time and well-known conditions of life and treatment needed to minimize the handicap require that provision for medical and educational care be planned in close relation to each other.

3. The varieties of muscular and skeletal defects are so many, and crippled persons, like normal ones, have so great a variety of aptitudes, that no single or simple means will satisfactorily provide for their vocational preparation. Their needs must, therefore, be met as a part of a general, liberal program for prevocational education.

4. With lively appreciation of the good work of existing agencies, it must still be said that special provisions for the care of crippled children in Cleveland are inadequate, especially in their equipment for correlating medical and educational care and for fitting crippled children for working life. Therefore, new or enlarged means of meeting this need should be provided.

ADULTS.

5. The problem of the crippled population is a problem of adults in working life. The number who are over 60 years of age is small; the number of those who became crippled after 60 is still smaller. But the number becoming crippled during working life by accident, especially of men, is large, and the number crippled from all causes very large.

6. Cripples in Cleveland, under heavy physical handicap, in direct competition with others, and without special favor of the community, have reached and held remarkable positions of economic independence. Their capacity, occupations, and earnings point on the whole to varied and normal tendencies of life.

7. The great variety of forms of handicap and notable differences in aptitudes and experience prior to becoming crippled point to the need of a most flexible system of service to those among cripples who can not make their way unaided, but who may be benefited by special plans for their rehabilitation and reeducation. This plan may well be a part of an adequate system for vocational training for all citizens.

8. The increased care with which, under existing laws, employers tend to avoid the added risks of liability in employing physically handicapped labor places the handicapped, however competent they may be, at an increasing disadvantage except at times and in places where other labor is difficult or impossible to secure.

These general conclusions and the facts in detail upon which they are based disclose particularly two definite directions in which community effort is needed in order to equalize chances for cripples:

First, adequate provision should be made for the medical-educational care of crippled children.

Second, measures should be planned for safeguarding the interests of crippled adults.

To carry out the work of a program of this kind a central bureau or federation is recommended that represents not only existing agencies especially instituted for cripples but all the forces touching their lives most closely—medical, educational, industrial.

PRICES AND COST OF LIVING,

RETAIL PRICES OF FOOD AND COAL IN THE UNITED STATES.

Retail prices of food as reported to the Bureau of Labor Statistics for January, 1919, show for the United States, for all articles combined, a decrease of 1 per cent as compared with December, 1918. Nine of the 29 articles for which prices are secured declined in price during the month. The price of eggs declined 7 per cent; butter, corn meal, and navy beans 3 per cent each; pork chops, lard, and flour 2 per cent each; milk and rice 1 per cent each. Bacon, bread, potatoes, sugar, and raisins remained the same in price. Coffee increased 8 per cent, lamb and onions 5 per cent each.

AVERAGE RETAIL PRICES AND PER CENT OF INCREASE OR DECREASE JAN. 15, 1919,
COMPARED WITH JAN. 15, 1918, AND DEC. 15, 1918.

Article.	Unit.	Average retail price.			Per cent of increase (+) or decrease (-) Jan. 15, 1919, compared with—	
		Jan. 15, 1918.	Dec. 15, 1918.	Jan. 15, 1919.	Jan. 15, 1918.	Dec. 15, 1918.
		<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>		
Sirloin steak.....	Pound.....	32.7	40.4	41.1	+26	+2
Round steak.....	do.....	30.6	38.2	39.0	+27	+2
Rib roast.....	do.....	25.8	31.9	32.6	+26	+2
Chuck roast.....	do.....	22.1	27.3	28.0	+27	+3
Plate beef.....	do.....	17.2	21.1	21.9	+27	+4
Pork chops.....	do.....	34.3	41.3	40.6	+18	-2
Bacon, sliced.....	do.....	48.6	58.5	58.5	+20	(1)
Ham, sliced.....	do.....	43.6	53.3	53.6	+23	+1
Lamb.....	do.....	30.8	34.4	36.1	+17	+5
Hens.....	do.....	32.9	38.4	40.0	+22	+4
Salmon, canned.....	do.....	29.2	31.4	32.1	+10	+2
Milk, fresh.....	Quart.....	13.4	15.7	15.6	+16	-1
Milk, evaporated (unsweetened).....	(?)			16.3		
Butter.....	Pound.....	56.7	72.7	70.5	+24	-3
Oleomargarine.....	do.....			39.6		
Nut margarine.....	do.....			36.4		
Cheese.....	do.....	34.5	42.7	44.5	+29	+4
Lard.....	do.....	32.9	34.2	33.4	+ 2	-2
Crisco.....	do.....			33.5		
Eggs, strictly fresh.....	Dozen.....	67.4	81.1	75.2	+12	-7
Eggs, storage.....	do.....		58.1	59.9		+3
Bread.....	Pound ³	9.3	9.8	9.8	+ 5	(1)
Flour.....	Pound.....	6.6	6.7	6.6	(1)	-2
Corn meal.....	do.....	7.0	6.4	6.2	-11	-3
Corn flakes.....	8-oz. pkg.....			14.1		
Cream of wheat.....	28-oz. pkg.....			25.9		
Rice.....	Pound.....	11.7	13.9	13.8	+18	-1
Beans, navy.....	do.....	18.5	15.4	14.9	-20	-3
Potatoes.....	do.....	3.2	3.2	3.2	(1)	(1)
Onions.....	do.....	5.0	3.9	4.1	-18	+5
Cabbage.....	do.....			4.1		
Beans, baked.....	No. 2 can.....			19.1		
Corn, canned.....	do.....			20.0		
Peas, canned.....	do.....			19.3		
Tomatoes, canned.....	do.....			17.6		
Sugar, granulated.....	Pound.....	9.5	10.8	10.8	+14	(1)
Tea.....	do.....	62.3	67.5	69.2	+11	+3
Coffee.....	do.....	30.4	32.4	35.0	+15	+8
Prunes.....	do.....	16.4	19.2	19.8	+21	+3
Raisins.....	do.....	15.0	16.1	16.1	+ 7	(1)
Bananas.....	Dozen.....			37.0		
Oranges.....	do.....			51.5		
All articles combined.....					+16	-1

¹ No change in price.

² 15-16 ounce can.

³ Baked weight.

Comparing January, 1919, with January, 1918, the increase in the cost of all articles combined was 16 per cent. In the year period cheese shows the greatest increase, or 29 per cent. Round steak, chuck roast, and plate beef were all 27 per cent higher than in January, 1918, while sirloin and rib roast show an increase of 26 per cent. Bacon increased 20 per cent; ham 23 per cent; lard 2 per cent; hens 22 per cent; milk 16 per cent; and butter 24 per cent. Since last January, corn meal has decreased 11 per cent; navy beans 20 per cent, and onions 18 per cent.

For January, 1919, prices are shown for 13 new articles of food.

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

Article.	Unit.	Average retail price, Jan. 15—							Per cent of increase (+) or decrease (-), Jan. 15 of each specified year compared with Jan. 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..	23.8	25.1	25.4	25.7	27.6	32.7	41.1	+ 5	+ 7	+ 8	+ 16	+ 37	+ 73
Round steak.....	do.	20.6	22.8	22.8	22.8	24.7	30.6	39.0	+11	+11	+11	+20	+49	+89
Rib roast.....	do.	14.7	19.7	19.9	19.9	21.6	25.8	32.6	+ 5	+ 6	+ 6	+ 16	+ 38	+ 74
Chuck roast.....	do.	18.9	16.9	16.3	16.2	17.4	22.1	28.0	.....	.....	.....	.....	.....	.....
Plate beef.....	do.	11.0	12.3	12.4	12.0	13.2	17.2	21.9	.....	.....	.....	.....	.....	.....
Pork chops.....	do.	18.6	20.7	18.6	18.6	23.6	34.3	40.6	+11	(1)	(1)	+27	+84	+118
Bacon, sliced.....	do.	25.5	26.4	27.3	27.3	29.6	48.6	58.5	+ 4	+ 7	+ 7	+ 16	+ 91	+129
Ham, sliced.....	do.	25.3	26.5	26.5	29.4	30.6	43.6	53.6	+ 5	+ 5	+16	+21	+72	+112
Lamb.....	do.	18.0	18.8	20.6	20.5	23.9	30.8	36.1	+ 4	+14	+14	+33	+71	+101
Hens.....	do.	20.3	21.2	20.3	21.7	25.5	32.9	40.0	+ 4	(1)	+ 7	+ 26	+ 62	+ 97
Salmon, canned.....	do.	.....	.....	19.8	20.0	21.4	29.2	32.1	.....	.....	.....	.....	.....	.....
Milk, fresh.....	Quart..	8.9	9.1	9.0	8.9	9.9	13.4	15.6	+ 2	+ 1	(1)	+ 11	+ 51	+ 75
Milk, evaporated (unsweetened).....	(?)	.....	.....	.....	.....	.....	16.3	.....	.....	.....	.....	.....	.....	.....
Butter.....	Pound..	41.0	39.8	38.6	38.2	45.3	56.7	70.5	- 3	- 6	- 7	+ 10	+ 38	+ 72
Oleomargarine.....	do.	.....	.....	.....	.....	.....	39.6	.....	.....	.....	.....	.....	.....	.....
Nut margarine.....	do.	.....	.....	.....	.....	.....	36.4	.....	.....	.....	.....	.....	.....	.....
Cheese.....	do.	.....	.....	23.2	24.3	31.2	34.5	44.5	.....	.....	.....	.....	.....	.....
Lard.....	do.	15.4	15.8	15.4	17.5	21.4	32.9	33.4	+ 3	(1)	+14	+39	+114	+117
Crisco.....	do.	.....	.....	.....	.....	.....	33.5	.....	.....	.....	.....	.....	.....	.....
Eggs, strictly fresh.....	Dozen..	37.1	43.5	44.3	42.4	54.4	67.4	75.2	+17	+19	+14	+47	+82	+103
Eggs, storage.....	do.	.....	.....	.....	.....	.....	59.9	.....	.....	.....	.....	.....	.....	.....
Bread.....	Pound ² ..	5.6	6.2	6.8	7.0	7.9	9.3	9.8	+11	+21	+25	+41	+66	+75
Flour.....	do.	3.3	3.2	4.0	3.9	5.6	6.6	6.6	- 3	+21	+18	+70	+100	+100
Corn meal.....	do.	3.0	3.1	3.3	3.2	4.0	7.0	6.2	+ 3	+10	+ 7	+33	+133	+107
Corn flakes.....	(4)	.....	.....	.....	.....	.....	14.1	.....	.....	.....	.....	.....	.....	.....
Cream of wheat.....	(5)	.....	.....	.....	.....	.....	25.9	.....	.....	.....	.....	.....	.....	.....
Rice.....	Pound..	.....	.....	9.1	9.1	9.1	11.7	13.8	.....	.....	.....	.....	.....	.....
Beans, navy.....	do.	.....	.....	7.3	9.1	14.5	18.5	14.9	.....	.....	.....	.....	.....	.....
Potatoes.....	do.	1.6	1.9	1.5	2.4	3.9	3.2	3.2	+19	- 6	+50	+144	+100	+100
Onions.....	do.	.....	.....	3.4	4.1	6.9	5.0	4.1	.....	.....	.....	.....	.....	.....
Cabbage.....	do.	.....	.....	.....	.....	.....	4.1	.....	.....	.....	.....	.....	.....	.....
Beans, baked.....	No. 2 can	.....	.....	.....	.....	.....	19.1	.....	.....	.....	.....	.....	.....	.....
Corn, canned.....	do.	.....	.....	.....	.....	.....	20.0	.....	.....	.....	.....	.....	.....	.....
Peas, canned.....	do.	.....	.....	.....	.....	.....	19.3	.....	.....	.....	.....	.....	.....	.....
Tomatoes, canned.....	do.	.....	.....	.....	.....	.....	17.6	.....	.....	.....	.....	.....	.....	.....
Sugar, granulated.....	Pound..	5.8	5.2	6.0	6.7	8.0	9.5	10.8	-10	+ 3	+16	+ 38	+ 64	+ 86
Tea.....	do.	.....	.....	54.6	54.6	54.6	62.3	69.2	.....	.....	.....	.....	.....	.....
Coffee.....	do.	.....	.....	29.9	29.9	29.9	30.4	35.0	.....	.....	.....	.....	.....	.....
Fruites.....	do.	.....	.....	13.7	13.3	13.9	16.4	19.8	.....	.....	.....	.....	.....	.....
Raisins.....	do.	.....	.....	12.5	12.6	14.1	15.0	16.1	.....	.....	.....	.....	.....	.....
Bananas.....	Dozen..	.....	.....	.....	.....	.....	37.0	.....	.....	.....	.....	.....	.....	.....
Oranges.....	do.	.....	.....	.....	.....	.....	51.5	.....	.....	.....	.....	.....	.....	.....
All articles combined..	.....	.....	.....	.....	.....	.....	.....	.....	+ 5	+ 5	+ 9	+ 30	+ 63	+ 83

¹ No change in price.
² 15-16-ounce can.

³ Baked weight.
⁴ 8-ounce package.

⁵ 23-ounce package.

For the six-year period, January, 1913, to January, 1919, all food articles combined show an increase of 88 per cent. Since 1913 nine articles show an increase of 100 per cent or over: Flour and potatoes 100 per cent each; lamb 101 per cent; eggs 103 per cent; corn meal 107 per cent; ham 112 per cent; lard 117 per cent; pork chops 118 per cent; and bacon 129 per cent.

The eight other articles for which prices have been secured since 1913 all show an increase of 72 per cent or over.

The table following shows relative prices for the six-year period:

RELATIVE RETAIL PRICES OF FOOD ON DEC. 15, 1918, AND JAN. 15, 1913 TO 1919.

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

Articles.	Unit.	Dec. 15, 1918.	Jan. 15, 1919.	January 15—					
				1913	1914	1915	1916	1917	1918
Sirloin steak.....	Pound....	159	162	94	99	100	101	109	129
Round steak.....	do.....	171	175	92	102	102	102	111	137
Rib roast.....	do.....	161	165	95	100	101	101	109	130
Chuck roast.....	do.....	171	175	93	102	101	99	109	138
Plate beef.....	do.....	174	181	91	102	102	99	108	142
Pork chops.....	do.....	197	193	89	99	88	89	113	163
Bacon.....	do.....	217	217	94	98	101	101	110	180
Ham.....	do.....	198	199	93	98	98	109	114	162
Lard.....	do.....	216	211	97	100	97	111	136	208
Hens.....	do.....	180	188	95	100	95	101	119	154
Eggs.....	Dozen....	235	218	108	126	123	123	158	195
Butter.....	Pound....	190	184	107	104	101	100	118	148
Milk.....	Quart....	176	175	100	102	101	100	112	151
Bread.....	Pound 1/2	172	196	100	110	120	124	140	166
Flour.....	Pound....	203	200	100	98	124	120	171	200
Corn meal.....	do.....	213	207	99	104	109	107	132	233
Potatoes.....	do.....	188	188	91	108	85	136	225	188
Sugar.....	do.....	196	196	106	95	110	123	146	173
All articles combined.....		187	185	98	104	103	107	128	160

¹ Baked weight.

The prices shown in the tables following are computed from reports sent monthly to the bureau by retail dealers. As some dealers occasionally fail to report, the number of quotations varies from month to month.

AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD FOR JAN. 15, 1913, 1914, 1917, 1918, 1919, AND DEC. 15, 1918, FOR 19 CITIES.

Article.	Unit.	Atlanta, Ga.						Baltimore, Md.						Birmingham, Ala.						Boston, Mass.					
		Jan. 15—				Dec. 15, 1918.	Jan. 15, 1919.	Jan. 15—				Dec. 15, 1918.	Jan. 15, 1919.	Jan. 15—				Dec. 15, 1918.	Jan. 15, 1919.	Jan. 15—				Dec. 15, 1918.	Jan. 15, 1919.
		1913	1914	1917	1918			1913	1914	1917	1918			1913	1914	1917	1918			1913	1914	1917	1918		
						Cts.	Cts.					Cts.	Cts.					Cts.	Cts.					Cts.	Cts.
Sirloin steak.....	Pound.....	23.6	23.6	25.0	30.0	39.4	39.2	20.7	22.8	25.2	32.7	44.0	44.5	25.0	28.0	27.5	35.0	40.7	40.7	35.2	32.5	36.0	42.6	56.1	55.1
Round steak.....	do.....	20.5	20.7	21.3	28.8	36.4	36.9	19.0	21.6	24.2	31.5	42.9	43.6	19.6	23.0	24.6	30.5	36.6	37.7	32.0	33.8	36.4	42.7	56.4	55.3
Rib roast.....	do.....	17.5	19.0	19.4	23.1	30.8	30.9	17.0	17.8	20.0	26.7	34.7	35.6	19.9	21.0	21.6	26.3	32.7	32.6	23.4	23.7	26.5	30.3	40.0	38.6
Chuck roast.....	do.....	13.5	15.3	14.9	20.2	25.8	25.9	15.0	15.2	16.6	23.1	30.4	30.8	15.1	16.5	18.4	21.9	28.3	28.3	16.3	17.3	19.7	25.3	31.2	30.4
Plate beef.....	do.....	9.8	9.5	10.5	16.0	22.1	20.5	10.8	12.8	14.0	18.3	23.7	25.1	10.0	11.5	13.3	17.1	22.0	22.5	.....	.....	.....	.....	.....	.....
Bacon, sliced.....	do.....	32.0	30.4	30.8	50.6	62.9	63.9	21.3	22.3	26.3	45.0	56.8	54.3	31.3	34.0	35.0	52.0	63.1	62.4	24.4	25.0	27.4	45.9	55.1	53.0
Ham, sliced.....	do.....	28.5	30.0	32.5	44.4	55.7	56.0	29.0	29.0	33.5	49.1	59.1	58.7	30.0	32.0	33.3	45.0	53.0	53.5	28.3	31.4	34.5	46.5	57.5	58.1
Lamb.....	do.....	20.0	20.1	25.0	31.0	38.7	35.6	17.3	18.0	27.0	32.7	36.7	38.5	20.0	22.0	24.9	35.0	37.5	38.0	21.3	21.2	27.6	33.4	37.3	40.2
Hens.....	do.....	19.5	20.9	24.0	30.9	35.6	39.6	20.0	21.3	24.8	35.1	39.7	42.0	18.7	19.3	20.3	30.1	34.8	36.9	22.0	24.5	28.3	34.9	43.4	43.3
Salmon, canned.....	do.....	.....	.....	15.9	22.8	26.4	28.5	.....	.....	17.5	26.2	27.7	28.9	.....	.....	21.3	27.2	31.2	31.8	.....	.....	20.5	30.2	32.3	32.3
Milk, fresh.....	Quart.....	10.0	10.6	12.3	17.5	20.0	21.7	8.8	8.7	9.2	13.0	17.0	17.0	10.3	10.0	13.3	15.2	20.0	20.0	8.9	8.9	10.0	14.5	16.5	16.5
Milk, evaporated(unsweetened)	15-16 oz. can.....	.....	.....	.....	.....	16.6	16.6	.....	.....	.....	.....	16.7	.....	.....	.....	.....	15.1	.....	.....	.....	.....	.....	.....	.....	16.9
Butter.....	Pound.....	42.4	40.4	45.4	58.1	71.6	74.8	42.8	40.6	48.1	59.1	74.7	77.4	44.0	43.0	48.0	59.5	75.4	77.2	38.5	38.2	44.6	54.4	68.1	71.1
Oleomargarine.....	do.....	.....	.....	.....	.....	40.1	41.5	.....	.....	.....	.....	38.6	.....	.....	.....	.....	42.0	.....	.....	.....	.....	.....	.....	.....	38.9
Nut margarine.....	do.....	.....	.....	.....	.....	40.1	41.5	.....	.....	.....	.....	36.6	.....	.....	.....	.....	40.3	.....	.....	.....	.....	.....	.....	.....	36.6
Cheese.....	do.....	.....	.....	30.0	34.7	44.2	47.3	.....	.....	32.3	35.5	45.5	47.3	.....	.....	34.0	35.6	46.6	47.8	.....	.....	29.0	33.2	37.2	39.3
Lard.....	do.....	14.8	15.5	20.0	34.4	35.3	34.9	14.0	14.7	20.3	33.2	34.0	33.0	15.3	15.9	20.5	32.7	34.0	33.1	15.4	15.8	21.7	33.4	34.9	33.3
Crisco.....	do.....	.....	.....	.....	.....	36.3	36.3	.....	.....	.....	.....	32.4	.....	.....	.....	.....	33.7	.....	.....	.....	.....	.....	.....	.....	33.6
Eggs, strictly fresh.....	Dozen.....	30.6	39.3	49.6	67.5	77.9	70.2	33.8	38.8	54.8	74.1	78.6	73.8	33.8	38.8	49.0	68.3	81.3	74.3	41.0	47.3	62.9	79.1	96.8	90.2
Eggs, storage.....	do.....	25.0	35.0	41.9	59.0	68.8	59.3	25.0	34.0	43.5	54.1	69.6	60.7	.....	.....	40.0	57.9	61.8	69.5	26.4	36.3	43.7	54.1	56.4	51.8
Bread.....	Pound.....	.....	.....	.....	10.0	10.0	10.0	.....	.....	.....	8.7	9.7	9.7	.....	.....	10.0	11.7	11.7	.....	.....	.....	.....	.....	.....	8.7
Flour.....	Pound.....	3.6	3.4	5.4	7.0	6.8	6.9	3.2	3.1	5.5	6.6	7.0	6.8	3.8	3.8	5.8	6.7	7.0	7.2	3.7	3.6	6.2	7.4	6.7	6.8
Corn meal.....	do.....	2.4	2.7	3.1	5.0	5.7	5.8	2.6	2.5	3.3	6.1	6.1	5.9	2.1	2.6	3.3	5.1	5.4	5.3	3.5	3.6	4.4	7.7	6.9	6.8
Corn flakes.....	8-oz pkg.....	.....	.....	.....	.....	14.2	14.2	.....	.....	.....	.....	13.5	.....	.....	.....	.....	14.8	.....	.....	.....	.....	.....	.....	.....	13.8
Cream of wheat.....	28-oz. pkg.....	.....	.....	.....	.....	25.8	25.8	.....	.....	.....	.....	23.4	.....	.....	.....	.....	25.2	.....	.....	.....	.....	.....	.....	.....	24.2
Rice.....	Pound.....	.....	.....	7.3	11.1	14.3	14.4	.....	.....	9.8	11.5	14.2	13.6	.....	.....	9.0	12.5	13.7	13.4	.....	.....	9.8	12.0	14.0	14.0
Beans, navy.....	do.....	.....	.....	14.2	19.0	17.5	17.1	.....	.....	14.5	18.6	16.9	15.8	.....	.....	16.5	19.2	17.5	17.4	.....	.....	14.8	18.8	15.6	15.4
Potatoes.....	do.....	2.0	2.3	4.3	3.9	4.2	4.2	1.7	1.8	4.1	3.6	3.5	3.4	1.9	2.3	4.5	3.9	3.9	4.3	1.7	2.0	4.0	3.7	4.2	3.3
Onions.....	do.....	.....	.....	7.6	5.9	5.3	5.6	.....	.....	7.5	5.1	4.2	3.8	.....	.....	7.6	6.0	4.5	4.6	.....	.....	.....	.....	.....	3.8
Cabbage.....	do.....	.....	.....	.....	.....	4.9	4.9	.....	.....	.....	.....	4.1	.....	.....	.....	.....	4.7	.....	.....	.....	.....	.....	.....	.....	4.1
Beans, baked.....	No 2 can.....	.....	.....	.....	.....	19.3	19.3	.....	.....	.....	.....	17.3	.....	.....	.....	.....	20.5	.....	.....	.....	.....	.....	.....	.....	20.1
Corn, canned.....	do.....	.....	.....	.....	.....	21.7	21.7	.....	.....	.....	.....	20.4	.....	.....	.....	.....	20.6	.....	.....	.....	.....	.....	.....	.....	21.2
Peas, canned.....	do.....	.....	.....	.....	.....	22.3	22.3	.....	.....	.....	.....	18.7	.....	.....	.....	.....	20.6	.....	.....	.....	.....	.....	.....	.....	21.1
Tomatoes, canned.....	do.....	.....	.....	.....	.....	16.0	16.0	.....	.....	.....	.....	16.2	.....	.....	.....	.....	16.6	.....	.....	.....	.....	.....	.....	.....	20.3
Sugar, granulated.....	Pound.....	6.1	5.5	8.2	10.4	10.9	11.1	5.1	4.7	7.5	9.4	10.4	10.4	5.7	5.3	8.8	9.6	10.9	10.9	5.8	5.2	7.8	9.9	10.8	10.7
Tea.....	do.....	.....	.....	62.0	79.3	87.1	89.9	.....	.....	55.0	65.3	73.1	73.2	.....	.....	70.0	76.2	84.2	83.7	.....	.....	60.0	61.7	66.4	66.0
Coffee.....	do.....	.....	.....	28.8	29.7	32.1	34.0	.....	.....	23.5	27.7	31.0	33.8	.....	.....	31.0	32.8	36.0	36.8	.....	.....	33.4	34.6	38.1	38.9
Prunes.....	do.....	.....	.....	14.0	16.7	19.2	18.5	.....	.....	13.0	16.6	19.1	19.4	.....	.....	14.0	14.8	16.7	18.4	.....	.....	14.3	16.7	19.6	20.5
Raisins.....	do.....	14.8	17.1	18.3	18.2	12.0	15.3	16.3	17.8	14.9	15.3	17.1	18.2	14.0	14.8	15.8	15.9
Oranges.....	Dozen.....	27.7	27.7	30.0	39.1	33.8
.....	do.....	39.3	39.3	46.2	44.8	52.6

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Article.	Unit.	Buffalo, N. Y.						Chicago, Ill.						Cleveland, Ohio.						Denver, Colo.									
		Jan. 15—				Dec. 15, 1918.	Jan. 15, 1919.	Jan. 15—				Dec. 15, 1918.	Jan. 15, 1919.	Jan. 15—				Dec. 15, 1918.	Jan. 15, 1919.	Jan. 15—				Dec. 15, 1918.	Jan. 15, 1919.				
		1913	1914	1917	1918	1918.	1919.	1913	1914	1917	1918	1918.	1919.	1913	1914	1917	1918	1918.	1919.	1913	1914	1917	1918	1918.	1919.	1913	1914	1917	1918	1918.	1919.
Sirloin steak.....	Pound.....	Cts. 20.3	Cts. 21.5	Cts. 25.3	Cts. 31.4	Cts. 38.5	Cts. 39.1	Cts. 21.0	Cts. 24.8	Cts. 26.5	Cts. 30.2	Cts. 37.0	Cts. 37.5	Cts. 22.3	Cts. 24.7	Cts. 27.0	Cts. 30.2	Cts. 36.3	Cts. 37.8	Cts. 22.0	Cts. 22.9	Cts. 22.5	Cts. 29.2	Cts. 25.4	Cts. 35.4	Cts. 37.9	Cts. 35.4	Cts. 36.9	
Round steak.....	do.....	18.3	19.2	22.7	29.2	36.5	36.8	18.2	21.2	22.7	27.3	33.7	34.0	18.8	22.0	24.2	28.8	34.0	35.5	19.0	20.7	18.8	27.6	31.5	34.0	31.5	34.0		
Rib roast.....	do.....	17.0	16.8	19.3	25.0	30.3	32.1	18.2	19.6	22.3	25.4	30.8	31.1	17.8	19.1	21.2	24.4	28.0	29.6	15.9	16.7	18.0	22.5	26.8	28.6	28.6	28.6		
Chuck roast.....	do.....	14.7	15.5	17.0	22.3	26.3	28.6	14.3	15.8	16.7	21.2	27.0	27.5	14.7	16.4	18.0	22.4	26.5	27.6	14.0	15.3	16.1	20.3	24.2	25.2	25.2	25.2		
Plate beef.....	do.....	10.7	11.8	13.5	17.5	22.1	23.1	10.9	11.9	13.0	16.4	20.7	20.7	10.4	12.0	12.7	16.8	19.6	20.7	9.1	9.7	10.1	14.8	17.3	19.1	19.1	19.1		
Pork chops.....	do.....	18.0	19.5	20.0	35.4	40.1	41.4	16.0	17.9	22.7	31.6	36.4	35.2	17.5	19.9	25.5	33.1	39.7	39.5	17.5	18.6	21.8	33.3	38.9	40.0	40.0	40.0		
Bacon, sliced.....	do.....	20.3	21.0	16.3	44.3	53.7	52.9	31.3	31.0	31.6	49.8	59.5	61.6	23.9	27.4	30.1	47.0	58.4	58.7	26.3	27.4	31.7	51.8	60.5	61.3	61.3	61.3		
Ham, sliced.....	do.....	24.0	25.0	32.7	45.1	52.3	53.1	30.8	32.0	33.8	42.8	53.4	55.3	32.0	33.5	35.0	45.6	57.4	57.6	27.0	28.3	33.3	46.7	57.8	59.3	59.3	59.3		
Lamb.....	do.....	17.5	16.7	22.3	29.1	30.3	32.9	18.7	19.7	23.2	30.6	33.1	34.2	17.3	19.1	27.0	30.1	31.5	33.6	15.0	15.1	19.3	30.6	32.7	30.6	30.6	30.6		
Hens.....	do.....	19.0	20.0	25.8	32.8	38.1	41.5	17.4	17.8	23.7	30.4	31.9	33.5	19.3	20.6	28.0	33.8	36.8	39.1	20.4	19.7	21.5	30.5	32.7	35.8	35.8	35.8		
Salmon, canned.....	do.....	18.5	28.6	29.0	28.9	28.9	28.9	23.1	30.3	32.3	31.6	31.6	31.6	19.7	28.2	30.1	30.6	30.6	30.6	18.1	27.6	30.9	32.5	32.5	32.5	32.5	32.5		
Milk, fresh.....	Quart.....	8.0	8.0	10.0	14.0	16.0	16.0	8.0	8.0	9.0	11.9	14.0	14.0	8.8	8.0	10.0	13.0	15.0	15.0	8.4	8.4	8.3	11.5	13.0	12.6	12.6	12.6		
Milk, evaporated (unsweetened)	15-16-oz. can.....					16.8	16.8					16.0						16.6	16.6										
Butter.....	Pound.....	40.2	39.8	44.3	57.0	74.0	75.5	39.9	38.1	43.8	54.4	72.7	71.3	41.8	42.8	48.7	57.1	76.9	76.0	40.0	39.4	43.8	54.3	70.1	73.3	73.3	73.3		
Oleomargarine.....	do.....					39.0	39.0					37.4						39.7	39.7										
Nut margarine.....	do.....					33.7	33.7					34.6						35.2	35.2										
Cheese.....	do.....			30.0	33.6	40.6	42.4			32.1	37.5	43.2	43.9			31.7	33.8	39.3	42.6			32.5	35.8	41.6	43.1	43.1	43.1		
Lard.....	do.....	14.1	14.3	19.5	31.9	32.8	31.5	14.8	15.0	20.3	31.8	32.4	31.4	15.8	16.3	22.4	31.6	34.2	32.7	15.6	16.3	21.6	34.2	34.8	34.2	34.2	34.2		
Crisco.....	do.....					31.6	31.6					33.1						32.7	32.7										
Eggs, strictly fresh.....	Dozen.....	37.7	43.5	58.8	71.8	79.1	75.5	32.7	38.8	52.5	65.1	72.8	69.5	35.0	44.8	61.9	72.5	83.6	77.9	37.0	43.6	52.5	61.2	70.0	74.8	74.8	74.8		
Eggs, storage.....	do.....	23.3	34.0	41.7	52.6	58.5	64.8	23.8	33.5	44.9	53.4	66.4	59.4	24.5	36.0	46.3	52.4	59.6	60.2	25.0	33.5	40.0	50.9	56.3	58.8	58.8	58.8		
Bread.....	Pound ¹				9.3	9.8	9.7				9.2	10.2	10.2					9.0	10.0			10.0	11.1	11.9	11.9	11.9	11.9		
Flour.....	do.....	2.9	2.9	5.3	6.2	6.3	6.2	2.8	2.9	5.1	6.1	6.3	6.1	3.2	3.2	5.8	6.6	6.6	6.6	2.6	2.5	4.9	5.4	6.0	6.0	6.0	6.0		
Corn meal.....	do.....	2.5	2.7	4.1	7.7	6.2	5.8	2.9	3.0	4.2	7.0	6.3	5.8	2.8	2.9	4.1	7.2	6.0	6.2	2.5	2.6	3.2	5.9	5.7	5.6	5.6	5.6		
Corn flakes.....	8-oz. package.....					13.2	13.2					12.7						13.9	13.9										
Cream of wheat.....	28-oz. package.....					24.5	24.5					24.2						24.7	24.7										
Rice.....	Pound.....			9.3	11.9	13.6	13.7			9.4	12.0	13.7	13.7			9.2	11.9	14.5	14.5			9.2	11.5	14.6	14.2	14.2	14.2		
Beans, navy.....	do.....			13.6	19.3	14.6	13.8			14.8	18.5	15.0	14.1			15.3	18.1	14.3	13.9			12.4	17.7	15.2	14.7	14.7	14.7		
Potatoes.....	do.....	1.4	1.8	4.0	3.1	2.7	2.7	1.3	1.7	4.0	2.8	2.5	2.7	1.4	2.0	4.2	3.0	3.0	3.1	1.2	1.7	3.2	2.2	2.7	2.7	2.7	2.7		
Onions.....	do.....			7.0	5.4	3.7	3.6			6.8	4.5	3.4	3.5			7.1	4.8	3.3	3.4			5.6	4.7	3.7	3.7	3.7	3.7		
Cabbage.....	do.....					3.0	3.0					3.7						3.6	3.6										
Beans, baked.....	No. 2 can.....					16.7	16.7					17.3						18.2	18.2										
Corn, canned.....	do.....					20.5	20.5					18.0						20.5	20.5										
Peas, canned.....	do.....					18.3	18.3					17.0						19.4	19.4										
Tomatoes, canned.....	do.....					17.9	17.9					17.0						17.7	17.7										
Sugar, granulated.....	Pound.....	5.5	5.1	7.7	9.7	10.7	10.7	5.3	5.0	7.3	8.4	10.6	10.4	5.6	5.1	8.0	9.6	10.9	10.9	5.8	5.0	7.9	8.9	11.8	11.6	11.6	11.6		
Tea.....	do.....			47.5	55.5	62.3	63.9			54.3	59.3	62.4	64.0			47.5	59.9	67.2	64.8			48.8	57.5	64.8	65.6	65.6	65.6		
Coffee.....	do.....			28.5	30.0	31.6	34.4			30.0	28.3	30.6	32.7			28.8	28.9	31.7	34.8			28.8	30.0	31.7	35.8	35.8	35.8		
Prunes.....	do.....			13.2	16.9	20.3	20.7			14.0	16.2	19.4	20.0			13.8	17.1	19.4	20.2			13.8	16.6	19.9	20.5	20.5	20.5		
Raisins.....	do.....			12.2	14.0	14.8	14.7			14.7	15.0	15.5	15.9			13.9	14.6	15.6	15.7			13.1	14.7	15.9	16.8	16.8	16.8		
Bananas.....	Dozen.....					40.0	40.0					35.5						41.4	41.4										
Oranges.....	do.....					56.2	56.2					49.3						58.7	58.7										

¹ Baked weight.

AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD FOR JAN. 15, 1913, 1914, 1917, 1918, 1919, AND DEC. 15, 1918, FOR 19 CITIES—Con.

[7101]

Article.	Unit.	Detroit, Mich.						Los Angeles, Cal.						Milwaukee, Wis.						New Orleans, La.					
		Jan. 15—				Dec. 15, 1918.	Jan. 15, 1919.	Jan. 15—				Dec. 15, 1918.	Jan. 15, 1919.	Jan. 15—				Dec. 15, 1918.	Jan. 15, 1919.	Jan. 15—				Dec. 15, 1918.	Jan. 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.	Cts.	Cts.	Cts.
Sirloin steak	Pound	22.8	26.2	25.2	31.8	36.0	37.6	22.2	23.1	23.8	26.4	32.7	33.9	20.5	23.4	25.1	29.8	34.5	36.2	19.6	22.1	21.5	28.1	32.9	35.2
Round steak	do	18.0	21.4	22.8	28.5	32.7	34.1	20.0	21.0	21.4	24.4	31.2	31.6	18.5	21.6	26.0	28.4	33.4	34.5	17.1	19.3	19.1	25.3	29.6	31.9
Rib roast	do	18.0	20.2	21.3	25.1	28.4	29.7	17.4	19.4	19.6	23.2	29.5	29.6	17.3	18.8	20.0	24.5	28.3	29.9	18.3	19.9	19.9	24.5	28.8	29.4
Chuck roast	do	14.5	15.6	16.5	21.0	23.9	25.7	14.7	16.6	16.8	19.2	24.6	25.0	15.9	16.4	17.4	22.5	26.1	27.6	12.1	14.9	13.8	18.3	21.9	25.3
Plate beef	do	10.6	11.7	12.8	16.7	18.1	20.0	11.8	13.5	13.8	15.7	20.3	20.7	10.5	11.7	12.8	16.7	20.0	20.8	10.9	11.6	12.3	16.8	20.2	21.6
Pork chops	do	16.5	17.6	21.8	33.3	38.5	37.9	24.4	25.6	26.0	37.3	46.3	45.7	15.3	17.8	22.6	32.1	37.3	36.6	20.0	22.9	25.5	35.0	43.2	43.6
Bacon, sliced	do	21.0	22.8	25.3	45.8	56.1	55.8	33.8	33.5	35.0	53.3	66.7	67.0	25.5	27.4	30.5	48.9	57.8	57.7	29.8	29.9	34.0	51.9	63.7	63.3
Ham, sliced	do	23.5	28.0	30.0	42.3	56.1	57.5	35.0	34.1	37.9	52.3	63.1	62.9	26.0	27.8	30.9	45.1	53.1	53.7	26.3	26.0	30.0	43.8	50.6	51.8
Lamb	do	16.0	16.6	22.5	31.3	31.8	35.2	17.4	19.1	22.8	31.1	33.2	34.4	18.5	19.0	24.5	31.2	33.7	36.4	19.8	19.8	23.8	29.8	36.8	39.4
Hens	do	18.8	19.4	26.3	34.2	35.2	38.9	26.8	27.4	28.0	36.0	46.0	46.3	17.8	19.0	24.5	30.4	33.8	35.0	20.8	21.6	25.3	33.0	37.0	41.5
Salmon, canned	do			19.5	28.6	31.6	31.8			28.7	32.9	33.3	38.7			21.9	27.8	31.6	31.0			31.3	34.5	36.6	39.4
Milk, fresh	Quart	9.0	8.9	11.0	14.0	15.0	15.0	10.0	10.0	9.0	14.0	14.0	14.0	7.0	7.0	8.0	11.0	13.0	13.0	10.0	9.7	11.5	14.2	16.0	16.3
Milk, evaporated (unsweetened)	15-16-oz. can					16.4							15.9					16.2						15.8	
Butter	Pound	39.7	39.9	44.3	55.6	73.4	74.4	44.5	38.5	43.3	57.4	69.6	73.0	38.0	38.5	44.8	54.4	74.1	74.0	41.1	40.1	47.3	56.8	75.2	76.3
Oleomargarine	do					39.8							41.9					38.8						40.2	
Nut margarine	do					35.3							38.2					34.7						36.4	
Cheese	do			30.5	33.8	42.8	44.4			28.8	33.3	43.0	45.9			31.3	33.5	44.9	46.1			31.4	34.8	45.4	46.4
Lard	do	15.6	16.1	20.8	32.9	34.0	33.4	18.0	18.0	21.7	32.3	34.8	34.3	15.0	15.6	21.6	31.9	35.3	34.0	14.4	15.0	20.6	33.1	35.1	33.7
Crisco	do					33.2							33.9					33.1						33.9	
Eggs, strictly fresh	Dozen	35.0	43.2	58.3	72.6	81.9	75.1	41.0	49.6	45.0	62.1	82.9	67.1	34.6	38.2	52.8	63.0	71.3	70.8	35.6	38.0	45.8	58.6	72.5	72.1
Eggs, storage	do	25.2	36.5	44.3	52.8	56.9	61.3				49.3	57.9	59.4	25.3	33.3	42.6	49.1	51.8	52.6			49.2	56.6	59.3	
Bread	Pound				8.7	9.5	9.5				8.9	8.9	8.9				8.8	9.2	8.6				9.1	9.2	9.2
Flour	Pound	3.1	3.1	5.4	6.2	6.5	6.4	3.4	3.5	5.5	6.3	7.1	7.1	3.1	3.1	5.6	6.2	6.5	6.4	3.7	3.7	6.1	7.2	7.3	7.4
Corn meal	do	2.8	3.0	4.0	7.7	6.5	6.5	3.3	3.5	4.6	7.5	7.1	6.9	3.3	3.3	4.7	7.1	6.6	6.5	2.6	2.6	3.8	6.3	5.9	5.4
Corn flakes	8-oz. package					13.8							13.7					14.3						14.2	
Cream of wheat	28-oz. package					25.1							24.7					24.8						24.8	
Rice	Pound			8.6	11.8	14.0	13.7			8.9	11.0	13.8	13.7			9.5	11.8	14.4	14.3			7.4	10.6	12.2	12.0
Beans, navy	do			14.4	17.9	14.0	13.5			13.0	16.7	14.8	14.1			14.7	19.0	14.3	14.0				17.6	15.1	14.5
Potatoes	do	1.3	1.6	4.1	2.9	2.5	2.6	1.1	1.9	3.5	2.5	3.1	3.1	1.2	1.6	4.1	2.7	2.7	2.8	2.0	2.3	4.8	3.8	3.9	4.0
Onions	do			6.5	5.3	3.9	4.0			7.2	4.8	3.3	3.7			7.2	4.8	3.5	3.8				4.7	4.0	4.1
Cabbage	do					4.5						2.7						3.8						3.0	
Beans, baked	No. 2 can					18.3						19.6						18.5						18.9	
Corn, canned	do					19.7						19.2						17.6						18.8	
Peas, canned	do					17.9						19.9						17.1						18.6	
Tomatoes, canned	do					17.5						17.2						17.5						15.3	
Sugar, granulated	Pound	5.2	5.0	7.4	8.7	10.8	10.8	5.9	5.2	7.3	8.7	10.6	10.6	5.5	5.3	7.7	8.6	11.5	10.9	5.7	4.9	8.0	9.6	10.4	10.5
Tea	do			45.0	54.4	63.6	62.0			53.3	58.6	70.3	68.8			54.0	59.5	66.2	67.0			63.0	62.6	63.9	64.5
Coffee	do			27.5	29.8	31.5	35.0			30.5	31.2	31.7	34.5			28.3	26.1	28.8	32.1			28.4	26.6	28.6	32.4
Prunes	do			12.9	16.8	18.5	20.3			12.4	14.6	20.4	20.3			15.0	15.8	17.2	19.6			15.9	18.1	19.0	
Raisins	do			12.8	13.8	15.6	15.9			11.0	13.8	15.6	16.7			14.2	15.1	15.3	15.6			15.1	16.8	17.1	
Bananas	Dozen					30.1						38.1						35.0						20.0	
Oranges	do					53.8						39.3						52.9						43.8	

Article.	Unit.	New York, N. Y.						Philadelphia, Pa.						Pittsburgh, Pa.						St. Louis, Mo.					
		Jan. 15—				Dec.	Jan.	Jan. 15—				Dec.	Jan.	Jan. 15—				Dec.	Jan.						
		1913	1914	1917	1918	15, 1918.	15, 1919.	1913	1914	1917	1918	15, 1918.	15, 1919.	1913	1914	1917	1918	15, 1918.	15, 1919.	1913	1914	1917	1918	15, 1918.	15, 1919.
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Sirloin steak.....	Pound.....	24.4	25.6	28.4	34.4	43.0	44.8	28.3	30.0	32.8	38.7	49.5	50.4	24.8	27.2	29.0	36.0	45.6	47.3	22.7	27.3	25.9	30.0	36.7	37.0
Round steak.....	do.....	23.1	25.1	27.5	35.2	45.4	47.3	23.1	25.7	28.6	36.0	46.4	47.4	21.4	22.8	25.9	33.2	42.6	44.0	19.3	24.3	24.6	29.6	35.6	36.5
Rib roast.....	do.....	21.0	21.8	23.8	29.4	39.6	40.9	21.4	21.9	23.8	29.6	37.5	38.2	20.4	21.3	23.3	27.2	34.9	36.7	16.8	20.5	21.3	25.7	30.3	29.7
Chuck roast.....	do.....	14.9	16.1	17.3	23.6	31.0	32.7	16.5	18.0	19.7	25.3	31.8	32.7	15.4	17.0	18.9	23.9	30.1	31.9	13.3	15.9	16.6	21.5	25.2	24.6
Plate beef.....	do.....	13.7	14.7	16.1	22.1	26.7	28.0	10.5	11.7	13.1	18.3	22.1	22.2	10.8	12.8	12.9	17.5	21.8	23.2	9.2	14.1	12.9	17.2	21.1	20.7
Pork chops.....	do.....	19.5	21.6	24.8	34.8	42.7	43.5	19.8	21.7	25.5	37.2	43.8	42.9	19.4	21.5	24.7	35.6	40.4	43.6	17.7	18.5	22.3	30.3	38.3	35.1
Bacon, sliced.....	do.....	23.0	25.1	27.2	46.2	55.2	54.8	23.6	25.4	30.1	46.8	58.0	58.2	27.2	28.3	30.8	50.5	61.6	61.7	23.0	25.0	27.5	50.0	55.3	54.6
Ham, sliced.....	do.....	27.8	29.0	32.5	46.9	55.4	57.1	29.1	29.6	36.3	48.8	57.6	58.3	29.0	29.1	35.0	47.0	58.6	59.6	25.0	30.0	30.0	45.7	55.5	56.7
Lamb.....	do.....	15.9	15.9	21.7	28.1	29.4	33.6	17.7	19.0	25.1	31.4	36.5	38.9	21.3	20.7	27.1	34.5	36.5	39.6	17.7	17.1	24.7	30.6	32.4	34.1
Hens.....	do.....	19.8	21.3	26.1	32.6	40.1	40.8	20.8	22.9	27.7	33.8	41.9	43.1	24.3	25.8	30.0	38.8	44.8	46.3	17.8	17.5	22.7	30.1	31.5	34.7
Salmon, canned.....	do.....	.....	.....	25.3	35.5	35.2	37.0	.....	.....	17.5	26.6	29.6	30.0	.....	.....	21.3	30.5	31.2	31.0	.....	.....	19.1	28.5	32.4	32.3
Milk, fresh.....	Quart.....	9.0	9.0	10.0	15.0	17.0	16.0	8.0	8.0	9.0	13.5	14.0	14.0	8.8	9.2	10.3	13.7	15.0	15.0	8.0	8.8	9.5	13.0	14.0	14.0
Milk, evaporated (umsweetened)	15-16 oz. can.....	.....	.....	.....	.....	16.1	.....	.....	.....	.....	.....	16.0	.....	.....	.....	.....	.....	15.8	.....	.....	.....	.....	.....	.....	16.3
Butter.....	Pound.....	40.8	39.8	46.0	57.4	76.2	75.5	46.4	46.1	51.1	62.4	78.9	80.4	41.9	42.3	47.3	58.6	76.3	78.0	40.7	39.8	45.8	58.1	75.5	76.8
Oleomargarine.....	do.....	.....	.....	.....	.....	37.2	.....	.....	.....	.....	.....	41.1	.....	.....	.....	.....	.....	40.3	.....	.....	.....	.....	.....	.....	37.5
Nut margarine.....	do.....	.....	.....	.....	.....	34.3	.....	.....	.....	.....	.....	36.4	.....	.....	.....	.....	.....	36.9	.....	.....	.....	.....	.....	.....	35.5
Cheese.....	do.....	.....	.....	30.1	34.4	40.4	42.7	.....	.....	31.8	36.2	41.9	44.6	.....	.....	31.3	35.2	43.6	44.3	.....	.....	30.9	35.2	44.0	45.7
Lard.....	do.....	.....	.....	21.3	33.0	34.1	33.1	14.4	15.1	21.1	33.6	33.9	33.3	15.6	15.6	21.3	33.4	34.4	33.6	13.1	13.0	18.7	28.6	31.6	28.9
Crisco.....	do.....	15.9	15.9	.....	.....	32.3	.....	.....	.....	.....	.....	32.3	.....	.....	.....	.....	.....	33.3	.....	.....	.....	.....	.....	.....	33.3
Eggs, strictly fresh.....	Dozen.....	42.6	49.9	66.7	80.8	90.3	78.1	38.4	44.0	62.3	74.1	82.8	78.6	37.6	43.1	59.3	74.7	80.3	79.2	29.3	38.3	48.3	68.4	71.9	69.9
Eggs, storage.....	do.....	27.4	37.7	45.5	53.6	60.4	61.1	25.2	34.7	44.6	52.9	62.4	64.5	25.0	36.1	43.8	53.9	60.8	62.2	25.0	30.0	41.7	52.5	56.6	57.9
Bread.....	Pound ¹.....	.....	.....	.....	9.1	9.0	10.0	.....	.....	.....	8.0	9.4	9.4	.....	.....	.....	.....	9.3	10.0	.....	.....	.....	10.0	10.0	10.0
Corn meal.....	Pound.....	3.3	3.2	5.6	7.0	6.9	6.8	3.2	3.1	5.6	7.1	6.5	6.7	3.0	3.1	5.6	7.0	6.7	6.6	3.1	2.8	5.2	6.1	6.3	6.3
Corn flakes.....	do.....	3.5	3.5	5.1	8.2	7.5	6.3	2.8	2.8	3.8	7.1	6.3	6.4	2.7	2.9	4.3	8.8	7.2	6.9	2.3	2.6	3.5	5.9	5.1	5.3
Cream of wheat.....	8-oz. package.....	.....	.....	.....	.....	12.4	.....	.....	.....	.....	.....	12.8	.....	.....	.....	.....	.....	14.3	.....	.....	.....	.....	.....	.....	14.2
Rice.....	28-oz. package.....	.....	.....	.....	.....	24.0	.....	.....	.....	.....	.....	24.3	.....	.....	.....	.....	.....	25.5	.....	.....	.....	.....	.....	.....	24.8
Beans, navy.....	Pound.....	.....	.....	9.1	11.8	13.9	13.8	.....	.....	9.7	12.8	14.7	14.7	.....	.....	9.5	11.9	14.5	14.4	.....	.....	8.6	11.2	13.7	13.6
Potatoes.....	do.....	.....	.....	14.9	18.5	15.8	15.3	.....	.....	14.3	18.7	15.0	14.7	.....	.....	15.0	19.7	15.3	14.6	.....	.....	14.3	17.9	14.4	13.9
Onions.....	do.....	2.5	2.5	4.8	4.3	4.0	4.0	2.1	2.4	4.6	3.9	4.3	4.1	1.5	1.9	4.4	3.3	3.1	3.2	1.7	1.6	3.9	3.0	2.9	3.1
Cabbage.....	do.....	.....	.....	7.2	5.2	4.3	4.2	.....	.....	7.7	5.5	3.7	3.5	.....	.....	8.5	5.1	4.0	4.2	.....	.....	8.5	4.6	3.9	4.2
Beans, baked.....	No. 2 can.....	.....	.....	.....	.....	3.9	.....	.....	.....	.....	.....	4.3	.....	.....	.....	.....	.....	4.4	.....	.....	.....	.....	.....	.....	5.0
Corn, canned.....	do.....	.....	.....	.....	.....	17.7	.....	.....	.....	.....	.....	16.0	.....	.....	.....	.....	.....	18.8	.....	.....	.....	.....	.....	.....	16.3
Peas, canned.....	do.....	.....	.....	.....	.....	19.7	.....	.....	.....	.....	.....	20.1	.....	.....	.....	.....	.....	19.7	.....	.....	.....	.....	.....	.....	16.8
Tomatoes, canned.....	do.....	.....	.....	.....	.....	18.5	.....	.....	.....	.....	.....	19.1	.....	.....	.....	.....	.....	19.5	.....	.....	.....	.....	.....	.....	17.3
Sugar, granulated.....	Pound.....	5.1	4.7	7.4	9.7	10.4	10.1	5.2	4.4	7.6	9.6	10.2	10.1	6.0	5.4	8.6	9.9	10.9	10.9	5.8	4.7	7.5	8.7	11.1	10.9
Tea.....	do.....	.....	.....	46.0	54.1	53.9	53.5	.....	.....	.....	.....	54.4	57.6	59.0	62.6	.....	.....	57.1	72.7	80.1	79.3	.....	.....	.....	73.2
Coffee.....	do.....	.....	.....	26.5	26.7	30.5	32.4	.....	.....	.....	.....	28.3	27.2	29.6	32.7	.....	.....	28.1	30.2	32.0	34.9	.....	.....	.....	34.9
Fruits.....	do.....	.....	.....	13.9	16.8	22.5	22.1	.....	.....	.....	.....	14.1	16.5	20.6	21.3	.....	.....	13.9	17.2	22.1	22.0	.....	.....	.....	18.9
Raisins.....	do.....	.....	.....	13.5	15.1	15.5	15.3	.....	.....	.....	.....	12.9	14.0	14.6	.....	.....	.....	14.7	14.6	15.5	16.0	.....	.....	.....	16.4
Bananas.....	Dozen.....	.....	.....	.....	.....	32.0	.....	.....	.....	.....	.....	32.8	.....	.....	.....	.....	.....	40.8	.....	.....	.....	.....	.....	.....	34.4
Oranges.....	do.....	.....	.....	.....	.....	51.2	.....	.....	.....	.....	.....	51.1	.....	.....	.....	.....	.....	56.3	.....	.....	.....	.....	.....	.....	46.4

¹ Baked weight.

[711]

AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD FOR JAN. 15, 1913, 1914, 1917, 1918, 1919, AND DEC. 15, 1918, FOR 19 CITIES—Con.

Article.	Unit.	San Francisco, Cal.						Seattle, Wash.						Washington, D. C.					
		Jan. 15—				Dec. 15, 1918.	Jan. 15, 1919.	Jan. 15—				Dec. 15, 1918.	Jan. 15, 1919.	Jan. 15—				Dec. 15, 1918.	Jan. 15, 1919.
		1913	1914	1917	1918			1913	1914	1917	1918			1913	1914	1917	1918		
Sirloin steak.	Pound.	Cts. 20.3	Cts. 21.0	Cts. 21.4	Cts. 24.3	Cts. 32.2	Cts. 32.8	Cts. 22.0	Cts. 24.0	Cts. 23.2	Cts. 27.5	Cts. 36.3	Cts. 36.2	Cts. 25.0	Cts. 27.5	Cts. 29.2	Cts. 37.0	Cts. 50.1	Cts. 51.4
Round steak.	do.	18.7	19.7	20.0	23.7	31.6	32.0	20.0	21.2	21.2	25.6	35.4	35.4	21.4	23.4	25.0	35.1	46.5	48.4
Rib roast.	do.	20.3	22.0	21.3	23.5	30.2	30.9	18.0	19.4	20.0	22.8	31.1	31.3	20.3	21.0	21.8	28.8	39.2	40.9
Chuck roast.	do.	15.0	15.5	14.8	17.3	23.8	23.8	15.2	14.9	15.1	19.5	25.1	26.9	15.6	17.0	18.8	25.4	34.3	34.9
Plate beef.	do.	12.5	15.0	14.2	16.6	22.0	22.2	11.7	12.8	11.7	16.2	20.6	21.8	10.7	12.4	14.4	19.5	23.4	23.8
Pork chops.	do.	21.8	25.0	24.6	36.1	44.0	43.4	23.4	24.0	24.4	38.8	47.6	47.0	20.3	20.3	24.2	38.1	46.0	45.9
Bacon, sliced.	do.	32.8	34.0	36.7	53.5	63.0	62.2	30.0	32.1	31.7	53.4	63.3	62.6	23.0	24.5	27.2	48.8	58.7	55.3
Ham, sliced.	do.	30.0	32.0	40.0	48.9	59.1	58.6	30.0	31.0	31.0	46.4	56.6	57.5	28.2	28.6	32.5	47.2	58.2	58.3
Lamb.	do.	17.2	18.0	21.8	28.2	34.9	34.7	18.6	18.7	21.5	35.1	36.2	19.3	19.7	25.0	35.7	41.7	44.5	45.4
Hens.	do.	24.2	23.8	28.3	37.5	47.3	48.9	24.3	25.0	25.5	34.1	40.1	44.1	20.6	22.4	25.3	35.0	43.0	45.4
Salmon, canned.	do.	19.6	25.7	28.3	28.0	28.0	28.0	19.6	25.0	28.5	30.8	30.9	30.9	18.0	28.3	33.0	33.0	34.2	34.2
Milk, fresh.	Quart.	10.0	10.0	10.0	12.1	14.0	14.0	9.1	9.6	9.8	12.6	15.7	15.7	9.0	9.0	10.0	14.0	17.0	17.0
Milk, evap. (unsweetened).	15-16-oz. can.	10.0	10.0	10.0	12.1	14.0	14.0	9.1	9.6	9.8	12.6	15.7	15.7	9.0	9.0	10.0	14.0	17.0	17.0
Butter.	Pound.	41.4	36.1	42.5	60.2	70.6	72.3	44.6	40.9	44.7	58.7	70.9	73.3	43.4	43.0	47.8	60.0	77.0	78.4
Oleomargarine.	do.	.....	.....	.....	.....	.....	39.0	.....	.....	.....	.....	.....	43.3	.....	.....	.....	.....	38.2	38.2
Nut margarine.	do.	.....	.....	.....	.....	.....	36.3	.....	.....	.....	.....	.....	40.5	.....	.....	.....	.....	35.7	35.7
Cheese.	do.	.....	.....	24.2	33.5	40.1	41.9	.....	.....	27.5	30.6	41.2	43.2	.....	.....	30.6	35.5	44.5	46.2
Lard.	do.	17.6	17.4	22.5	33.6	34.2	33.7	17.8	17.0	21.1	32.7	33.6	33.8	14.2	14.9	19.8	33.6	34.9	33.9
Crisco.	do.	.....	.....	.....	.....	.....	34.8	.....	.....	.....	.....	.....	35.3	.....	.....	.....	.....	33.8	33.8
Eggs, strictly fresh.	Dozen.	31.4	47.9	48.0	71.0	85.0	65.7	39.0	42.5	45.3	59.5	83.6	73.5	33.1	41.0	61.3	81.3	81.8	78.3
Eggs, storage.	do.	22.5	41.3	35.0	48.8	56.6	57.0	32.5	37.5	37.3	47.5	58.6	.....	25.0	35.7	42.5	58.4	61.5	63.0
Bread.	Pound ¹.	.....	.....	.....	10.0	10.0	10.0	.....	.....	.....	9.9	10.5	10.3	.....	.....	8.7	10.1	10.0	10.0
Flour.	Pound.	3.3	3.4	5.1	6.2	7.0	7.0	2.8	2.9	4.7	5.9	6.7	6.5	3.8	3.7	5.3	7.0	6.8	6.2
Corn meal.	do.	3.4	3.4	4.4	7.1	7.1	7.3	3.1	3.4	4.1	7.3	7.3	7.2	2.6	2.5	3.0	6.6	5.6	5.5
Corn flakes.	8-oz. package.	.....	.....	.....	.....	.....	14.2	.....	.....	.....	.....	.....	14.7	.....	.....	.....	.....	14.2	14.2
Cream of wheat.	28-oz. package.	.....	.....	.....	.....	.....	24.8	.....	.....	.....	.....	.....	27.6	.....	.....	.....	.....	24.2	24.2
Rice.	Pound.	.....	.....	8.8	11.9	13.8	13.6	.....	.....	8.5	10.8	14.0	14.5	.....	.....	9.7	12.5	14.5	14.2
Beans, navy.	do.	.....	.....	14.1	16.2	13.6	13.0	.....	.....	14.6	17.7	15.8	14.8	.....	.....	14.9	20.0	15.0	14.5
Potatoes.	do.	1.6	1.9	3.2	2.7	3.0	3.0	1.0	1.4	2.6	1.9	2.4	2.3	1.6	2.0	4.0	3.5	3.0	3.1
Onions.	do.	.....	.....	7.6	3.3	2.7	2.7	.....	.....	7.6	4.1	3.9	4.0	.....	.....	6.2	5.1	3.5	3.3
Cabbage.	do.	.....	.....	.....	.....	.....	5.0	.....	.....	.....	.....	.....	4.8	.....	.....	.....	.....	3.6	3.6
Beans, baked.	No. 2 can.	.....	.....	.....	.....	.....	21.2	.....	.....	.....	.....	.....	23.3	.....	.....	.....	.....	18.6	18.6
Corn, canned.	do.	.....	.....	.....	.....	.....	19.0	.....	.....	.....	.....	.....	20.4	.....	.....	.....	.....	20.7	20.7
Peas, canned.	do.	.....	.....	.....	.....	.....	18.6	.....	.....	.....	.....	.....	19.7	.....	.....	.....	.....	20.7	20.7
Tomatoes, canned.	do.	.....	.....	.....	.....	.....	15.9	.....	.....	.....	.....	.....	19.7	.....	.....	.....	.....	17.4	17.4
Sugar, granulated.	Pound.	5.7	5.3	7.4	8.6	10.7	10.6	6.1	5.8	7.9	8.9	10.9	10.4	5.5	4.9	7.5	9.6	10.5	10.4
Tea.	do.	.....	.....	51.7	53.9	57.5	57.2	.....	.....	50.0	56.1	62.3	62.7	.....	.....	53.2	63.9	72.3	75.9
Coffee.	do.	.....	.....	31.7	30.9	31.5	34.1	.....	.....	32.0	31.8	32.0	35.4	.....	.....	29.4	29.6	31.4	33.5
Prunes.	do.	.....	.....	12.4	14.2	17.0	17.5	.....	.....	13.0	14.3	18.5	18.9	.....	.....	14.6	17.4	21.4	22.4
Raisins.	do.	.....	.....	13.5	13.8	14.2	14.5	.....	.....	13.1	14.9	15.7	15.4	.....	.....	13.7	15.2	16.7	16.0
Bananas.	Dozen.	.....	.....	.....	.....	.....	35.0	.....	.....	.....	.....	.....	46.1	.....	.....	.....	.....	40.5	40.5
Oranges.	do.	.....	.....	.....	.....	.....	49.0	.....	.....	.....	.....	.....	59.5	.....	.....	.....	.....	48.8	48.8

¹ Baked weight.

AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD FOR DEC. 15, 1918, AND JAN. 15, 1919, FOR 31 CITIES.

Article.	Unit.	Bridgeport, Conn.		Butte, Mont.		Charleston, S. C.		Cincinnati, Ohio.		Columbus, Ohio.		Dallas, Tex.		Fall River, Mass.		Houston, Tex.		Indianapolis, Ind.		Jacksonville, Fla.		Kansas City, Mo.	
		Dec. 15, 1918.	Jan. 15, 1919.	Dec. 15, 1918.	Jan. 15, 1919.	Dec. 15, 1918.	Jan. 15, 1919.	Dec. 15, 1918.	Jan. 15, 1919.	Dec. 15, 1918.	Jan. 15, 1919.	Dec. 15, 1918.	Jan. 15, 1919.	Dec. 15, 1918.	Jan. 15, 1919.	Dec. 15, 1918.	Jan. 15, 1919.	Dec. 15, 1918.	Jan. 15, 1919.	Dec. 15, 1918.	Jan. 15, 1919.	Dec. 15, 1918.	Jan. 15, 1919.
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Sirloin steak	Pound	50.8	52.1	36.1	38.2	37.3	38.5	33.6	35.2	37.8	37.8	37.3	39.6	58.9	58.3	33.9	36.3	35.8	36.5	40.3	42.2	36.4	37.8
Round steak	do	49.2	50.5	33.8	37.3	37.3	39.2	32.8	34.2	35.5	36.0	36.6	38.2	50.3	50.4	34.1	35.2	34.9	36.6	38.8	39.7	34.5	34.6
Rib roast	do	38.0	38.6	30.1	30.2	32.7	32.5	27.1	29.5	30.6	31.7	32.5	34.0	36.5	35.1	28.6	28.3	27.4	28.2	31.8	33.3	27.5	27.9
Chuck roast	do	32.2	33.0	24.6	25.1	26.4	27.3	23.4	24.8	27.2	27.5	29.2	29.9	28.8	28.4	24.2	26.3	25.4	25.6	26.9	28.7	23.8	24.0
Plate beef	do	21.0	21.4	17.0	18.0	21.4	22.5	20.6	21.9	21.5	21.5	23.1	25.0	.....	.....	20.0	24.6	20.4	21.2	20.7	21.1	20.3	19.8
Pork chops	do	42.1	40.9	43.0	42.0	45.8	47.1	35.9	35.5	36.7	38.1	44.5	43.0	42.7	38.8	41.7	41.7	39.3	37.9	43.4	41.6	37.9	36.5
Bacon, sliced	do	63.5	62.5	67.9	66.3	63.0	64.5	54.8	54.6	55.9	55.0	66.0	67.3	53.3	55.1	66.9	68.3	56.7	55.7	62.4	61.6	60.0	60.9
Ham, sliced	do	62.1	62.9	60.0	57.9	55.0	54.6	52.3	54.0	53.7	55.8	58.0	57.3	55.1	54.9	51.4	51.7	56.4	57.4	53.3	54.7	53.1	55.3
Lamb	do	34.4	38.5	34.2	35.5	40.3	41.1	29.8	32.8	32.7	35.0	39.0	40.0	36.9	36.0	38.8	38.3	37.5	37.1	35.8	38.2	29.2	32.5
Hens	do	42.5	42.8	37.9	39.3	47.2	46.3	36.6	39.5	34.6	37.0	33.3	33.6	44.1	44.3	33.3	35.0	30.2	33.5	41.8	44.1	81.6	33.8
Salmon, canned	do	36.6	37.2	40.0	38.9	29.9	31.4	28.2	29.5	30.9	28.9	31.7	32.1	28.9	31.0	32.1	31.2	26.5	27.1	29.2	30.5	81.6	32.7
Milk, fresh	Quart	17.0	16.0	5.5	15.5	20.0	20.0	14.0	14.0	15.0	15.0	19.0	19.0	16.0	16.0	19.8	19.8	14.0	14.0	18.0	18.0	16.0	16.0
Milk, evaporated ¹	15-16 oz. can	16.4	16.4	17.5	17.3	17.3	17.3	15.6	15.6	15.7	15.7	16.5	16.5	15.6	15.6	17.3	17.3	16.8	16.8	15.5	15.5	17.2	17.2
Butter	Pound	67.1	69.7	69.5	70.7	70.1	73.4	74.1	74.0	76.0	76.4	67.8	69.3	67.3	70.7	73.1	74.2	75.5	74.8	73.8	77.5	72.3	73.2
Oleomargarine	do	39.2	39.2	.....	.....	42.0	40.3	.....	38.1	38.3	38.3	39.0	39.0	37.7	37.7	39.2	39.2	40.4	40.4	41.8	41.8	38.1	38.1
Nut margarine	do	40.4	36.1	.....	.....	40.3	35.9	.....	35.9	35.1	35.1	39.0	39.0	36.9	36.9	38.8	38.8	36.7	36.7	38.3	38.3	35.3	35.3
Cheese	do	40.4	42.5	43.2	46.4	44.5	46.3	44.5	45.5	42.1	44.0	45.1	45.9	37.8	40.0	41.8	45.0	43.1	46.4	45.5	46.9	45.7	46.3
Lard	do	34.2	32.2	34.1	33.9	35.5	35.9	32.1	29.6	33.9	31.3	33.8	35.5	33.9	31.9	31.4	34.0	33.7	32.4	33.9	35.5	35.2	35.2
Crisco	do	33.4	33.4	37.6	34.0	.....	34.0	.....	32.5	32.9	32.9	34.4	34.4	32.4	32.4	33.0	33.0	30.7	30.7	33.4	33.4	35.4	35.4
Eggs, strictly fresh	Dozen	99.6	89.9	93.3	90.0	72.7	76.5	72.0	68.4	74.2	67.7	73.5	75.3	99.0	89.9	72.6	68.5	70.9	68.3	85.0	79.1	75.5	71.2
Eggs, storage	do	59.6	61.9	61.8	66.7	54.1	67.6	57.2	55.0	58.4	55.7	60.7	60.7	60.8	62.6	57.0	60.8	55.1	56.3	62.9	65.0	55.2	59.0
Bread	Pound ²	10.0	10.0	10.0	10.0	10.0	10.0	9.8	9.8	9.7	9.6	10.0	10.0	10.0	10.0	9.0	9.1	10.0	9.9	10.0	10.0	10.0	9.3
Flour	Pound	6.8	6.6	7.0	6.9	7.0	7.1	6.4	6.4	6.5	6.3	6.8	6.9	6.9	6.7	7.0	6.9	6.4	6.5	7.2	7.2	6.9	6.4
Corn meal	do	8.1	7.4	8.2	8.2	5.4	5.1	5.4	5.3	5.9	5.7	6.3	6.3	6.7	8.0	7.1	6.2	5.5	5.8	5.4	5.4	6.3	6.3
Corn flakes	8-oz. pkg	13.8	13.8	14.7	14.8	13.5	13.5	13.5	13.5	14.3	14.3	15.8	15.8	14.6	14.6	14.6	14.6	14.4	14.4	14.4	14.4	14.9	14.9
Cream of wheat	28-oz. pkg	24.0	24.0	31.7	25.0	25.2	25.2	.....	25.2	25.9	25.9	25.7	25.7	24.7	24.7	24.8	24.8	25.1	25.1	25.4	25.4	25.5	25.5
Rice	Pound	14.3	14.3	14.2	14.1	11.8	12.5	14.3	14.1	13.8	13.1	13.5	13.3	13.9	13.5	12.3	12.4	14.8	14.8	13.4	12.8	13.8	13.8
Beans, navy	do	16.6	16.4	16.3	15.3	19.2	17.9	13.4	13.6	13.8	12.8	16.8	16.0	16.5	15.4	16.4	16.2	14.0	13.6	17.1	16.2	16.0	15.6
Potatoes	do	3.4	3.4	2.2	2.1	4.2	3.8	3.2	3.3	3.0	3.0	3.4	3.7	3.4	3.3	3.5	3.8	2.7	3.0	4.0	4.0	2.9	3.2
Onions	do	4.3	4.3	4.3	4.4	5.0	4.7	3.5	3.7	3.7	3.7	3.7	3.7	3.8	4.3	4.4	4.6	3.9	4.1	5.9	5.3	4.4	4.7
Cabbage	do	4.4	4.4	4.0	4.6	4.6	4.6	3.4	3.4	4.2	4.2	5.5	5.5	4.0	4.0	4.6	4.6	4.5	4.5	5.7	5.7	4.7	4.7
Beans, baked	No. 2 can	18.7	18.7	25.6	19.2	17.3	17.3	17.7	17.7	22.8	22.8	19.0	19.0	20.2	20.2	19.5	19.5	19.5	19.5	18.7	18.7	16.5	16.5
Corn, canned	do	21.3	21.3	20.0	22.3	18.1	18.1	15.8	15.8	20.9	20.9	20.8	20.8	19.3	19.3	19.4	19.4	19.4	19.4	22.5	22.5	18.0	18.0
Peas, canned	do	21.0	21.0	19.8	22.7	17.3	17.3	16.1	16.1	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	22.7	22.7	18.2	18.2
Tomatoes, canned	do	19.1	19.1	20.0	16.1	16.3	16.3	14.8	14.8	18.1	18.1	20.2	20.2	15.5	15.5	17.1	17.1	17.1	17.1	16.7	16.7	17.9	17.9
Sugar, granulated	Pound	10.7	10.6	12.0	11.9	10.7	10.7	10.7	10.7	10.9	11.0	11.3	11.3	10.9	10.8	10.7	10.9	11.0	11.0	10.9	11.0	11.3	11.3
Tea	do	68.4	66.7	76.8	80.0	70.1	73.7	67.6	68.7	83.8	82.2	82.0	78.3	61.5	61.3	58.9	57.6	79.2	83.3	79.1	81.1	76.9	77.5
Coffee	do	33.6	35.4	42.7	42.2	30.7	33.0	30.9	32.6	30.9	35.7	35.0	38.3	33.5	35.0	30.3	32.4	31.8	30.7	36.3	38.5	32.1	33.9
Prunes	do	18.5	20.9	18.4	17.8	21.7	21.5	19.0	19.2	20.5	21.9	18.8	19.8	18.5	19.3	18.6	19.0	17.3	18.5	22.3	21.0	18.4	18.5
Raisins	do	16.5	16.8	15.0	15.3	17.1	16.6	16.6	16.6	15.3	14.9	15.8	17.1	16.3	16.4	17.0	17.2	17.6	17.5	18.5	17.9	17.0	17.7
Bananas	Dozen	36.3	36.3	46.3	40.8	38.1	38.1	38.1	38.1	38.3	38.3	38.9	38.9	33.6	33.6	34.0	34.0	28.5	28.5	35.0	35.0	43.3	43.3
Oranges	do	48.0	48.0	52.2	44.4	39.4	39.4	39.4	39.4	49.4	49.4	51.4	51.4	49.3	49.3	55.0	55.0	49.5	49.5	36.7	36.7	59.7	59.7

¹ Unsweetened.

² Baked weight.

[731]

AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD FOR DEC. 15, 1918, AND JAN. 15, 1919, FOR 31 CITIES—Continued.

Article.	Unit.	Little Rock, Ark.		Louisville, Ky.		Manchester, N. H.		Memphis, Tenn.		Minneapolis, Minn.		Mobile, Ala.		Newark, N. J.		New Haven, Conn.		Norfolk, Va.		Omaha, Nebr.	
		Dec. 15, 1918.	Jan. 15, 1919.	Dec. 15, 1918.	Jan. 15, 1919.	Dec. 15, 1918.	Jan. 15, 1919.	Dec. 15, 1918.	Jan. 15, 1919.	Dec. 15, 1918.	Jan. 15, 1919.	Dec. 15, 1918.	Jan. 15, 1919.	Dec. 15, 1918.	Jan. 15, 1919.	Dec. 15, 1918.	Jan. 15, 1919.	Dec. 15, 1918.	Jan. 15, 1919.	Dec. 15, 1918.	Jan. 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>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	Cts.
Sirloin steak.....	Pound.....	40.0	40.8	37.1	37.7	55.5	55.8	37.8	39.2	28.8	31.5	34.6	35.0	46.0	47.7	54.8	56.5	45.4	46.8	36.7	37.2
Round steak.....	do.....	37.3	38.3	34.9	36.2	49.8	49.8	35.2	36.8	28.0	30.0	34.6	34.7	46.6	48.2	51.0	51.5	43.4	42.2	34.8	35.6
Rib roast.....	do.....	33.0	35.2	30.6	31.3	35.5	34.0	29.7	30.0	24.2	25.9	32.0	31.6	38.5	37.1	37.7	39.5	38.9	39.5	28.2	28.4
Chuck roast.....	do.....	27.3	27.9	26.3	27.8	30.5	30.4	26.2	26.6	20.9	22.3	27.3	27.3	32.1	34.0	34.4	33.9	31.2	31.9	24.4	24.9
Plate beef.....	do.....	22.7	23.5	22.8	23.5	.....	.....	22.5	22.5	16.8	17.4	23.5	24.8	23.9	25.6	.....	.....	24.0	22.9	18.6	18.6
Pork chops.....	do.....	40.8	39.0	40.8	38.3	39.5	38.2	41.3	38.1	36.1	35.7	46.2	46.9	41.8	41.8	39.6	39.0	43.3	40.3	38.4	36.8
Bacon, sliced.....	do.....	61.6	60.8	59.2	59.9	54.0	54.4	61.9	62.5	58.1	57.5	63.8	60.6	53.2	53.6	61.3	61.2	58.0	57.8	61.2	60.3
Ham, sliced.....	do.....	52.7	53.3	54.1	55.4	53.8	54.2	55.4	55.0	53.9	52.2	51.5	52.9	42.3	60.0	61.1	61.1	45.2	50.0	55.7	55.6
Lamb.....	do.....	35.7	35.0	38.8	38.8	34.4	38.0	36.1	35.6	25.9	29.5	35.5	34.6	35.4	41.8	36.9	40.2	40.0	41.4	31.3	32.1
Hens.....	do.....	33.5	34.1	36.6	40.3	45.4	46.6	33.1	34.5	30.6	32.6	43.8	40.6	42.4	42.3	43.9	44.4	43.0	43.7	29.6	33.1
Salmon, canned.....	do.....	30.5	30.1	29.4	30.4	31.0	30.8	38.4	35.4	37.1	36.9	26.3	29.0	34.2	36.0	34.9	37.4	29.8	32.2	30.4	32.5
Milk, fresh.....	Quart.....	18.0	18.5	15.0	15.0	15.4	15.4	18.0	18.0	13.0	13.0	15.0	15.0	18.3	17.7	15.0	16.0	18.0	18.0	14.7	14.8
Milk, evaporated (unsweetened).....	15-16-oz. can.....	.....	17.2	.....	15.1	.....	17.5	.....	16.5	.....	14.9	.....	16.6	.....	15.4	.....	15.8	.....	17.3	.....	17.5
Butter.....	Pound.....	70.9	72.9	77.0	76.1	72.4	75.1	75.3	75.9	69.1	65.7	69.3	76.4	76.8	77.9	68.1	69.6	71.2	73.5	71.0	72.6
Oleomargarine.....	do.....	.....	39.9	.....	40.8	.....	38.4	.....	41.8	.....	37.1	.....	42.3	.....	39.8	.....	39.6	.....	43.3	.....	40.2
Nut margarine.....	do.....	.....	39.0	.....	36.0	.....	36.0	.....	41.3	.....	32.8	.....	.....	.....	35.9	.....	37.2	.....	39.5	.....	36.0
Cheese.....	do.....	46.3	47.4	45.1	48.6	38.3	39.8	47.4	47.4	41.4	43.2	45.1	47.2	41.1	42.6	39.0	42.6	44.1	44.9	44.0	45.3
Lard.....	do.....	35.4	34.5	34.3	32.4	34.5	33.0	34.1	33.9	33.8	31.9	33.8	33.7	34.7	34.1	34.7	33.7	36.4	35.6	34.5	34.3
Crisco.....	do.....	.....	33.5	.....	32.6	.....	33.8	.....	31.7	.....	33.6	.....	33.6	.....	32.0	.....	34.4	.....	34.3	.....	32.9
Eggs, strictly fresh.....	Dozen.....	73.9	69.6	74.3	68.3	95.6	87.3	76.1	66.5	69.0	60.6	75.0	74.2	93.8	85.5	102.1	93.3	71.3	73.4	74.5	70.8
Eggs, storage.....	do.....	61.5	.....	56.3	.....	59.0	62.5	63.0	60.0	49.6	50.4	59.8	68.3	59.9	60.0	56.3	59.5	60.4	63.3	55.1	59.3
Bread.....	Pound.....	10.0	10.0	9.8	9.8	9.3	9.3	10.0	10.0	8.8	9.2	9.7	9.7	9.7	9.7	10.2	10.2	9.9	9.9	10.0	10.0
Flour.....	do.....	6.6	6.7	6.6	6.8	6.8	6.9	6.7	7.0	6.2	6.2	6.9	7.1	6.7	6.7	6.5	7.0	6.9	6.2	6.3	6.3
Corn meal.....	do.....	5.6	5.4	5.0	4.9	7.6	7.5	5.4	5.5	5.2	5.6	6.1	5.7	8.2	6.8	7.7	7.7	6.1	6.0	5.5	5.6
Corn flakes.....	8-oz. pkg.....	14.8	.....	13.5	.....	15.0	.....	14.5	.....	15.0	.....	14.6	.....	12.7	.....	14.1	.....	14.9	.....	14.8	14.8
Cream of wheat.....	28-oz. pkg.....	25.5	.....	25.4	.....	24.8	.....	24.5	.....	25.1	.....	25.3	.....	23.9	.....	24.6	.....	25.5	.....	25.4	25.4
Rice.....	Pound.....	13.0	13.1	13.4	13.6	14.1	13.5	13.3	13.0	13.9	13.8	12.6	12.7	14.4	14.4	14.2	14.4	14.8	15.1	14.9	14.1
Beans, navy.....	do.....	14.9	14.9	15.2	14.8	15.3	14.9	15.8	15.2	12.6	16.4	15.8	15.7	15.9	15.2	16.5	16.0	17.4	16.0	15.0	14.2
Potatoes.....	do.....	3.2	3.4	2.7	2.7	3.1	3.1	3.3	3.4	2.3	2.3	4.3	4.1	4.1	4.0	3.4	3.4	3.8	3.2	2.6	2.7
Onions.....	do.....	4.1	4.7	4.0	3.9	3.6	3.9	4.1	4.4	2.4	2.7	4.6	4.8	4.9	4.9	4.7	5.2	4.8	5.2	3.9	3.8
Cabbage.....	do.....	.....	4.7	.....	4.1	.....	2.8	.....	4.0	.....	2.6	.....	4.7	.....	3.6	.....	4.2	.....	5.6	.....	3.9
Beans, baked.....	No. 2 can.....	20.0	.....	18.1	.....	20.6	.....	19.9	.....	20.4	.....	19.6	.....	16.6	.....	19.2	.....	18.1	.....	21.6	21.6
Corn, canned.....	do.....	19.8	.....	19.4	.....	22.3	.....	19.5	.....	15.2	.....	19.4	.....	21.9	.....	20.9	.....	22.4	.....	19.3	19.3
Peas, canned.....	do.....	19.9	.....	19.1	.....	20.9	.....	18.1	.....	16.0	.....	18.9	.....	19.5	.....	21.2	.....	22.3	.....	20.1	20.1
Tomatoes, canned.....	do.....	17.7	.....	16.3	.....	21.9	.....	15.8	.....	16.4	.....	14.9	.....	28.5	.....	18.3	.....	19.1	.....	18.4	18.4
Sugar, granulated.....	Pound.....	11.0	10.9	10.9	10.9	10.7	10.8	10.8	11.1	11.1	10.9	10.7	10.4	10.1	10.6	10.5	10.8	10.7	11.0	11.0	11.0
Tea.....	do.....	86.7	86.3	78.3	80.6	62.6	63.3	81.5	82.8	57.1	60.0	65.0	66.5	57.9	58.6	62.0	64.3	80.0	84.4	71.2	71.4
Coffee.....	do.....	36.1	38.3	28.4	34.9	32.1	37.3	33.5	37.4	32.3	35.4	29.4	30.9	31.5	34.2	34.2	36.0	35.0	36.9	35.0	37.4
Prunes.....	do.....	15.4	16.0	20.2	18.1	18.8	18.9	20.3	21.3	18.2	20.6	18.5	20.7	18.3	21.4	20.0	23.0	19.4	22.6	18.7	20.9
Raisins.....	do.....	18.0	17.9	16.2	17.2	16.2	16.5	16.9	17.7	14.9	15.1	18.6	19.7	15.2	15.4	16.3	16.4	17.6	16.4	17.7	17.5
Bananas.....	Dozen.....	.....	38.5	.....	38.3	.....	.....	.....	35.4	.....	40.0	.....	33.0	.....	38.3	.....	34.3	.....	36.7	.....	45.0
Oranges.....	do.....	.....	54.5	.....	40.8	.....	52.9	.....	46.4	.....	55.4	.....	42.2	.....	53.1	.....	59.7	.....	43.8	.....	57.0

[714]

Article.	Unit.	Peoria, Ill.		Portland, Me.		Portland, Oreg.		Providence, R. I.		Richmond, Va.		Rochester, N. Y.		St. Paul, Minn.		Salt Lake City, Utah.		Scranton, Pa.		Springfield, Ill.	
		Dec. 15, 1918.	Jan. 15, 1919.	Dec. 15, 1918.	Jan. 15, 1919.	Dec. 15, 1918.	Jan. 15, 1919.	Dec. 15, 1918.	Jan. 15, 1919.	Dec. 15, 1918.	Jan. 15, 1919.	Dec. 15, 1918.	Jan. 15, 1919.	Dec. 15, 1918.	Jan. 15, 1919.	Dec. 15, 1918.	Jan. 15, 1919.	Dec. 15, 1918.	Jan. 15, 1919.	Dec. 15, 1918.	Jan. 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>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	Cts.
Sirloin steak.....	Pound.....	35.3	34.9	57.5	58.3	31.6	32.8	65.2	66.1	44.6	44.9	38.3	39.3	38.8	35.4	34.3	34.0	45.9	47.1	34.5	34.4
Round steak.....	do.....	34.1	34.1	48.5	50.5	30.6	31.4	53.6	53.9	42.0	41.7	36.6	37.9	30.0	31.6	33.0	32.7	41.5	43.2	34.1	33.8
Rib roast.....	do.....	26.2	26.7	33.6	34.3	28.5	29.1	42.2	42.5	34.9	36.1	30.9	31.8	27.8	29.0	28.6	28.0	37.1	38.2	25.4	28.4
Chuck roast.....	do.....	23.5	24.5	29.5	29.6	22.9	24.2	38.2	36.2	31.9	40.1	29.6	29.8	23.8	25.4	24.4	24.3	31.9	32.6	24.5	24.9
Plate beef.....	do.....	18.6	19.1	.....	.....	18.1	18.9	.....	.....	25.9	26.1	22.9	22.9	18.1	19.3	18.7	18.8	23.4	23.2	20.5	20.4
Pork chops.....	do.....	36.2	35.4	44.8	41.1	43.1	42.9	45.8	42.4	44.0	44.0	40.9	48.8	37.3	35.8	42.7	42.3	44.4	43.8	38.3	37.9
Bacon, sliced.....	do.....	58.8	59.0	.....	.....	58.9	58.7	55.3	55.7	58.2	57.1	51.1	50.4	51.1	56.2	56.3	60.4	61.7	61.2	62.7	54.8
Ham, sliced.....	do.....	55.8	55.7	56.0	56.8	54.8	55.9	61.7	62.5	51.6	52.6	52.8	55.8	53.3	54.6	53.3	53.8	57.9	60.6	51.1	50.8
Lamb.....	do.....	35.0	34.2	34.8	36.7	32.6	32.4	37.9	42.0	42.0	43.0	32.8	33.8	27.6	29.6	31.9	31.6	37.6	39.5	34.3	35.8
Hens.....	do.....	31.5	33.2	44.5	44.8	37.8	42.1	45.5	44.8	40.8	44.2	42.2	43.5	31.4	35.1	34.6	35.2	45.0	45.3	29.0	30.0
Salmon, canned.....	do.....	30.4	30.9	29.9	29.9	36.7	36.9	34.3	35.6	25.0	28.7	30.2	30.9	30.4	31.6	33.8	34.2	31.7	32.4	29.6	32.7
Milk, fresh.....	Quart.....	11.8	11.9	15.8	16.0	15.5	15.6	16.5	16.5	15.5	15.7	15.5	15.0	14.0	13.7	12.5	12.5	15.0	15.0	14.3	14.3
Milk, evaporated (unsweetened).....	15-16 oz. can.....	.....	17.6	.....	15.6	.....	16.9	.....	16.4	.....	15.5	.....	16.5	.....	15.0	.....	17.3	.....	15.7	.....	17.4
Butter.....	Pound.....	70.3	70.2	72.7	74.5	71.6	72.8	67.5	72.9	74.5	79.2	71.5	73.8	70.0	69.7	69.5	70.3	67.7	70.6	74.5	75.6
Oleomargarine.....	do.....	40.3	40.3	.....	39.1	.....	43.7	.....	36.9	.....	40.7	.....	40.1	.....	38.5	.....	40.0	.....	39.3	.....	41.4
Nut margarine.....	do.....	.....	37.9	.....	35.8	.....	39.9	.....	34.1	.....	38.8	.....	34.4	.....	35.0	.....	39.2	.....	36.2	.....	37.4
Cheese.....	do.....	43.9	45.7	38.9	41.4	45.7	46.6	37.5	39.9	42.2	43.8	38.6	41.7	42.5	44.2	44.1	44.2	39.2	41.8	45.2	47.8
Lard.....	do.....	34.3	34.3	34.8	33.5	35.2	35.0	34.9	33.5	35.5	34.9	34.3	33.2	34.2	33.1	35.0	37.6	35.1	34.0	34.6	33.9
Crisco.....	do.....	.....	34.2	.....	34.4	.....	35.8	.....	33.9	.....	34.1	.....	32.9	.....	34.3	.....	36.8	.....	33.5	.....	35.2
Eggs, strictly fresh.....	Dozen.....	71.4	69.8	91.8	88.1	79.9	72.0	95.7	88.5	77.9	73.0	89.0	83.4	72.2	65.1	81.1	75.4	88.3	78.6	70.8	72.3
Eggs, storage.....	do.....	56.2	58.8	59.5	62.5	61.3	61.0	57.1	62.5	61.4	63.3	59.0	61.0	50.6	51.7	58.9	65.0	60.3	59.2	.....	59.2
Bread.....	Pound ¹	10.0	10.0	10.0	10.0	10.0	9.9	10.0	10.0	10.0	10.0	10.0	10.0	8.5	8.7	10.4	10.2	10.0	10.0	10.0	10.0
Flour.....	Pound.....	6.9	6.9	6.7	6.6	6.5	6.7	6.7	6.6	6.8	6.8	6.6	6.5	6.4	6.3	5.7	5.6	6.8	6.9	6.7	6.5
Corn meal.....	do.....	6.2	6.2	6.9	6.7	7.5	7.5	6.8	6.5	6.1	5.9	6.5	6.4	5.9	6.0	7.7	7.6	7.4	7.0	6.9	6.5
Corn flakes.....	8 oz. pkg.....	14.9	.....	13.8	.....	.....	15.0	.....	14.1	.....	14.9	.....	13.9	.....	13.2	.....	14.8	.....	14.0	.....	14.9
Cream of wheat.....	28 oz. pkg.....	26.1	.....	25.1	.....	.....	28.3	.....	24.1	.....	25.0	.....	23.9	.....	26.0	.....	25.7	.....	23.8	.....	27.6
Rice.....	Pound.....	14.3	13.9	13.8	13.7	13.9	14.2	13.9	13.8	14.6	14.9	14.1	14.3	13.9	14.1	13.8	13.8	13.7	13.5	14.5	13.9
Beans, navy.....	do.....	15.5	15.0	15.8	15.0	13.8	13.5	16.2	15.1	16.7	16.4	14.5	14.2	14.0	13.0	16.0	14.7	16.7	16.2	14.8	14.3
Potatoes.....	do.....	2.6	2.7	3.0	3.1	2.5	2.4	3.4	3.3	3.5	3.4	2.7	2.7	2.2	2.2	2.2	2.9	2.8	2.8	3.2	3.2
Onions.....	do.....	4.1	4.6	3.8	.....	3.6	3.3	3.3	3.8	3.8	5.0	5.1	3.3	3.1	2.9	3.0	3.8	4.5	4.5	4.1	3.8
Cabbage.....	do.....	4.1	.....	2.4	.....	.....	4.2	.....	3.2	.....	4.6	.....	3.7	.....	3.3	.....	5.1	.....	3.5	.....	4.0
Beans, baked.....	No. 2 can.....	19.5	.....	21.3	.....	.....	25.0	.....	18.5	.....	18.7	.....	17.9	.....	20.9	.....	20.0	.....	17.5	.....	19.1
Corn, canned.....	do.....	17.3	.....	21.8	.....	.....	20.8	.....	20.0	.....	20.4	.....	21.6	.....	18.9	.....	18.5	.....	20.5	.....	17.7
Peas, canned.....	do.....	18.7	.....	20.4	.....	.....	20.4	.....	19.9	.....	21.5	.....	19.5	.....	17.2	.....	18.3	.....	18.5	.....	17.8
Tomatoes, canned.....	do.....	17.1	.....	21.6	.....	.....	17.9	.....	19.4	.....	18.6	.....	20.3	.....	18.7	.....	16.8	.....	20.2	.....	18.7
Sugar, granulated.....	Pound.....	11.0	11.2	10.7	10.6	10.9	10.8	10.7	10.6	11.0	11.0	10.6	10.6	11.1	11.2	11.4	11.4	10.8	10.7	11.0	11.0
Tea.....	do.....	70.4	69.0	61.3	64.0	62.1	60.8	58.8	62.7	77.7	79.2	59.3	33.3	60.4	60.4	58.5	64.0	67.4	61.9	63.5	76.9
Coffee.....	do.....	29.4	35.6	33.1	35.5	32.9	36.3	36.9	38.4	31.2	32.9	31.4	33.3	33.1	35.4	35.7	37.0	33.3	35.4	32.9	33.9
Prunes.....	do.....	20.6	21.9	18.1	19.3	15.0	15.5	19.4	20.5	19.0	19.6	20.9	20.8	20.0	20.2	16.7	16.2	16.6	18.8	17.8	17.8
Raisins.....	do.....	16.4	16.4	15.3	15.4	14.9	15.6	15.3	15.3	15.5	16.0	15.4	15.2	15.2	15.2	15.1	15.0	14.9	14.5	18.1	17.7
Bananas.....	Dozen.....	.....	210.2	.....	36.9	.....	44.4	.....	35.0	.....	40.0	.....	37.3	.....	46.3	.....	44.4	.....	33.3	.....	42.5
Oranges.....	do.....	.....	58.2	.....	64.2	.....	56.7	.....	56.1	.....	44.6	.....	60.5	.....	57.3	.....	59.3	.....	50.5	.....	58.6

¹ Baked weight.² Per pound.

RETAIL PRICES OF COAL.

The following table shows the average retail price of coal on January 15 of each year, 1913, 1918, and 1919, inclusive, by cities. The prices are those quoted for retail trade for household use.

Unless otherwise stated, the prices given on anthracite, both for the stove and the chestnut sizes, are for Pennsylvania white-ash. Prices are also shown for Colorado, Arkansas, and New Mexico anthracite in those cities where the Pennsylvania anthracite is not sold. In such instances the variety of coal is indicated by note.

The prices shown for bituminous coal are averages made on the several kinds. The coal dealers in each city were asked to quote prices on the kinds of bituminous coal usually sold for household use.

The prices quoted are for coal delivered to consumers, but do not include charges for storing the coal in cellar or coal bin where an extra handling was necessary.

Prices are shown for coal only in the cities in which prices are scheduled for food and are shown for the years when food prices were obtained.

RETAIL PRICES PER TON OF 2,000 POUNDS OF COAL, FOR HOUSEHOLD USE, ON JANUARY 15, 1913, 1918, AND 1919, BY CITIES.

City.	January 15—			City.	January 15—		
	1913	1918	1919		1913	1918	1919
Atlanta, Ga.:				Cincinnati, Ohio:			
Bituminous.....	\$5.875	\$7.444	\$8.029	Anthracite—			
Baltimore, Md.:				Stove.....	\$8.250	\$9.500	(?)
Anthracite—				Chestnut.....	8.750	9.500	(?)
Stove.....	¹ 7.700	¹ 9.600	¹ 11.983	Bituminous.....	3.500	6.098	\$6.478
Chestnut.....	¹ 7.930	¹ 9.750	¹ 12.042	Cleveland, Ohio:			
Bituminous.....			¹ 7.540	Anthracite—			
Birmingham, Ala.:				Stove.....	7.500	9.825	11.050
Bituminous.....	4.217	5.616	6.741	Chestnut.....	7.750	9.575	11.175
Boston, Mass.:				Bituminous.....	4.143	6.901	6.821
Anthracite—				Columbus, Ohio:			
Stove.....	8.250	9.850	12.000	Bituminous.....		5.943	6.088
Chestnut.....	8.250	9.850	12.000	Dallas, Tex.:			
Bituminous.....			10.250	Anthracite—			
Bridgeport, Conn.:				Chestnut.....			18.000
Anthracite—				Egg.....		² 14.167	³ 15.800
Stove.....		10.500	12.370	Bituminous.....	8.250	10.139	10.980
Chestnut.....		10.500	12.370	Denver, Colo.:			
Bituminous.....			9.125	Anthracite—			
Buffalo, N. Y.:				Stove, 3 and 5 mixed..	⁴ 8.500	⁴ 11.750	⁴ 12.650
Anthracite—				Furnace, 1 and 2	⁴ 8.875	⁴ 11.750	⁴ 12.650
Stove.....	6.750	8.830	10.400	mixed			
Chestnut.....	6.992	8.830	10.500	Bituminous.....	5.250	7.598	8.148
Bituminous.....			6.000	Detroit, Mich.:			
Butte, Mont.:		9.188	9.377	Anthracite—			
Bituminous.....				Stove.....	8.000	9.880	11.600
Charleston, S. C.:				Chestnut.....	8.250	10.080	11.710
Anthracite—				Bituminous.....	5.200	8.267	7.732
Stove.....	¹ 8.375	¹ 12.275	(?)	Fall River, Mass.:			
Chestnut.....	¹ 8.500	¹ 12.475	(?)	Anthracite—			
Bituminous.....	¹ 6.750	8.000	8.500	Stove.....	8.250	10.750	12.700
Chicago, Ill.:				Chestnut.....	8.250	10.750	12.383
Anthracite—				Bituminous.....			10.250
Stove.....	8.000	10.350	11.808	Houston, Tex.:			
Chestnut.....	8.250	10.388	12.016	Anthracite—			
Bituminous.....	4.969	6.671	6.700	Chestnut.....		15.750	.....
				Bituminous.....		9.000	10.000

¹ Per ton of 2,240 pounds.

² Zoned out by Fuel Administration.

³ Arkansas anthracite.

⁴ Colorado anthracite.

RETAIL PRICES PER TON OF 2,000 POUNDS OF COAL, FOR HOUSEHOLD USE, ON JANUARY 15, 1913, 1918, AND 1919, BY CITIES—Concluded.

City.	January 15—			City.	January 15—		
	1913	1918	1919		1913	1918	1919
Indianapolis, Ind.:				Omaha, Nebr.:			
Anthracite—				Anthracite—			
Stove.....	\$8.950	\$9.825	\$12.250	Stove.....	\$12.000	\$13.188	.....
Chestnut.....	9.150	9.925	12.333	Chestnut.....	12.000	13.338	.....
Bituminous.....	3.813	7.107	6.875	Bituminous.....	6.625	7.950	\$8.471
Jacksonville, Fla.:				Peoria, Ill.:			
Anthracite—				Anthracite—			
Stove.....	10.000	12.000	(¹)	Stove.....	.....	10.250	.....
Chestnut.....	10.000	12.000	(¹)	Chestnut.....	.....	10.500	.....
Bituminous.....	7.500	9.333	10.000	Bituminous.....	.....	5.150	5.850
Kansas City, Mo.:				Philadelphia, Pa.:			
Anthracite—				Anthracite—			
Furnace.....	.....	\$12.592	\$15.107	Stove.....	\$ 7.156	\$ 9.594	\$11.244
Stove, or No. 4.....	.....	\$13.150	\$15.550	Chestnut.....	\$ 7.375	\$ 9.681	\$11.319
Bituminous.....	4.391	6.703	7.354	Bituminous.....	.....	.....	8.500
Little Rock, Ark.:				Pittsburgh, Pa.:			
Anthracite—				Anthracite—			
Egg.....	.....	\$11.500	\$12.975	Stove.....	\$ 7.938	.....	\$12.750
Stove.....	.....	.....	\$13.333	Chestnut.....	\$ 8.000	\$10.150	\$12.700
Bituminous.....	6.000	8.250	9.414	Bituminous.....	\$ 3.158	\$ 5.278	6.000
Los Angeles, Cal.:				Portland, Me.:			
Anthracite—				Anthracite—			
Cerillos egg.....	.....	\$22.000	\$21.150	Stove.....	.....	10.890	13.000
Bituminous.....	.....	14.881	14.688	Chestnut.....	.....	10.890	13.000
Louisville, Ky.:				Bituminous.....	.....	10.453	10.853
Anthracite—				Portland, Ore.:			
Stove.....	9.000	(¹)	(¹)	Bituminous.....	9.786	10.181	10.566
Chestnut.....	9.000	(¹)	(¹)	Providence, R. I.:			
Bituminous.....	4.200	6.038	6.743	Anthracite—			
Manchester, N. H.:				Stove.....	8.250	10.500	7 12.400
Anthracite—				Chestnut.....	8.250	10.500	7 12.400
Stove.....	10.000	11.000	12.500	Bituminous.....	.....	.....	7 10.500
Chestnut.....	10.000	11.000	12.500	Richmond, Va.:			
Bituminous.....	.....	.....	10.000	Anthracite—			
Memphis, Tenn.:				Stove.....	8.000	9.500	11.500
Anthracite—				Chestnut.....	8.000	9.500	11.500
Stove.....	.....	.....	15.000	Bituminous.....	5.500	7.686	8.222
Chestnut.....	.....	.....	15.000	Rochester, N. Y.:			
Bituminous.....	4 4.344	6.539	7.221	Anthracite—			
Milwaukee, Wis.:				Stove.....	.....	8.550	10.300
Anthracite—				Chestnut.....	.....	8.650	10.400
Stove.....	8.000	9.500	12.286	St. Louis, Mo.:			
Chestnut.....	8.250	9.650	12.378	Anthracite—			
Bituminous.....	6.250	7.385	7.814	Stove.....	8.438	10.433	.....
Minneapolis, Minn.:				Chestnut.....	8.680	10.533	.....
Anthracite—				Bituminous.....	3.360	5.444	5.463
Stove.....	9.250	10.826	13.708	St. Paul, Minn.:			
Chestnut.....	9.500	10.926	13.786	Anthracite—			
Bituminous.....	5.889	8.888	9.000	Stove.....	.....	10.727	13.453
Mobile, Ala.:				Chestnut.....	.....	10.827	13.543
Anthracite—				Bituminous.....	.....	9.162	9.582
Stove.....	.....	14.000	.....	Salt Lake City, Utah:			
Chestnut.....	.....	14.000	.....	Anthracite—			
Bituminous.....	.....	8.000	9.429	Furnace, 1 and 2			
Newark, N. J.:				mixed.....	\$11.000	\$14.000	\$15.333
Anthracite—				Stove, 3 and 5 mixed.....	\$11.000	\$14.000	\$15.333
Stove.....	6.500	8.100	9.750	Bituminous.....	5.639	7.250	7.875
Chestnut.....	6.750	8.100	9.750	San Francisco, Cal.:			
New Haven, Conn.:				Anthracite—			
Anthracite—				Cerillos egg.....	\$17.000	\$20.750	\$21.550
Stove.....	7.500	9.750	12.050	Egg.....	\$17.000	\$18.600	\$19.400
Chestnut.....	7.500	9.750	12.050	Bituminous.....	12.000	13.867	14.200
New Orleans, La.:				Seranton, Pa.:			
Anthracite—				Anthracite—			
Stove.....	10.000	13.067	(¹)	Stove.....	4.250	6.113	7.475
Chestnut.....	10.500	13.300	(¹)	Chestnut.....	4.500	6.150	7.563
Bituminous.....	4 6.056	8.040	8.900	Seattle, Wash.:			
New York, N. Y.:				Bituminous.....	9 7.125	10 7.867	9.163
Anthracite—				Springfield, Ill.:			
Stove.....	7.071	9.058	10.757	Bituminous.....	.....	3.711	3.832
Chestnut.....	7.143	9.083	10.764	Washington, D. C.:			
Norfolk, Va.:				Anthracite—			
Anthracite—				Stove.....	\$ 7.500	\$10.100	\$11.890
Stove.....	.....	10.000	11.700	Chestnut.....	\$ 7.650	\$10.190	\$12.019
Chestnut.....	.....	10.000	11.700	Bituminous.....	.....	.....	6 7.974
Bituminous.....	.....	7.750	8.250				

¹ Zoned out by Fuel Administration.

² Arkansas anthracite.

³ New Mexico anthracite.

⁴ Price per 10-barrel lots (1,800 pounds).

⁵ Per ton of 2,240 pounds.

⁶ Per 25-bushel lots (1,900 pounds).

⁷ Charges for binning, 50 cents per ton additional.

⁸ Colorado anthracite.

⁹ Prices quoted at yard; delivery charges, 50 cents to \$2 per ton, according to distance.

¹⁰ Prices in Zone A. Prices in other zones range from \$0.25 to \$1.50 additional.

AVERAGE AND RELATIVE PRICES OF COAL.

The table below shows both average and relative retail prices for Pennsylvania white-ash coal, both stove and chestnut sizes, and bituminous coal for the United States on January 15 of each year, 1913 to 1919, inclusive. An average price for the year 1913 has been made from the averages for January and July of that year. This average price for the year 1913 has been divided into the average price for January of each subsequent year to obtain the relative prices.

Since January, 1913, Pennsylvania white-ash stove coal has advanced 44 per cent, chestnut, 42 per cent, and bituminous coal, 44 per cent.

As will be noticed in the table the first big jump in the price of all kinds of coal came in the year from January 15, 1917, to January 15, 1918. Another interesting fact is that in the last year, from January 15, 1918, to January 15, 1919, stove coal increased 17 per cent; chestnut 16 per cent; while bituminous coal increased only 3 per cent.

AVERAGE AND RELATIVE RETAIL PRICES OF COAL IN TON LOTS, FOR HOUSEHOLD USE, JANUARY 15 OF EACH YEAR 1913 TO 1919, INCLUSIVE.

[Average price for year 1913=100.]

Period.	Pennsylvania anthracite, white ash.				Bituminous.	
	Stove.		Chestnut.		Average price.	Relative price.
	Average price.	Relative price.	Average price.	Relative price.		
Average for year, 1913.....	\$7.73	100	\$7.91	100	\$5.41	100
Jan. 15, 1913.....	7.99	103	8.15	103	5.48	101
Jan. 15, 1914.....	7.80	101	8.00	101	5.97	110
Jan. 15, 1915.....	7.83	101	7.99	101	5.71	106
Jan. 15, 1916.....	7.93	103	8.13	103	5.69	105
Jan. 15, 1917.....	9.29	120	9.40	119	6.96	129
Jan. 15, 1918.....	9.88	128	10.03	127	7.68	142
Jan. 15, 1919.....	11.52	149	11.61	147	7.90	146

AVERAGE RETAIL FOOD PRICES AND PERCENTAGES OF INCREASE IN 39 CITIES, 1918 COMPARED WITH 1913.

BY ELMA B. CARR.

It is interesting to know just how much difference there was in the actual retail prices of certain foods in 1918 compared with the retail prices of the same articles of food in 1913, or 5 years ago.

The Bureau of Labor Statistics has prices for 19 identical articles of food from 1913 to 1918.¹ As 1913 is the last year before the war when prices were normal, that year has been taken as the base for the following table, and the percentage increases determined for the year 1918.

As stated in previous publications of the Bureau of Labor Statistics, about 25 firms in each of the larger cities, and about 15 firms in each of the smaller cities send to the bureau a report of the prices charged by them on the 15th of each month. From the prices reported, an average monthly price is made for each article in each city. From monthly averages thus obtained, yearly averages are made.

¹ Effort, however, is being made to obtain prices on four additional articles for the years 1913 and 1914. If this can be done it will give the bureau 23 food articles on which to base comparisons from the year 1913. This additional information, if obtainable, will be published later.

AVERAGE RETAIL FOOD PRICES AND PERCENTAGES OF INCREASE, 1918 COMPARED WITH 1913, BY CITIES.

City.	Sirloin steak.			Round steak.			Rib roast.		
	Price per pound.		Percent- age in- crease: 1918 over 1913.	Price per pound.		Percent- age in- crease: 1918 over 1913.	Price per pound.		Percent- age in- crease: 1918 over 1913.
	1913	1918		1913	1918		1913	1918	
United States.....	\$0.254	\$0.389	53.1	\$0.223	\$0.369	65.5	\$0.198	\$0.307	55.1
Atlanta.....	.240	.369	53.8	.211	.341	61.6	.191	.283	48.2
Baltimore.....	.230	.415	80.4	.215	.407	89.3	.183	.328	79.2
Birmingham.....	.269	.398	48.0	.220	.364	65.5	.200	.317	58.5
Boston.....	.353	.514	45.6	.343	.522	52.2	.245	.363	48.2
Buffalo.....	.223	.374	67.7	.194	.350	80.4	.170	.295	73.5
Charleston.....	.217	.354	63.1	.204	.357	75.0	.202	.305	51.0
Chicago.....	.232	.353	52.2	.202	.323	59.9	.195	.297	52.3
Cincinnati.....	.231	.333	44.2	.208	.325	56.3	.191	.276	44.5
Cleveland.....	.246	.362	47.2	.217	.341	57.1	.190	.284	49.5
Dallas.....	.223	.368	65.0	.204	.357	75.0	.195	.313	60.5
Denver.....	.235	.362	54.0	.209	.338	61.7	.172	.275	59.9
Detroit.....	.246	.362	47.2	.198	.333	68.2	.195	.291	49.2
Fall River.....	.340	.537	57.9	.268	.460	71.6	.232	.350	50.9
Indianapolis.....	.251	.357	42.2	.235	.350	48.9	.176	.269	52.8
Jacksonville.....	.260	.383	47.3	.213	.363	70.4	.230	.301	30.9
Kansas City.....	.240	.360	50.0	.214	.342	59.8	.178	.270	51.7
Little Rock.....	.254	.381	50.0	.200	.351	75.5	.194	.318	63.9
Los Angeles.....	.235	.318	35.3	.208	.297	42.8	.183	.277	51.4
Louisville.....	.226	.355	57.1	.195	.341	74.9	.181	.285	57.5
Manchester.....	.355	.520	46.5	.290	.475	63.8	.202	.333	64.9
Memphis.....	.227	.373	64.3	.191	.351	83.8	.204	.296	45.1
Milwaukee.....	.224	.345	54.0	.206	.331	60.7	.184	.280	52.2
Minneapolis.....	.219	.306	39.7	.198	.293	48.0	.189	.253	33.9
Newark.....	.271	.440	62.4	.267	.446	67.0	.208	.360	73.1
New Haven.....	.316	.510	61.4	.286	.474	65.7	.236	.370	56.8
New Orleans.....	.214	.321	50.0	.187	.290	55.1	.190	.283	48.9
New York.....	.259	.409	57.9	.250	.423	69.2	.218	.353	61.9
Omaha.....	.250	.360	44.0	.217	.346	59.4	.184	.277	50.5
Philadelphia.....	.302	.478	58.3	.255	.443	73.7	.220	.357	62.3
Pittsburgh.....	.268	.437	63.1	.233	.406	74.2	.217	.336	54.8
Portland, Oreg.....	.229	.318	38.9	.201	.305	51.7	.192	.283	47.4
Providence.....	.396	.611	54.3	.307	.505	64.5	.241	.394	63.5
Richmond.....	.221	.411	86.0	.198	.388	96.0	.189	.328	73.5
St. Louis.....	.245	.357	45.7	.223	.351	57.4	.187	.295	57.8
Salt Lake City.....	.226	.323	42.9	.199	.308	54.8	.193	.268	38.9
San Francisco.....	.207	.306	47.8	.193	.301	56.0	.210	.288	37.1
Scranton.....	.248	.432	74.2	.209	.397	90.0	.218	.343	57.3
Seattle.....	.234	.347	48.3	.208	.331	59.1	.193	.292	51.3
Washington.....	.269	.465	72.9	.233	.441	89.3	.212	.363	71.2

AVERAGE RETAIL FOOD PRICES AND PERCENTAGES OF INCREASE, 1918 COMPARED WITH 1913, BY CITIES—Continued.

City.	Chuck roast.			Plate beef.			Pork chops.		
	Price per pound.		Percent- age in- crease: 1918 over 1913.	Price per pound.		Percent- age in- crease: 1918 over 1913.	Price per pound.		Percent- age in- crease: 1918 over 1913.
	1913	1918		1913	1918		1913	1918	
United States.....	\$0.160	\$0.266	66.3	\$0.121	\$0.206	70.3	\$0.210	\$0.390	85.7
Atlanta.....	.149	.244	63.8	.101	.197	95.0	.231	.391	69.3
Baltimore.....	.156	.285	82.7	.124	.225	81.5	.191	.412	115.7
Birmingham.....	.164	.270	64.6	.103	.209	102.9	.209	.377	80.4
Boston.....	.175	.304	73.7				.230	.413	79.6
Buffalo.....	.153	.264	72.5	.115	.210	82.6	.203	.398	96.1
Charleston.....	.151	.248	64.2	.118	.208	76.3	.235	.413	75.7
Chicago.....	.154	.259	68.2	.115	.198	72.2	.190	.354	86.3
Cincinnati.....	.152	.235	54.6	.118	.204	72.9	.206	.364	76.7
Cleveland.....	.166	.262	57.8	.119	.198	66.4	.210	.385	83.3
Dallas.....	.163	.279	71.2	.130	.227	74.6	.214	.381	78.0
Denver.....	.153	.248	62.1	.095	.177	86.3	.195	.376	92.8
Detroit.....	.151	.249	64.9	.112	.197	75.9	.195	.377	93.3
Fall River.....	.181	.296	63.5				.212	.396	86.8
Indianapolis.....	.159	.251	57.9	.122	.201	64.8	.211	.376	78.2
Jacksonville.....	.145	.254	75.2	.108	.195	80.6	.228	.396	73.7
Kansas City.....	.150	.238	58.7	.117	.198	69.2	.200	.359	79.5
Little Rock.....	.163	.263	61.3	.129	.227	76.0	.210	.384	82.9
Los Angeles.....	.157	.230	46.5	.126	.190	50.8	.251	.420	67.3
Louisville.....	.151	.252	66.9	.125	.220	76.0	.198	.373	88.4
Manchester.....	.169	.295	74.6				.205	.397	93.7
Memphis.....	.150	.262	74.7	.118	.227	92.4	.203	.380	87.2
Milwaukee.....	.161	.258	60.2	.116	.196	69.0	.190	.357	87.9
Minneapolis.....	.158	.226	43.0	.099	.176	77.8	.185	.348	88.1
Newark.....	.177	.316	78.5	.123	.231	87.8	.224	.411	83.5
New Haven.....	.190	.333	75.3				.220	.402	82.7
New Orleans.....	.145	.219	51.0	.113	.186	64.6	.228	.402	76.3
New York.....	.160	.285	78.1	.146	.260	78.1	.215	.404	87.9
Omaha.....	.157	.250	59.2	.107	.184	72.0	.195	.352	80.5
Philadelphia.....	.176	.310	76.1	.119	.216	81.5	.215	.417	94.0
Pittsburgh.....	.167	.297	77.8	.121	.216	78.5	.222	.402	81.1
Portland, Oreg.....	.163	.231	41.7	.134	.184	37.3	.217	.402	85.3
Providence.....	.187	.361	93.0				.210	.431	105.2
Richmond.....	.154	.294	90.9	.119	.241	102.5	.206	.403	95.6
St. Louis.....	.149	.246	65.1	.112	.200	78.6	.189	.360	90.5
Salt Lake City.....	.151	.242	60.3	.120	.190	58.3	.228	.405	77.6
San Francisco.....	.149	.223	49.7	.135	.207	53.3	.236	.405	71.6
Scranton.....	.167	.302	80.8	.115	.215	87.0	.207	.404	95.2
Seattle.....	.158	.245	55.1	.124	.204	64.5	.240	.428	78.3
Washington.....	.171	.319	86.5	.120	.231	92.5	.217	.453	108.8

AVERAGE RETAIL FOOD PRICES AND PERCENTAGES OF INCREASE, 1918 COMPARED WITH 1913, BY CITIES—Continued.

City.	Bacon, sliced.			Ham, sliced.			Lard.		
	Price per pound.		Percent- age in- crease: 1918 over 1913.	Price per pound.		Percent- age in- crease: 1918 over 1913.	Price per pound.		Percent- age in- crease: 1918 over 1913.
	1913	1918		1913	1918		1913	1918	
United States.....	\$0.270	\$0.529	95.9	\$0.269	\$0.479	78.1	\$0.158	\$0.333	110.8
Atlanta.....	.317	.554	74.8	.298	.491	64.8	.154	.342	122.1
Baltimore.....	.231	.505	118.6	.305	.530	73.8	.145	.330	127.6
Birmingham.....	.334	.563	68.6	.309	.476	54.0	.156	.327	109.6
Boston.....	.252	.495	96.4	.309	.506	63.8	.158	.336	112.7
Buffalo.....	.221	.488	120.8	.262	.485	85.1	.143	.319	123.1
Charleston.....	.257	.556	116.3	.275	.491	78.5	.150	.340	126.7
Chicago.....	.316	.547	73.1	.318	.488	53.5	.149	.322	116.1
Cincinnati.....	.251	.494	96.8	.283	.485	71.4	.141	.310	119.9
Cleveland.....	.276	.513	85.9	.353	.501	41.9	.163	.329	101.8
Dallas.....	.376	.577	53.5	.311	.504	62.1	.169	.336	98.8
Denver.....	.283	.554	95.8	.302	.521	72.5	.162	.340	109.9
Detroit.....	.232	.507	118.5	.261	.491	88.1	.162	.333	105.6
Fall River.....	.255	.487	91.0	.310	.476	53.5	.151	.322	113.2
Indianapolis.....	.294	.507	72.4	.307	.494	60.9	.151	.322	113.2
Jacksonville.....	.280	.546	95.0	.284	.474	66.9	.155	.335	116.1
Kansas City.....	.297	.542	82.5	.285	.496	74.0	.163	.347	112.9
Little Rock.....	.363	.567	56.2	.296	.510	72.3	.159	.339	113.2
Los Angeles.....	.337	.599	77.7	.353	.569	61.2	.180	.338	87.8
Louisville.....	.284	.537	89.1	.285	.492	72.6	.156	.324	107.7
Manchester.....	.234	.495	111.5	.282	.467	65.6	.161	.340	111.2
Memphis.....	.303	.543	79.2	.287	.479	66.9	.157	.328	108.9
Milwaukee.....	.275	.517	88.0	.278	.478	71.9	.156	.333	113.5
Minneapolis.....	.264	.517	95.8	.294	.474	61.2	.154	.326	111.7
Newark.....	.244	.489	100.4	1.204	1.379	85.8	.161	.341	111.8
New Haven.....	.281	.549	95.4	.320	.553	72.8	.155	.339	118.7
New Orleans.....	.299	.557	86.3	.273	.461	68.9	.149	.334	124.2
New York.....	.251	.502	100.0	.290	.517	78.3	.161	.332	106.2
Omaha.....	.277	.541	95.3	.291	.500	71.8	.174	.342	96.6
Philadelphia.....	.261	.522	100.0	.309	.532	72.2	.152	.334	119.7
Pittsburgh.....	.290	.548	89.0	.299	.527	76.3	.155	.333	114.8
Portland, Oreg.....	.301	.551	83.1	.303	.497	64.0	.181	.349	92.8
Providence.....	.225	.504	124.0	.313	.562	79.6	.154	.342	122.1
Richmond.....	.254	.514	102.4	.250	.454	81.6	.152	.342	125.0
St. Louis.....	.255	.510	100.0	.269	.497	84.8	.136	.302	122.1
Salt Lake City.....	.311	.544	74.9	.298	.481	61.4	.192	.357	85.9
San Francisco.....	.337	.571	69.4	.310	.521	68.1	.180	.337	87.2
Scranton.....	.264	.544	106.1	.290	.504	73.8	.160	.331	106.9
Seattle.....	.317	.572	80.4	.302	.506	67.5	.175	.333	90.3
Washington.....	.262	.527	101.1	.294	.517	75.9	.149	.341	128.9

1 Whole.

AVERAGE RETAIL FOOD PRICES AND PERCENTAGES OF INCREASE, 1918 COMPARED WITH 1913, BY CITIES—Continued.

City.	Lamb.			Hens.			Eggs, strictly fresh.		
	Price per pound.		Percent- age in- crease: 1918 over 1913.	Price per pound.		Percent- age in- crease: 1918 over 1913.	Price per dozen.		Percent- age in- crease: 1918 over 1913.
	1913	1918		1913	1918		1913	1918	
United States.....	\$0.189	\$0.349	84.7	\$0.213	\$0.377	77.0	\$0.345	\$0.569	64.9
Atlanta.....	.197	.369	87.3	.202	.356	76.2	.292	.527	80.5
Baltimore.....	.184	.379	106.0	.213	.408	91.5	.302	.561	85.8
Birmingham.....	.217	.373	71.9	.186	.337	81.2	.306	.523	70.9
Boston.....	.221	.369	67.0	.248	.421	69.8	.423	.705	66.7
Buffalo.....	.169	.321	90.0	.211	.382	81.0	.329	.584	77.5
Charleston.....	.218	.384	76.2	.217	.428	97.2	.315	.536	70.2
Chicago.....	.198	.338	70.7	.193	.339	75.6	.292	.520	78.1
Cincinnati.....	.170	.324	90.6	.234	.370	58.1	.278	.512	84.2
Cleveland.....	.193	.336	74.1	.215	.379	76.3	.343	.586	70.8
Dallas.....	.221	.391	76.9	.187	.312	66.8	.284	.494	73.9
Denver.....	.164	.326	98.8	.203	.344	69.5	.320	.537	67.8
Detroit.....	.167	.347	107.8	.206	.374	81.6	.314	.580	84.7
Fillmore.....	.198	.360	81.8	.247	.408	65.2	.416	.713	71.4
Indianapolis.....	.198	.277	39.9	.211	.310	46.9	.282	.498	76.6
Jacksonville.....	.203	.357	75.9	.228	.378	65.8	.353	.567	60.6
Kansas City.....	.182	.295	62.1	.170	.309	81.8	.275	.507	84.4
Little Rock.....	.200	.367	83.5	.191	.342	79.1	.291	.514	76.6
Los Angeles.....	.188	.325	72.9	.266	.407	53.0	.383	.583	52.2
Louisville.....	.178	.372	109.0	.226	.350	54.9	.269	.507	88.5
Manchester.....	.201	.360	79.1	.241	.424	75.9	.376	.674	79.3
Memphis.....	.206	.365	77.2	.198	.327	65.2	.285	.507	77.9
Milwaukee.....	.197	.349	77.2	.198	.336	69.7	.293	.511	74.4
Minneapolis.....	.154	.292	89.6	.186	.312	67.7	.283	.492	73.9
Newark.....	.207	.372	79.7	.231	.406	75.8	.445	.673	51.2
New Haven.....	.197	.378	91.9	.234	.422	80.3	.423	.727	71.9
New Orleans.....	.207	.358	72.9	.214	.371	73.4	.299	.500	67.2
New York.....	.165	.314	90.3	.214	.394	84.1	.403	.642	59.3
Omaha.....	.172	.320	86.1	.173	.316	82.7	.271	.500	84.5
Philadelphia.....	.197	.366	85.8	.226	.416	84.1	.349	.598	71.3
Pittsburgh.....	.210	.377	79.5	.257	.434	68.9	.325	.580	78.5
Portland, Oreg.....	.177	.322	81.9	.211	.354	67.8	.365	.553	51.5
Providence.....	.196	.382	94.9	.242	.432	78.5	.416	.692	66.3
Richmond.....	.193	.390	102.1	.204	.397	94.6	.288	.542	88.2
St. Louis.....	.182	.339	86.3	.178	.329	84.8	.266	.511	92.1
Salt Lake City.....	.181	.318	75.7	.238	.354	48.7	.335	.545	62.7
San Francisco.....	.169	.327	93.5	.242	.421	74.0	.373	.595	59.5
Scranton.....	.198	.380	91.9	.230	.427	85.7	.349	.588	68.5
Seattle.....	.191	.352	84.3	.241	.383	58.9	.376	.604	60.6
Washington.....	.204	.409	100.5	.221	.425	92.3	.310	.595	91.9

AVERAGE RETAIL FOOD PRICES AND PERCENTAGES OF INCREASE, 1918 COMPARED WITH 1913, BY CITIES—Continued.

City.	Butter.			Milk.			Flour.		
	Price per pound.		Percent- age in- crease: 1918 over 1913.	Price per quart.		Percent- age in- crease: 1918 over 1913.	Price per pound.		Percent- age in- crease: 1918 over 1913.
	1913	1918		1913	1918		1913	1918	
United States.....	\$0.383	\$0.577	50.7	\$0.089	\$0.139	56.2	\$0.033	\$0.067	103.0
Atlanta.....	.399	.602	50.9	.102	.191	87.3	.036	.070	94.4
Baltimore.....	.397	.605	52.4	.088	.125	77.3	.032	.068	112.5
Birmingham.....	.417	.601	44.1	.102	.169	65.7	.037	.069	86.5
Boston.....	.379	.561	48.0	.089	.150	68.5	.037	.069	86.5
Buffalo.....	.371	.570	53.6	.080	.141	76.3	.030	.063	110.0
Charleston.....	.378	.584	54.5	.118	.181	53.4	.037	.072	94.6
Chicago.....	.362	.545	50.6	.080	.125	56.3	.028	.064	128.6
Cincinnati.....	.385	.569	47.8	.080	.133	66.3	.033	.067	103.0
Cleveland.....	.396	.582	47.0	.082	.135	64.6	.032	.068	112.5
Dallas.....	.384	.552	43.8	.103	.169	64.1	.033	.067	103.0
Denver.....	.373	.545	46.1	.084	.118	40.5	.026	.057	119.2
Detroit.....	.370	.564	52.4	.084	.138	64.3	.031	.067	116.1
Fall River.....	.369	.544	47.4	.090	.140	55.6	.033	.072	118.2
Indianapolis.....	.376	.571	51.9	.080	.115	43.8	.032	.065	103.1
Jacksonville.....	.407	.599	47.2	.114	.168	47.4	.038	.071	86.8
Kansas City.....	.383	.563	47.0	.089	.135	51.7	.030	.066	120.0
Little Rock.....	.425	.587	38.1	.101	.158	56.4	.036	.067	86.1
Los Angeles.....	.396	.569	43.7	.100	.138	38.0	.035	.068	94.3
Louisville.....	.396	.589	48.7	.088	.135	53.4	.037	.067	81.1
Manchester.....	.403	.594	47.4	.080	.142	77.5	.034	.070	105.9
Memphis.....	.394	.582	47.7	.100	.155	55.0	.035	.067	91.4
Milwaukee.....	.359	.554	54.3	.070	.112	60.0	.031	.065	109.7
Minneapolis.....	.356	.533	49.7	.074	.112	51.4	.029	.061	110.3
Newark.....	.402	.600	49.3	.090	.151	67.8	.036	.072	100.0
New Haven.....	.366	.560	53.0	.090	.146	62.2	.032	.070	118.8
New Orleans.....	.380	.574	51.1	.098	.147	50.0	.038	.073	92.1
New York.....	.382	.578	51.3	.090	.145	61.1	.032	.072	125.0
Omaha.....	.367	.552	50.4	.082	.132	61.0	.028	.063	125.0
Philadelphia.....	.436	.630	44.5	.080	.129	61.3	.032	.070	118.8
Pittsburgh.....	.398	.593	49.0	.088	.136	54.5	.032	.068	112.5
Portland, Oreg.....	.405	.598	47.7	.095	.136	43.2	.029	.061	110.3
Providence.....	.388	.572	47.4	.090	.150	66.7	.034	.069	102.9
Richmond.....	.411	.605	47.2	.100	.149	49.0	.033	.068	106.1
St. Louis.....	.374	.582	55.6	.083	.130	56.6	.030	.063	110.0
Salt Lake City.....	.385	.571	48.3	.087	.116	33.3	.025	.057	128.0
San Francisco.....	.388	.589	51.8	.100	.127	27.0	.034	.067	97.1
Scranton.....	.375	.548	46.1	.087	.134	54.0	.035	.070	100.0
Seattle.....	.400	.593	48.3	.090	.135	50.0	.029	.062	113.8
Washington.....	.405	.611	50.9	.086	.148	72.1	.038	.068	78.9

AVERAGE RETAIL FOOD PRICES AND PERCENTAGES OF INCREASE, 1918 COMPARED WITH 1913, BY CITIES—Continued.

City.	Corn meal.			Potatoes.			Sugar.		
	Price per pound.		Percent- age in- crease: 1918 over 1913.	Price per pound.		Percent- age in- crease: 1918 over 1913.	Price per pound.		Percent- age in- crease: 1918 over 1913.
	1913	1918		1913	1918		1913	1918	
United States.....	\$0.030	\$0.068	126.7	\$0.017	\$0.032	88.2	\$0.055	\$0.097	76.4
Atlanta.....	.025	.056	124.0	.022	.041	86.4	.057	.099	73.7
Baltimore.....	.025	.064	156.0	.018	.034	88.9	.049	.093	89.3
Birmingham.....	.023	.055	139.1	.021	.038	81.0	.054	.096	77.8
Boston.....	.035	.075	114.3	.017	.035	105.9	.054	.098	81.5
Buffalo.....	.026	.069	165.4	.017	.030	76.5	.054	.097	79.6
Charleston.....	.024	.061	154.2	.022	.038	72.7	.051	.094	84.3
Chicago.....	.029	.068	134.5	.016	.027	68.8	.051	.092	80.4
Cincinnati.....	.027	.060	122.2	.018	.030	66.7	.053	.095	79.2
Cleveland.....	.028	.067	139.3	.017	.032	88.2	.054	.096	77.8
Dallas.....	.029	.067	131.0	.022	.035	59.1	.058	.099	70.7
Denver.....	.025	.060	140.0	.014	.027	92.9	.055	.099	80.0
Detroit.....	.028	.072	157.1	.015	.028	86.7	.052	.094	80.8
Fall River.....	.035	.086	145.7	.019	.034	78.9	.054	.101	87.0
Indianapolis.....	.026	.063	142.3	.016	.031	93.8	.058	.096	65.5
Jacksonville.....	.029	.062	113.8	.024	.039	62.5	.060	.096	60.0
Kansas City.....	.026	.067	157.7	.017	.030	76.5	.057	.101	77.2
Little Rock.....	.025	.063	152.0	.020	.032	60.0	.056	.099	76.8
Los Angeles.....	.033	.076	130.3	.015	.026	73.3	.054	.093	72.2
Louisville.....	.023	.060	160.9	.019	.032	68.4	.053	.096	81.1
Manchester.....	.037	.078	110.8	.016	.033	106.3	.054	.100	85.2
Memphis.....	.022	.059	168.2	.018	.032	77.8	.055	.096	74.5
Milwaukee.....	.033	.071	115.2	.014	.027	92.9	.054	.095	75.9
Minneapolis.....	.024	.057	137.5	.012	.022	83.3	.055	.098	78.2
Newark.....	.036	.082	127.8	.025	.038	52.0	.053	.095	79.2
New Haven.....	.032	.081	153.1	.081	.036	100.0	.053	.102	92.5
New Orleans.....	.027	.063	133.3	.021	.034	61.9	.052	.094	80.8
New York.....	.034	.079	132.4	.025	.038	52.0	.049	.094	91.8
Omaha.....	.024	.061	154.2	.016	.029	81.3	.058	.097	67.2
Philadelphia.....	.028	.070	150.0	.022	.038	72.7	.050	.094	88.0
Pittsburgh.....	.028	.076	171.4	.018	.034	88.9	.056	.099	76.8
Portland, Oreg.....	.034	.076	123.5	.009	.023	155.6	.062	.096	54.8
Providence.....	.029	.073	151.7	.017	.034	100.0	.051	.099	94.1
Richmond.....	.021	.062	195.2	.019	.037	94.7	.053	.098	84.9
St. Louis.....	.023	.060	160.9	.017	.030	76.5	.052	.094	80.8
Salt Lake City.....	.034	.075	120.6	.012	.021	75.0	.061	.101	65.6
San Francisco.....	.034	.073	114.7	.017	.028	64.7	.054	.092	70.4
Scranton.....	.031	.074	138.7	.018	.031	72.2	.057	.097	70.2
Seattle.....	.031	.074	138.7	.012	.025	108.3	.061	.096	57.4
Washington.....	.025	.061	144.0	.018	.034	88.9	.051	.094	84.3

AVERAGE RETAIL FOOD PRICES AND PERCENTAGES OF INCREASE, 1918 COMPARED WITH 1913, BY CITIES—Concluded.

City.	Bread.				City.	Bread.			
	Price per pound.			Per-centage in-crease: 1918 over 1913.		Price per pound.			Per-centage in-crease: 1918 over 1913.
	1913		1918 ²			1913		1918 ²	
	Scaling weight. ¹	Baked weight. ³				Scaling weight. ¹	Baked weight. ²		
United States	\$0.050	\$0.057	\$0.098	71.9	Manchester.....	\$0.053	\$0.060	\$0.090	50.0
Atlanta.....	.052	.059	.100	69.5	Memphis.....	.053	.060	.100	66.7
Baltimore.....	.048	.054	.096	77.8	Milwaukee.....	.050	.056	.091	62.5
Birmingham.....	.048	.054	.107	98.1	Minneapolis.....	.050	.056	.089	58.9
Boston.....	.052	.059	.099	52.5	Newark.....	.050	.056	.094	67.9
Buffalo.....	.050	.056	.098	75.0	New Haven.....	.053	.060	.100	66.7
Charleston.....	.054	.061	.100	63.9	New Orleans.....	.045	.051	.093	82.4
Chicago.....	.054	.061	.101	65.6	New York.....	.054	.061	.097	59.0
Cincinnati.....	.043	.048	.095	97.9	Omaha.....	.046	.052	.100	92.3
Cleveland.....	.049	.055	.097	76.4	Philadelphia.....	.043	.048	.090	87.5
Dallas.....	.048	.054	.097	79.6	Pittsburgh.....	.048	.054	.098	81.5
Denver.....	.048	.054	.113	109.3	Portland, Ore.....	.050	.056	.103	83.9
Detroit.....	.050	.056	.094	67.9	Providence.....	.053	.060	.099	65.0
Fall River.....	.053	.062	.100	61.3	Richmond.....	.047	.053	.100	88.7
Indianapolis.....	.045	.051	.097	90.2	St. Louis.....	.049	.053	.100	81.8
Jacksonville.....	.057	.064	.100	56.3	Salt Lake City.....	.052	.059	.100	69.5
Kansas City.....	.053	.060	.100	66.7	San Francisco.....	.052	.059	.100	69.5
Little Rock.....	.053	.060	.100	66.7	Scranton.....	.050	.056	.098	75.0
Los Angeles.....	.054	.061	.091	49.2	Seattle.....	.050	.056	.103	83.9
Louisville.....	.051	.057	.098	71.9	Washington.....	.050	.056	.097	73.2

¹ Sixteen ounces, weight of dough.

² Baked weight. For the year 1918 the bureau has used the pound, baked weight, as reported by bakers. For all loaves weighing other than one pound baked, the price per pound has been computed. No figures are available for baked weights previous to 1918, hence figures for 1913 have been converted to an 18-ounce scaling weight from those previously published for a 16-ounce scaling weight, as 18 ounces is the average scaling weight for a baked loaf weighing a pound. This gives prices comparable with those for 1918 on a pound loaf, baked weight.

If comparison is made between cities in the foregoing tables, it will be noticed that there is a wide variation in the percentage increases of certain articles. It should be understood that a high percentage increase in any city does not necessarily mean a high retail price for the year 1918 as compared with other cities. For example, the retail price of strictly fresh eggs shows an increase in the five-year period of 51 per cent in Newark and an increase of 92 per cent in St. Louis. However, in St. Louis the actual price charged in 1918 was cheaper by approximately 16 cents a dozen, and in 1913 by approximately 18 cents a dozen, than the retail price charged in Newark. The much greater percentage of increase in St. Louis is explained by the smaller basic price on which it is computed. In considering the percentage increases of the various articles as shown in the tables, attention should always be given to the actual prices for both years.

PRICE CHANGES, WHOLESALE AND RETAIL, IN THE UNITED STATES.

A comparison of wholesale and retail price changes for important food articles is contained in the subjoined table. As some products—fresh beef, for example—are not sold by the retailer in the

same form in which they leave the wholesaler, strictly comparable prices are not obtainable. In most instances, also, the comparison is not for the same date, the retail prices being those prevailing on the 15th of the month, while the wholesale prices are for a variable date, usually several days prior to the 15th. Notwithstanding these differences, the figures may be considered indicative of price variations in the retail as compared with the wholesale markets.

The differential between the two series of quotations at successive dates is given to assist in making the comparison. It should not be assumed, however, that this differential in any case represents the margin of profit to the retailer, since, in addition to a possible difference of grade between the articles shown at wholesale and retail, the various items of handling cost to both the wholesaler and retailer are included in the figure.

WHOLESALE AND RETAIL PRICES OF IMPORTANT FOOD ARTICLES IN SELECTED CITIES.

[The initials W=wholesale; R=retail. The wholesale price is the mean of the high and low quotation on the date selected, as published in leading trade journals. The retail price is the average of prices reported to the Bureau of Labor Statistics by dealers.]

Article and city.	Unit.	1913: Av- erage for year.				July—				1917				1918				1919
		1914	1915	1916	Jan.	Apr.	July.	Oct.	Jan.	Apr.	July.	Oct.	Dec.	Jan.				
Beef, Chicago:																		
Steer loin ends..W.	Lb..	16.8	17.5	16.0	20.5	20.0	20.0	19.0	23.5	20.0	23.0	34.0	34.0	32.0	32.0			
Sirloin steak.....R.	Lb..	23.2	26.0	25.8	28.1	26.5	29.3	30.2	30.6	30.2	33.7	37.7	37.6	37.0	37.5			
Price differential....		6.4	8.5	9.8	7.6	6.5	9.3	11.2	7.1	10.2	10.7	3.7	3.6	5.0	5.5			
Beef, Chicago:																		
Steer rounds, No. 2.....W.	Lb..	13.1	14.5	14.3	14.5	12.0	15.5	17.0	19.0	16.5	18.5	25.0	26.0	22.0	22.0			
Round steak.....R.	Lb..	20.2	23.3	22.8	24.1	22.7	25.6	26.6	27.3	27.3	30.4	35.0	34.3	33.7	34.0			
Price differential....		7.1	8.8	8.5	9.6	10.7	10.1	9.6	8.3	10.8	11.9	10.0	8.3	11.7	12.0			
Beef, Chicago:																		
Steer ribs, No. 2..W.	Lb..	15.7	16.5	14.5	17.5	16.0	21.0	20.0	23.0	20.0	22.0	28.0	31.0	30.0	30.0			
Sirloin steak.....R.	Lb..	19.5	21.2	21.3	22.9	22.3	24.1	24.6	24.7	25.4	28.8	31.8	31.3	30.8	31.1			
Price differential....		3.8	4.7	6.8	5.4	6.3	3.1	4.6	1.7	5.4	6.8	3.8	.3	.8	1.1			
Beef, New York:																		
Loins, No. 2.....W.	Lb..	15.8	18.3	17.0	20.0	18.0	19.0	19.0	27.5	23.5	26.0	28.0	35.0	35.0	37.0			
Round steak.....R.	Lb..	25.9	27.4	28.2	29.4	28.4	31.8	33.7	35.6	34.4	38.0	43.9	43.8	43.0	44.8			
Price differential....		10.1	9.1	11.2	9.4	10.4	12.8	14.7	8.1	10.9	12.0	15.9	8.8	8.0	7.8			
Beef, New York:																		
Rounds, No. 2..W.	Lb..	12.1	13.5	13.5	14.5	13.0	17.0	17.5	19.0	18.0	20.0	28.0	27.0	25.0	25.0			
Round steak.....R.	Lb..	24.9	27.0	27.1	28.9	27.5	31.5	33.7	36.0	35.2	38.4	46.3	45.4	45.4	47.3			
Price differential....		12.8	13.5	13.6	14.4	14.5	14.5	16.2	17.0	17.2	18.4	18.3	18.4	20.4	22.3			
Beef, New York:																		
Ribs, No. 2.....W.	Lb..	15.1	16.5	16.0	18.0	16.0	20.0	19.0	27.5	23.5	25.0	28.0	32.0	34.0	35.0			
Rib roast.....R.	Lb..	21.8	22.5	22.7	24.3	23.8	27.0	27.9	29.8	29.4	32.4	37.5	37.2	39.6	40.9			
Price differential....		6.7	6.0	6.7	6.3	7.8	7.0	8.9	2.3	5.9	7.4	9.5	5.2	5.6	5.9			
Pork, Chicago:																		
Loins.....W.	Lb..	14.9	16.5	15.0	16.5	16.5	24.0	25.0	33.0	27.0	29.0	29.0	34.0	32.0	27.0			
Chops.....R.	Lb..	19.0	20.4	20.1	21.7	22.7	28.5	29.2	35.8	31.6	33.0	35.5	39.0	36.4	35.2			
Price differential....		4.1	3.9	5.1	5.2	6.2	4.5	4.2	2.8	4.6	4.0	6.5	5.0	4.4	8.2			
Pork, New York:																		
Loins, western..W.	Lb..	15.2	16.3	15.3	16.5	17.0	23.5	23.5	30.0	26.5	27.5	30.5	37.0	34.0	33.0			
Chops.....R.	Lb..	21.7	23.0	21.7	23.9	24.8	31.9	32.6	39.9	34.8	36.7	40.6	46.7	42.7	43.5			
Price differential....		6.5	6.7	6.4	7.4	7.8	8.4	9.1	9.9	8.3	9.2	10.1	9.7	8.7	10.5			
Bacon, Chicago:																		
Short clear sides..W.	Lb..	12.7	13.9	11.3	15.9	15.8	21.8	24.7	31.8	30.1	27.5	27.4	29.1	30.8	29.4			
Sliced.....R.	Lb..	29.4	31.8	31.5	32.8	31.6	39.5	43.9	47.5	49.8	51.9	54.7	59.3	59.5	61.6			
Price differential....		16.7	17.9	20.2	16.9	15.8	17.7	19.2	15.7	19.7	24.4	27.3	30.2	28.7	32.2			
Ham, Chicago:																		
Smoked.....W.	Lb..	16.6	17.5	16.3	19.0	18.8	24.3	24.3	28.3	29.8	30.0	30.1	33.6	36.5	35.3			
Smoked, sliced..R.	Lb..	26.6	33.8	32.8	34.9	33.3	38.2	41.4	43.9	42.8	46.7	49.1	52.0	53.4	55.3			
Price differential....		10.0	16.3	16.5	15.9	14.5	13.9	17.1	15.6	13.0	16.7	19.0	13.4	16.9	20.0			
Lard, New York:																		
Prime, contract..W.	Lb..	11.0	10.4	8.0	13.3	15.9	21.5	20.1	24.6	24.6	26.3	26.2	26.6	26.7	24.0			
Pure, tub.....R.	Lb..	16.0	15.6	15.1	16.8	21.3	26.3	27.4	31.3	33.0	33.4	32.2	34.1	34.1	33.1			
Price differential....		5.0	5.2	7.1	3.5	5.4	4.8	7.3	6.7	8.4	7.1	6.0	7.5	7.4	8.9			

WHOLESALE AND RETAIL PRICES OF IMPORTANT FOOD ARTICLES IN SELECTED CITIES—Concluded.

Article and city.	Unit.	1913: Average for year.				July—				1917				1918				1919
						1914	1915	1916	Jan.	Apr.	July.	Oct.	Jan.	Apr.	July.	Oct.	Dec.	Jan.
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Lamb, Chicago:																		
Dressed round...W.	Lb.	14.9	17.0	19.0	19.0	20.0	20.0	22.0	26.0	27.0	24.0	29.0	31.0	24.0	24.0	28.0		
Leg of, yearling...R.	Lb.	19.8	21.9	20.8	23.1	23.2	26.3	28.7	31.4	30.6	35.6	35.7	32.3	33.1	34.2			
Price differential...		4.9	4.9	1.8	4.1	3.2	4.3	2.7	4.4	6.6	6.6	4.7	8.3	9.1	6.2			
Poultry, New York:																		
Dressed fowls...W.	Lb.	18.2	18.8	17.5	21.5	22.0	26.5	24.8	28.5	29.8	34.0	36.0	34.5	34.5	35.5			
Dressed hens...R.	Lb.	21.4	22.0	21.9	25.6	26.1	29.3	28.7	32.3	32.6	38.0	41.0	41.0	40.1	40.8			
Price differential...		3.2	3.2	4.4	4.1	4.1	2.8	3.9	3.8	2.8	4.0	5.0	6.5	5.6	5.3			
Butter, Chicago:																		
Creamery, extra...W.	Lb.	31.0	26.5	26.5	27.5	37.0	44.0	37.5	43.5	49.0	40.0	42.5	55.0	67.3	66.0			
Creamery, extra...R.	Lb.	36.2	31.2	32.2	33.5	43.8	48.4	43.3	48.7	54.4	46.0	48.0	61.5	72.7	71.3			
Price differential...		5.2	4.7	5.7	6.0	6.8	4.4	5.7	5.2	5.4	6.0	5.5	6.5	5.4	5.3			
Butter, New York:																		
Creamery, extra...W.	Lb.	32.3	28.0	27.0	28.5	39.5	45.0	39.5	44.3	51.0	41.5	44.4	60.0	69.3	67.0			
Creamery, extra...R.	Lb.	38.2	32.8	33.6	34.6	46.0	51.3	45.3	51.5	57.4	49.3	51.4	65.6	76.2	75.5			
Price differential...		5.9	4.8	6.6	6.1	6.5	6.3	5.8	7.2	6.4	7.8	7.0	5.6	6.9	8.5			
Butter, San Francisco:																		
Creamery, extra...W.	Lb.	31.7	24.5	26.5	25.5	35.5	39.0	38.5	46.0	53.0	37.5	50.0	62.5	63.0	64.5			
Creamery, extra...R.	Lb.	38.8	32.9	33.8	33.3	42.5	45.2	45.5	54.5	60.2	45.2	56.6	70.0	70.6	72.3			
Price differential...		7.1	8.4	7.3	7.8	7.0	6.2	7.0	8.5	7.2	7.7	6.7	7.5	7.6	7.8			
Cheese, Chicago:																		
Whole milk...W.	Lb.	14.2	13.3	14.5	14.5	21.8	22.3	21.6	24.6	23.3	21.5	22.7	35.0	35.3	36.3			
Full cream...R.	Lb.																	
Price differential...																		
Cheese, New York:																		
Wholemilk																		
State...W.	Lb.	15.4	14.4	14.6	15.1	22.0	24.5	23.8	25.5	23.0	22.5	23.9	32.5	36.3	36.8			
Full cream...R.	Lb.																	
Price differential...																		
Cheese, San Francisco:																		
Fancy...W.	Lb.	15.9	12.5	11.5	13.5	18.0	21.5	20.0	22.0	25.5	26.0	26.0	30.5	35.5	33.5			
Full cream...R.	Lb.																	
Price differential...																		
Milk, Chicago:																		
Fresh...W.	Qt.	3.8	3.9	3.7	3.6	4.5	5.4	4.7	7.4	7.0	5.8	5.3	7.5	8.4	8.4			
Fresh, bottled...R.	Qt.	8.0	8.0	8.0	8.1	10.0	10.0	10.0	12.9	11.9	11.9	12.0	12.9	14.0	14.0			
Price differential...		4.2	4.4	4.3	4.5	5.5	4.6	5.3	5.5	4.9	6.1	6.7	5.4	5.6	5.6			
Milk, New York:																		
Fresh...W.	Qt.	3.5	3.0	3.0	3.1	5.1	4.9	5.0	7.2	8.1	5.9	5.4	8.2	9.2	9.2			
Fresh, bottled...R.	Qt.	9.0	9.0	9.0	9.0	10.0	10.9	11.4	13.8	15.0	14.0	12.7	15.6	17.0	16.0			
Price differential...		5.5	6.0	6.0	5.9	4.9	6.0	6.4	6.6	6.9	8.1	7.3	7.4	7.8	6.8			
Milk, San Francisco:																		
Fresh...W.	Qt.	3.9	3.9	3.8	3.8	3.8	3.8	4.3	5.9	6.6	5.9	5.9	7.4	7.4	7.4			
Fresh, bottled...R.	Qt.	10.0	10.0	10.0	10.0	10.0	10.0	10.0	12.1	12.1	12.1	12.1	14.0	14.0	14.0			
Price differential...		6.1	6.1	6.2	6.2	6.2	6.2	5.7	6.2	5.5	6.2	6.2	6.6	6.6	6.6			
Eggs, Chicago:																		
Fresh, firsts...W.	Doz.	22.6	18.8	16.8	21.8	48.5	30.5	31.0	37.0	56.5	31.5	36.5	49.3	61.0	58.8			
Strictly fresh...R.	Doz.	29.2	26.1	24.8	29.6	52.5	37.6	40.6	46.9	65.1	38.0	45.7	55.9	72.8	69.5			
Price differential...		6.6	7.3	8.0	7.8	4.0	7.1	9.6	9.9	8.6	6.5	9.2	6.6	11.8	10.7			
Eggs, New York:																		
Fresh, firsts...W.	Doz.	24.9	21.5	20.0	24.1	50.5	33.0	35.0	40.0	64.5	33.3	40.0	52.5	71.5	61.3			
Strictly fresh...R.	Doz.	39.7	35.3	32.6	37.2	66.7	42.4	47.7	62.7	80.8	47.6	57.3	69.2	90.3	78.1			
Price differential...		14.8	13.8	12.6	13.1	16.2	9.4	12.7	22.7	16.3	14.3	17.3	6.7	18.8	16.8			
Eggs, San Francisco:																		
Fresh...W.	Doz.	26.8	23.0	22.0	24.0	38.0	28.0	32.0	43.5	61.0	36.5	44.0	62.0	78.0	53.0			
Strictly fresh...R.	Doz.	37.3	33.8	31.0	33.3	48.0	37.4	39.2	60.8	71.0	41.9	51.4	75.6	85.0	65.7			
Price differential...		10.5	10.8	9.0	9.3	10.0	9.4	7.2	17.3	10.0	5.4	7.4	3.6	7.0	12.7			
Meal, corn, Chicago:																		
Fine...W.	Lb.	1.4	1.6		1.9	2.4	3.6	4.5	5.2	5.1	6.0	5.4	4.1	3.7	3.6			
Fine...R.	Lb.	2.9	2.8	3.1	3.1	4.2	5.0	5.8	7.1	7.0	7.2	6.8	6.7	6.3	5.8			
Price differential...		1.5	1.2		1.2	1.8	1.4	1.3	1.9	1.9	1.2	1.4	2.6	2.6	2.2			
Beans, New York:																		
Medium, choice...W.	Lb.	4.0	4.0	5.8	9.8	10.8	13.0	15.4	13.8	14.1	13.7	11.9	11.0	10.0	9.9			
Navy, white...R.	Lb.				8.1	11.3	14.9	16.2	18.8	18.5	18.2	17.2	15.8	15.3				
Price differential...					2.3	1.5	4.1	3.2	3.4	4.7	4.4	4.5	5.6	6.2	5.8			
Potatoes, Chicago:																		
White...W.	Lb.	1.0	2.4	.7	1.6	2.9	4.7	4.4	1.9	2.0	1.1	1.5	1.5	1.6	1.9			
White...R.	Lb.	1.5	2.7	1.2	2.3	3.9	5.8	5.0	2.8	2.8	1.7	3.7	2.7	2.5	2.7			
Price differential...		.5	.3	.5	.7	1.0	1.1	.6	.9	.8	.6	2.2	1.2	.9	.8			
Rice, New Orleans:																		
Head...W.	Lb.	5.0	5.4	4.9	4.6	4.8	4.9	7.1	7.7	8.8	8.8	9.3	9.1	9.1	9.1			
Head...R.	Lb.				7.5	7.4	7.4	8.8	10.1	10.0	10.6	10.7	11.9	12.3	12.2			
Price differential...					2.6	2.8	2.6	3.9	3.0	2.3	1.8	1.9	2.6	3.2	3.1			
Sugar, New York:																		
Granulated...W.	Lb.	4.3	4.2	5.9	7.5	6.6	8.1	7.4	8.2	7.3	7.3	7.4	8.8	8.8	8.8			
Granulated...R.	Lb.	4.9	4.6	6.3	7.9	7.4	8.7	8.4	9.7	9.7	8.8	8.8	10.6	10.4	10.1			
Price differential...		.6	.4	.4	.4	.8	.6	1.0	1.5	2.4	1.5	1.4	1.8	1.6	1.3			

1 Good to choice.

Wholesale and retail prices expressed as percentages of the average money prices for 1913 are contained in the following table. This will enable the reader to follow more easily the trend of price fluctuations of many food articles at wholesale and retail. Owing to lack of satisfactory data for 1913, a few articles which are shown in the preceding table do not appear in this one. The table shows that, as compared with the 1913 base price, the retail prices of most of the commodities in recent months were relatively lower than the wholesale prices. This is particularly noticeable in the case of bacon, milk, eggs, and corn meal. The preceding table shows, however, that the margin between wholesale and retail prices for most of the articles was greater in recent months than in 1913.

RELATIVE WHOLESALE AND RETAIL PRICES OF IMPORTANT FOOD ARTICLES IN SELECTED CITIES (AVERAGE FOR 1913=100).

[The initials W=wholesale; R=retail.]

Article and city.	1913: Average for year.	July—			1917				1918					1919	
		1914	1915	1916	Jan.	Apr.	July.	Oct.	Jan.	Apr.	July.	Oct.	Dec.		Jan.
Beef, Chicago:															
Steer loin ends (hips).....W.	100	104	95	122	119	119	113	140	119	137	202	202	190	190	162
Sirloin steak.....R.	100	112	111	121	114	126	130	132	130	145	163	162	159	123	160
Beef, Chicago:															
Steer rounds, No. 2.....W.	100	111	109	111	92	118	130	145	126	141	191	198	168	168	168
Round steak.....R.	100	115	113	119	112	127	132	135	135	151	173	170	167	167	168
Beef, Chicago:															
Steer ribs, No. 2.....W.	100	105	92	111	102	134	127	146	127	140	178	197	191	223	223
Rib roast.....R.	100	109	109	117	114	124	126	127	130	148	163	161	158	159	159
Beef, New York:															
No. 2 loins, city.....W.	100	116	108	127	114	120	120	174	149	165	177	222	222	207	234
Sirloin steak.....R.	100	106	109	114	110	123	130	137	133	147	170	169	166	166	173
Beef, New York:															
No. 2 rounds, city.....W.	100	112	112	120	107	140	145	157	149	165	231	223	207	207	207
Round steak.....R.	100	108	109	116	110	127	135	145	141	154	186	182	182	190	190
Beef, New York:															
No. 2 ribs, city.....W.	100	109	106	119	106	132	126	182	156	166	185	212	225	232	232
Rib roast.....R.	100	103	104	111	109	124	128	137	135	149	172	171	182	188	188
Pork, Chicago:															
Loins.....W.	100	111	101	111	111	161	168	221	181	195	195	228	215	181	181
Chops.....R.	100	107	106	114	119	150	154	188	166	174	187	205	192	185	185
Pork, New York:															
Loins, western.....W.	100	107	101	109	112	155	155	197	174	181	201	243	224	217	217
Chops.....R.	100	106	100	110	114	147	150	184	160	169	187	215	197	201	201
Bacon, Chicago:															
Short clear sides.....W.	100	109	89	125	124	172	194	250	237	217	216	229	243	232	232
Sliced.....R.	100	108	107	112	107	134	149	162	169	177	186	202	202	210	210
Ham, Chicago:															
Smoked.....W.	100	105	98	114	113	146	146	170	180	181	181	202	220	213	213
Smoked, sliced.....R.	100	127	123	131	125	144	156	165	161	176	185	195	201	208	208
Lard, New York:															
Prime, contract.....W.	100	95	73	121	145	195	183	224	224	239	238	242	243	220	220
Pure, tub.....R.	100	98	94	105	133	164	171	196	206	209	201	213	213	207	207
Lamb, Chicago:															
Dressed, round.....W.	100	114	128	128	134	148	174	181	161	195	208	161	161	188	188
Leg of, yearling.....R.	100	111	105	117	117	133	145	159	155	180	180	163	167	173	173
Poultry, New York:															
Dressed fowls.....W.	100	103	96	118	121	146	136	157	164	187	198	190	190	195	195
Dressed hens.....R.	100	103	102	120	122	137	134	151	152	.....	192	192	187	191	191
Butter, Chicago:															
Creamery, extra.....W.	100	85	85	89	119	142	121	140	158	129	137	177	217	213	213
Creamery, extra.....R.	100	86	89	93	121	134	119	135	150	127	133	170	201	197	197
Butter, New York:															
Creamery, extra.....W.	100	87	84	88	122	139	122	137	158	128	137	186	215	207	207
Creamery, extra.....R.	100	86	88	91	120	134	119	135	150	129	135	172	199	198	198
Butter, San Francisco:															
Creamery, extra.....W.	100	77	84	80	112	123	121	145	167	118	158	197	199	203	203
Creamery, extra.....R.	100	85	87	86	110	116	117	140	155	116	146	180	182	186	186
Milk, Chicago:															
Fresh.....W.	100	95	97	95	118	142	124	195	184	153	139	197	221	221	221
Fresh, bottled, del'vd.....R.	100	100	100	101	125	125	125	161	149	149	150	161	175	175	175

RELATIVE WHOLESALE AND RETAIL PRICES OF IMPORTANT FOOD ARTICLES IN SELECTED CITIES (AVERAGE FOR 1913=100)—Concluded.

[The initials W=wholesale; R=retail.]

Article and city.	1913: Average for year.	July—			1917.				1918.				1919	
		1914	1915	1916	Jan.	Apr.	July.	Oct.	Jan.	Apr.	July.	Oct.	Dec.	Jan.
Milk, New York:														
Fresh.....W.	100	86	86	89	146	140	143	206	231	169	154	234	263	263
Fresh, bottled, del'vd..R.	100	100	100	100	111	121	127	153	167	156	141	173	189	178
Milk, San Francisco:														
Fresh.....W.	100	100	97	97	97	97	110	151	169	151	151	190	190	190
Fresh, bottled.....R.	100	100	100	100	100	100	100	121	121	121	121	140	140	140
Eggs, Chicago:														
Fresh, firsts.....W.	100	83	74	96	215	135	137	164	250	139	162	218	270	260
Strictly fresh.....R.	100	89	85	101	180	129	139	161	223	130	137	191	249	238
Eggs, New York:														
Fresh, firsts.....W.	100	86	80	97	203	133	141	161	259	134	161	211	287	246
Strictly fresh.....R.	100	89	82	94	168	107	120	158	204	120	144	174	227	197
Eggs, San Francisco:														
Fresh.....W.	100	86	82	90	142	105	119	162	228	136	164	231	291	198
Strictly fresh.....R.	100	91	83	89	129	100	105	163	190	112	138	203	228	176
Meal, corn, Chicago:														
Fine.....W.	100	114	.....	136	171	257	321	371	364	429	386	293	264	257
Fine.....R.	100	97	107	107	145	172	200	245	241	248	234	231	217	200
Potatoes, Chicago:														
White, good to choice..W.	100	237	66	160	286	458	429	185	200	110	150	150	160	190
White.....R.	100	182	78	151	263	384	331	185	187	113	247	180	167	180
Sugar, New York:														
Granulated.....W.	100	98	137	174	153	188	172	191	170	170	172	205	205	205
Granulated.....R.	100	94	129	161	151	178	171	198	198	180	180	216	212	206

INDEX NUMBERS OF WHOLESALE PRICES IN THE UNITED STATES.

Wholesale prices in the United States showed a downward trend with the beginning of the new year, the bureau's weighted index number standing at 202 for January as compared with 206 for December, 1918. Marked decreases in the two months took place in several of the commodity groups, food, etc., dropping from 207 to 204, cloths and clothing from 246 to 231, and metals and metal products from 183 to 172. Smaller decreases are shown in the groups of farm products, fuel and lighting, lumber and building materials, and chemicals and drugs. The index for articles classed as miscellaneous registered an increase from 204 to 206, while there was no change in the group of house-furnishing goods.

Among important articles whose wholesale prices averaged less in January than in December were cotton, flaxseed, corn, oats, hay, hides, tobacco, butter, cheese, eggs, rye flour, lard, corn meal, bacon, hams, cotton and woolen goods, raw silk, bar iron, copper, pig lead, pig iron, steel, zinc, oak and poplar lumber, linseed oil, glycerine, ammonia, caustic soda, soda ash, rope, rubber, and wood pulp. Hops, cattle, sheep, peanuts, poultry, apples, lamb, mutton, oleo oil, potatoes, douglas fir and maple lumber, wrapping paper, laundry soap, and whisky averaged higher in price, while barley, hogs, canned goods, fish, beef, veal, milk, rice, salt, sugar, tea, vinegar, leather goods, and coal remained practically unchanged in price.

Comparing prices in January, 1919, with those of a year ago, it is seen that the index number of farm products increased from 205 to 220, that of food articles from 188 to 204, and that of cloths and

clothing from 209 to 231. In the same period the index number of fuel and lighting increased from 169 to 181, that of lumber and building materials from 136 to 160, and that of house-furnishing goods, which is built on a limited number of tableware articles, from 188 to 233. The index number of miscellaneous articles, including such important commodities as cottonseed meal, jute, malt, lubricating oil, news-print paper, rubber, starch, soap, plug tobacco, and wood pulp, increased from 178 to 206. On the other hand, the index number of chemicals and drugs decreased from 216 to 179, and that of metals and metal products from 173 to 172.

INDEX NUMBERS OF WHOLESALE PRICES, 1913 TO JANUARY, 1919, BY GROUPS OF COMMODITIES.

[1913=100.]

Year and month.	Farm products.	Food, etc.	Cloths and clothing.	Fuel and lighting.	Metals and metal products.	Lumber and building materials.	Chemicals and drugs.	House-furnishing goods.	Miscellaneous.	All commodities.
1913.										
Average for year.....	100	100	100	100	100	100	100	100	100	100
January.....	97	99	100	99	107	100	101	100	100	99
April.....	97	96	100	99	102	101	100	100	99	98
July.....	101	101	100	100	98	101	99	100	102	101
October.....	103	102	100	100	99	98	100	100	100	101
1914.										
January.....	101	102	99	99	92	98	101	103	98	100
April.....	103	95	100	98	91	99	101	103	99	98
July.....	104	103	100	90	85	97	101	103	97	99
October.....	103	107	98	87	83	96	109	103	95	99
1915.										
January.....	102	106	96	86	83	94	106	101	98	98
April.....	107	105	98	84	91	94	102	101	97	99
July.....	108	104	99	84	102	94	107	101	96	101
October.....	105	104	103	90	100	93	121	101	99	101
1916.										
January.....	108	114	110	102	126	99	140	105	107	110
April.....	114	117	119	105	147	102	159	109	111	115
July.....	118	121	126	105	145	98	143	111	122	119
October.....	136	140	137	128	151	101	135	114	132	133
1917.										
January.....	147	150	161	170	183	106	144	128	137	150
February.....	150	160	162	178	190	108	146	129	138	155
March.....	162	161	163	181	199	111	151	129	140	160
April.....	180	182	169	178	208	114	155	151	144	171
May.....	196	191	173	187	217	117	164	151	148	181
June.....	196	187	179	193	239	127	165	162	153	184
July.....	198	180	187	183	237	132	185	165	151	185
August.....	204	180	193	159	249	133	198	165	156	184
September.....	203	178	193	155	228	134	203	165	155	182
October.....	207	183	194	142	182	134	242	165	164	180
November.....	211	184	202	151	173	135	232	175	165	182
December.....	204	185	206	153	173	135	230	175	166	181
1918.										
January.....	205	188	209	169	173	136	216	188	178	185
February.....	207	186	213	171	175	137	217	188	181	187
March.....	211	178	220	171	175	142	217	188	184	187
April.....	217	179	230	170	176	145	214	188	193	191
May.....	212	178	234	172	177	147	209	188	197	191
June.....	214	179	243	171	177	148	205	192	199	193
July.....	221	185	249	178	183	153	202	192	192	198
August.....	229	191	251	178	183	156	207	227	191	202
September.....	236	199	251	179	183	158	208	233	195	207
October.....	223	199	253	179	186	157	204	233	197	204
November.....	219	203	253	182	186	163	201	233	207	206
December.....	221	207	246	183	183	163	182	233	204	206
1919.										
January.....	220	204	231	181	172	160	179	233	206	202

A comparison of yearly fluctuations of wholesale prices since 1890, computed on prices in the year 1913 as the base, is furnished by the index numbers in the next table. These index numbers, like those in the foregoing table, have been constructed from the aggregates of weighted commodity prices, as explained in the bulletin on wholesale prices issued by the Bureau of Labor Statistics for the years 1890 to 1914 (Bulletin No. 181, pp. 252-256) and can readily be shifted to any desired base.

INDEX NUMBERS OF WHOLESALE PRICES, 1890 TO 1918, BY GROUPS OF COMMODITIES.
[1913=100.]

Year.	Farm products.	Food, etc.	Cloths and clothing.	Fuel and lighting.	Metals and metal products.	Lumber and building materials.	Chemicals and drugs.	House-furnishing goods.	Miscellaneous.	All commodities.
1890.....	68	89	92	69	114	72	90	119	92	81
1891.....	73	89	89	68	102	70	92	119	92	81
1892.....	66	80	89	65	93	67	91	116	88	76
1893.....	67	87	88	65	85	68	90	116	91	77
1894.....	59	77	78	61	72	66	83	115	86	69
1895.....	60	74	78	68	77	64	88	109	82	70
1896.....	54	67	75	68	80	63	91	106	80	66
1897.....	58	71	75	61	71	62	89	99	80	67
1898.....	61	76	79	61	71	65	92	105	79	69
1899.....	62	75	82	71	108	71	96	104	82	74
1900.....	69	79	88	81	106	76	97	111	91	80
1901.....	73	80	82	78	98	73	98	123	90	79
1902.....	81	85	84	93	97	77	97	123	92	85
1903.....	75	82	88	106	96	80	96	122	94	85
1904.....	80	87	89	91	88	80	97	117	94	86
1905.....	77	87	91	87	98	85	96	109	95	86
1906.....	78	84	97	90	113	94	94	109	97	88
1907.....	85	89	104	93	120	97	96	109	101	94
1908.....	85	94	94	90	94	92	100	104	97	91
1909.....	97	99	98	88	92	97	101	105	109	97
1910.....	103	100	99	83	93	101	102	104	116	99
1911.....	93	99	96	81	89	101	103	99	104	95
1912.....	101	108	98	89	99	100	101	99	101	101
1913.....	100	100	100	100	100	100	100	100	100	100
1914.....	103	103	98	92	87	97	103	103	97	99
1915.....	105	104	100	87	97	94	113	101	98	100
1916.....	122	126	127	115	148	101	143	110	121	123
1917.....	188	177	181	169	208	124	185	155	154	175
1918.....	218	189	236	175	182	151	206	207	195	196

**WHOLESALE PRICES IN THE UNITED STATES AND FOREIGN COUNTRIES,
1890 TO DECEMBER, 1918.**

In the following table the more important index numbers of wholesale prices in the United States and several foreign countries, as compiled by recognized authorities, have been reduced to a common base in order that the trend of prices in the several countries may be directly compared. The results here shown have been obtained by merely shifting the base for each series of index numbers to the year 1913, i. e., by dividing the index for 1913 on the original base into the index for each year or month on that base. These results are therefore to be regarded only as approximations of the correct index numbers in the case of series constructed by averaging the relative prices of individual commodities. This applies to the index numbers of the *Annalist*, *Gibson*, the *Economist*, *Sauerbeck*, the Department of Labor of Canada, the *Statistique Générale* of France, and, presumably, the *Monthly Statistical Bulletin* of New South Wales, Australia. The index numbers of the Bureau of Labor Statistics, *Bradstreet*, *Dun*, and the Bureau of Census and Statistics of Australia are built on aggregates of actual money prices, or relatives made from such aggregates of actual prices, and therefore can be readily shifted to any desired base. In cases where no index numbers for years are shown in the original sources, the figures here presented have been obtained by averaging the 12 monthly index numbers.

WHOLESALE PRICES IN THE UNITED STATES AND CERTAIN FOREIGN COUNTRIES.

[Index numbers expressed as percentages of the index number for 1913. See text explanation.]

Year and month.	United States.					United Kingdom.		Canada.	Australia.		France.
	Bureau of Labor Statistics: 294 commodities (variable).	Annalist: 25 commodities.	Bradstreet: 96 commodities.	Dun: 200 commodities.	Gibson: 22 commodities.	Economist: 44 commodities.	Sauerbeck: 45 commodities.	Department of Labor: 272 commodities (variable).	Commonwealth Bureau of Census and Statistics: 92 commodities.	New South Wales Monthly Statistical Bulletin: Number of commodities not shown.	Statistique Générale: 45 commodities.
1890.....	81	78	.....	¹ 75	75	¹ 83	85	81	97	.....	.....
1895.....	70	68	70	¹ 67	72	72	73	71	70	.....	.....
1900.....	80	71	86	77	76	82	88	80	82	.....	.....
1905.....	86	79	88	83	81	81	85	84	84	84	85
1910.....	99	98	98	98	102	90	92	92	92	88	93
1913.....	100	100	100	100	100	100	100	100	100	100	100
1914.....	99	104	97	101	105	99	100	100	106	95	102
1915.....	100	106	107	105	110	123	127	110	147	114	140
1916.....	123	126	128	123	129	160	160	134	138	137	188
1917.....	175	187	170	169	191	204	205	174	153	153	262
1918.....	196	205	208	190	211	225	226	205	.....	.....	.....
1914.											
January...	100	102	97	103	100	97	98	101	² 100	98	² 100
April.....	98	101	95	99	99	96	96	101	² 102	102	² 100
July.....	99	104	94	99	101	95	104	99	² 109	101	² 101
October...	99	107	100	102	108	101	106	102	² 113	95	² 197
1915.											
January...	98	108	99	103	111	112	118	103	² 127	101	² 124
April.....	99	109	106	103	117	124	125	108	² 153	109	² 135
July.....	101	105	107	103	111	122	126	111	² 167	115	² 142
October...	101	101	108	105	103	125	134	112	² 142	117	² 158
1916.											
January...	110	110	119	114	113	143	149	127	² 138	123	² 179
April.....	116	118	128	121	123	156	157	132	² 137	137	² 190
July.....	119	121	125	120	124	156	157	132	² 138	134	² 186
October...	133	136	131	126	141	171	175	138	² 139	140	² 198
1917.											
January...	150	151	149	140	150	184	187	154	² 140	150	215
February...	155	159	151	146	156	188	193	160	.....	151	225
March.....	160	170	154	154	166	197	199	163	.....	151	230
April.....	171	188	158	157	188	200	203	169	² 146	150	248
May.....	181	203	164	172	204	201	205	177	.....	153	256
June.....	184	198	168	176	197	210	211	179	.....	152	266
July.....	185	189	175	175	200	208	208	179	² 158	152	268
August.....	184	190	178	181	203	210	207	181	.....	156	270
September	182	195	181	178	206	209	207	179	.....	152	280
October...	180	200	184	182	207	212	212	179	² 166	147	284
November.	182	199	185	183	206	214	214	183	.....	163	293
December..	181	200	191	182	209	217	218	187	.....	166	304
1918.											
January...	185	200	195	184	205	215	219	190	² 173	161	313
February...	187	204	196	188	210	216	220	194	.....	165	319
March.....	187	204	196	189	217	218	221	199	.....	156	327
April.....	191	207	200	191	225	221	223	199	.....	155	333
May.....	191	207	205	188	216	223	225	204	.....	164	335
June.....	193	201	206	186	211	227	226	207	.....	163	3.9
July.....	198	203	208	192	212	228	227	210	.....	160	.....
August.....	202	207	208	192	210	233	230	210	.....	170	.....
September	207	210	207	193	212	231	232	211	.....	164	.....
October...	204	203	207	193	205	231	233	214	.....	.....	.....
November.	206	205	205	191	204	231	230	215	.....	.....	.....
December..	206	208	207	191	208	226	231	213	.....	.....	.....

¹ Average for January and July.² Quarter beginning in specified month.

CHANGES IN UNION WAGE SCALES AND IN RETAIL PRICES OF FOOD, 1907 TO 1918.

Summarized figures concerning the changes in recent years in union wage scales, drawn from a report prepared by the Bureau of Labor Statistics, are here presented in comparison with like figures relating to retail prices of food. The statements are given in the form of index numbers (percentages) in which the figures for each other year are compared with the figures for 1913; in other words, 1913 is made the base or 100 per cent.

For all trades covered in the report, taken collectively, the average rate of wages per hour in May, 1918, was 133 per cent of the average in May, 1913; that is, the average rate in 1918 was 33 per cent higher than in 1913. In 1907 the average hourly rate was but 90 per cent of what it was in 1913; thus the average hourly rate had increased between 1907 and 1918 in the ratio of 90 to 133, an increase of 43 points in the index, which number is 48 per cent of 90, making the increase in the rate of wages per hour between 1907 and 1918, 48 per cent. The wage figures are for May of each year.

INDEX NUMBERS OF UNION WAGE RATES, AND HOURS OF LABOR AND RETAIL PRICES OF FOOD, 1907 TO 1918.

[1913=100.]

Year.	Rates of wages per hour.	Full-time hours per week.	Rates of wages per week, full time.	Retail prices of food.
1907.....	90	103	92	82
1908.....	91	102	93	84
1909.....	92	102	93	89
1910.....	94	101	95	93
1911.....	96	101	96	92
1912.....	98	100	98	98
1913.....	100	100	100	100
1914.....	102	100	102	102
1915.....	103	99	102	101
1916.....	107	99	106	114
1917.....	114	98	112	146
1918.....	133	97	130	168

The index numbers for full-time hours per week decreased gradually from 103 in 1907 to 97 in 1918. It should be borne in mind that these figures are percentages based on the year 1913, not concrete hours. Index numbers for rates of wages per week increased from 92 in 1907 to 130 in 1918, or 40 per cent. A far greater change took place in retail prices of food, the increase between 1913 and 1918 being 68 per cent and between 1907 and 1918, 105 per cent.

From the same basic data the following table has been prepared indicating the change in the purchasing power of an hour's wages and of a week's wages from 1907 to 1918:

INDEX NUMBERS OF PURCHASING POWER OF UNION WAGES AS MEASURED IN FOOD,
1907 TO 1918.

[1913=100.]

Year.	Purchasing power measured by retail prices of food—	
	Of rates of wages per hour.	Of rates of wages per week, full time.
1907.....	109	112
1908.....	108	110
1909.....	104	105
1910.....	102	102
1911.....	104	105
1912.....	100	100
1913.....	100	100
1914.....	100	99
1915.....	101	101
1916.....	94	93
1917.....	78	77
1918.....	79	77

The above table shows that an hour's wages in 1918 purchased but 79 per cent as much food as in 1913, and a week's wages but 77 per cent as much. As compared with 1907 an hour's wages in 1918 bought but 72 per cent as much food, and a week's wages but 69 per cent as much food.

RETAIL PRICES IN THE SCANDINAVIAN CAPITALS.

Actual prices and price changes in 22 of the more important articles of ordinary household consumption in the three Scandinavian capitals are reported from time to time in the official journal of the Swedish labor office. The table below has been made up from the most recent presentation.¹ The quotations are average monthly prices gathered by the statistical bureaus of the respective countries. Similarity of living conditions and habits of consumption make the data reliably comparable, in the opinion of the Swedish labor office.

¹ Sociala Meddelanden utgivna av K. Socialstyrelsen. Stockholm, 1918. No. 10, pp. 1074, 1075.

ACTUAL AND RELATIVE PRICES OF ARTICLES OF HOUSEHOLD CONSUMPTION IN THE CAPITAL CITIES OF THE SCANDINAVIAN COUNTRIES, JULY, 1914, TO AUGUST, 1918.

[Source: Sociala Meddelanden utgivna av K. Socialstyrelsen. Stockholm, 1918. -No. 10, pp. 1074, 1075.]

STOCKHOLM.

Article.	Unit.	Average prices.						Relative prices.					
		July, 1914.	July, 1915.	July, 1916.	July, 1917.	July, 1918.	August, 1918.	July, 1914.	July, 1915.	July, 1916.	July, 1917.	July, 1918.	August, 1918.
Milk, whole.....	Quart.	<i>Cts.</i> 4.3	<i>Cts.</i> 4.8	<i>Cts.</i> 5.3	<i>Cts.</i> 6.6	<i>Cts.</i> 110.9	<i>Cts.</i> 110.9	100	112	124	153	253	253
Butter, creamery..	Pound	29.9	35.7	36.5	45.6	69.3	69.3	100	120	122	152	232	232
Oleomargarine, vegetable.	do.	16.9	20.4	24.3	.....	.....	.....	100	121	144	.....	.....	.....
Eggs, fresh.....	Dozen	24.1	31.4	35.5	52.1	127.4	130.9	100	130	147	216	528	543
Potatoes.....	Bushel	66.1	85.0	60.4	136.0	810.3	349.4	100	129	91	206	1,226	529
Peas, yellow.....	Pound	3.2	7.1	6.3	17.4	.....	7.3	100	223	200	235	.....	231
Flour:													
Wheat.....	do.	3.9	5.5	4.5	15.0	15.1	5.1	100	141	116	128	131	131
Rye.....	do.	2.9	4.5	3.3	14.3	14.4	4.4	100	154	113	146	150	150
Oatmeal.....	do.	4.1	6.4	6.0	17.8	.....	.....	100	156	144	188	.....	.....
Bread:													
Rye.....	do.	4.9	8.0	7.4	18.3	11.2	10.9	100	165	153	170	230	225
Wheat.....	do.	8.0	10.5	10.3	.....	.....	.....	100	130	129	.....	.....	.....
Beef:													
Steak.....	do.	15.2	21.4	31.7	30.5	92.4	93.2	100	141	209	201	608	614
Soup.....	do.	12.4	17.9	23.9	24.7	83.5	83.3	100	144	193	199	674	672
Veal:													
Steak, fat.....	do.	17.6	22.4	29.4	18.2	96.0	97.2	100	127	167	103	545	552
Steak, tender....	do.	12.3	16.9	19.7	18.2	61.9	62.6	100	138	160	149	504	510
Pork:													
Fresh.....	do.	18.1	29.7	28.6	135.9	155.9	155.9	100	164	158	198	399	309
Salt.....	do.	18.2	29.3	31.1	37.1	57.1	57.1	100	161	171	203	313	313
Coffee, Santos....	do.	20.2	20.3	24.7	39.5	137.7	137.7	100	101	122	196	187	187
Sugar, loaf.....	do.	7.8	8.0	8.3	18.3	11.3	11.3	100	103	106	106	145	145
Kerosene.....	Gallon	18.3	21.3	27.4	39.6	.....	.....	100	117	150	217	.....	.....
Coal.....	Bushel	22.6	34.0	49.6	.....	.....	.....	100	151	220	.....	.....	.....
Coke.....	do.	12.6	20.8	26.9	35.9	79.3	82.2	100	165	214	286	632	654

CHRISTIANIA.

Milk, whole.....	Quart.	4.8	5.3	6.6	17.4	11.2	11.2	100	111	137	153	232	232
Butter, creamery..	Pound	31.1	36.3	40.1	57.7	.....	78.2	100	117	129	186	.....	251
Oleomargarine, vegetable.	do.	.....	.....	.....	28.0	.....	.....	100	.....	.....	.....	.....	.....
Eggs, fresh.....	Dozen	28.9	32.3	52.9	65.1	112.2	113.5	100	112	183	225	388	392
Potatoes.....	Bushel	98.2	73.7	96.3	156.8	139.8	185.1	100	75	98	160	142	188
Peas, yellow.....	Pound	4.9	10.7	11.5	15.6	19.4	19.4	100	220	238	320	400	400
Flour:													
Wheat.....	do.	3.9	5.6	5.3	10.2	10.9	10.9	100	144	138	263	281	281
Rye.....	do.	2.4	5.0	4.7	9.7	10.9	10.9	100	205	195	400	450	450
Oatmeal.....	do.	4.4	6.4	6.6	11.7	12.8	12.8	100	147	150	267	292	292
Bread:													
Rye.....	do.	2.9	4.5	4.7	9.0	.....	.....	100	154	163	308	.....	.....
Wheat.....	do.	.....	.....	6.7	11.8	16.4	16.4	.....	.....	.....	.....	.....	.....
Beef:													
Steak.....	do.	16.0	18.8	39.8	32.6	61.6	63.7	100	117	248	203	384	397
Soup.....	do.	15.3	16.7	36.2	26.7	55.4	58.6	100	109	237	175	362	383
Veal:													
Steak, fat.....	do.	17.1	19.1	39.5	44.1	76.6	97.9	100	111	230	257	447	571
Steak, tender....	do.	10.1	11.4	27.5	26.7	49.2	60.3	100	113	272	265	488	598
Pork:													
Fresh.....	do.	17.6	22.4	34.9	45.5	63.0	.....	100	127	198	258	357	.....
Salt.....	do.	19.4	24.3	37.4	45.7	65.6	65.6	100	125	193	235	338	338
Coffee, Santos....	do.	26.0	27.5	27.8	39.0	57.1	57.1	100	106	107	150	220	220
Sugar, loaf.....	do.	6.9	8.4	13.1	15.4	16.2	16.2	100	121	189	223	233	233
Kerosene.....	Gallon	18.3	19.3	29.4	36.5	44.6	44.6	100	106	161	200	244	244
Coal.....	Bushel	17.8	32.6	62.3	.....	132.2	132.2	100	184	351	.....	745	745
Coke.....	do.	15.6	26.4	33.5	113.3	94.9	94.9	100	170	215	727	609	609

¹ Maximum price by Government orders.

ACTUAL AND RELATIVE PRICES OF ARTICLES OF HOUSEHOLD CONSUMPTION IN THE CAPITAL CITIES OF THE SCANDINAVIAN COUNTRIES, JULY, 1914, TO AUGUST, 1918—Concluded.

COPENHAGEN.

Article.	Unit.	Average prices.						Relative prices.					
		July, 1914.	July, 1915.	July, 1916.	July, 1917.	July, 1918.	August, 1918.	July, 1914.	July, 1915.	July, 1916.	July, 1917.	July, 1918.	August, 1918.
Milk.....	Quart.	<i>Cts.</i> 4.8	5.6	6.1	7.6	10.7	10.7	100	116	126	158	221	221
Butter, creamery.....	Pound	28.6	33.2	36.6	42.9	38.9	38.9	100	116	123	150	136	136
Oleomargarine, vegetable.....	do.	15.2	18.2	19.9	27.5	.....	.....	100	120	131	181	.....	.....
Eggs, fresh.....	Dozen	24.1	36.0	42.6	46.3	76.7	78.0	100	149	177	192	318	323
Potatoes.....	Bushel	47.2	86.9	113.3	92.6	370.2	171.9	100	184	240	196	784	364
Peas, yellow.....	Pound	4.9	9.8	10.1	13.0	25.5	25.5	100	205	208	268	525	525
Flour:													
Wheat.....	do.	3.2	4.7	4.5	6.0	16.2	16.2	100	150	142	188	196	196
Rye.....	do.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Oatmeal.....	do.	4.7	8.9	8.9	10.7	10.3	10.3	100	187	187	226	218	218
Bread:													
Rye.....	do.	1.8	2.8	2.7	2.7	2.7	2.7	100	153	147	147	147	147
Wheat.....	do.	4.9	6.1	5.8	10.1	10.1	10.1	100	125	120	208	208	208
Beef:													
Steak.....	do.	.....	26.5	46.3	31.6	52.8	55.2	.....	.....	.....	.....	.....	.....
Soup.....	do.	15.2	21.4	35.7	22.5	39.9	42.1	100	141	235	148	262	277
Veal:													
Steak, fat.....	do.	17.0	23.0	35.7	26.6	45.5	48.6	100	135	210	156	267	236
Steak, tender.....	do.	13.4	20.2	31.8	21.5	38.9	42.8	100	151	238	161	291	320
Pork:													
Fresh.....	do.	17.0	23.0	20.7	20.7	20.1	20.1	100	135	121	121	118	118
Salt.....	do.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Coffee, Santos.....	do.	25.5	27.1	30.0	43.2	158.3	158.3	100	106	118	160	229	229
Sugar, loaf.....	do.	5.2	5.7	6.3	16.6	17.3	17.3	100	109	121	126	140	140
Kerosene.....	Gallon	18.3	20.3	21.3	29.4	64.9	64.9	100	111	117	161	356	356
Coal.....	Bushel	16.1	31.6	64.2	.....	113.3	118.1	100	197	400	.....	709	735
Coke.....	do.	11.8	25.6	26.0	.....	.....	.....	100	217	220	.....	.....	.....

¹ Maximum price by Government orders.

HIGH COST OF LIVING IN ARGENTINA.

This bureau has received no recent official data as to prices of foodstuffs and other commodities affecting the cost of living in Argentina, but the following table taken from an article in "La Prensa," a newspaper published in Buenos Aires on October 23, 1918, may prove interesting as throwing some light on the cost of living in that city. The data is furnished by the American consul general under date of November 4, 1918, who states that the article in question notes that the prices were obtained from leading firms of the grocery trade and that the prices are wholesale prices to which must be added "the large profits of the retailers." These prices in many instances are subject to daily fluctuations according to the stocks on hand, which at the time of the report were very low owing to the infrequent arrivals of cargo vessels from abroad. The consul calls attention to the fact that there has been a very considerable advance in all the prices in question, which has compelled the poorer part of the population to cease purchasing some of these articles that were previously common in every home. The prices quoted are in American currency.

PRICES OF FOOD AND OTHER COMMODITIES IN ARGENTINA IN 1918 AS COMPARED WITH 1914 AND 1917.

Article.	Unit.	1914	1917	1918	Per cent of increase, 1918 over 1914. ¹
Cheese, "Reggiano".....	Pound.....	\$0.37	\$1.39	\$1.47	29.7
Rice:					
"Carolina".....	do.....	.06	.09	.10	66.7
"Glasé".....	do.....	.05	.08	.10	100.0
Sugar, "Tucuman".....	do.....	.07	.10	.16	128.6
Beans:					
"Tapiz".....	do.....	.03	.04	.05	66.7
"Buiter".....	do.....	.04	.05	.06	50.0
"Triguitos".....	do.....	.05	.07	.10	100.0
"Caballeros".....	do.....	.05	.....	.09	80.0
"Palares".....	do.....	.07	.08	.10	42.9
"Saltanos".....	do.....	.04	.06	.08	100.0
Split peas.....	do.....	.05	.10	.14	180.0
Lima beans.....	do.....	.05	.04	.05	.....
Small candles.....	Package.....	.06	.06	.12	100.0
Olive oil.....	Quart.....	.20	.26	.70	250.0
Chick peas:					
Medium size.....	Pound.....	.07	.08	.11	57.1
Large size.....	do.....	.09	.11	.12	33.3
Tomato paste.....	do.....	.14	.20	.31	121.4
Yerba maté.....	do.....	.05	.08	.10	100.0
Kerosene.....	Gallon.....	.78	.96	1.07	37.2
Fat.....	Pound.....	.11	.12	.17	54.5
Flour.....	do.....	.03	.04	.05	66.7

¹Computed; this column does not appear in the original.

EFFECT OF THE WAR UPON COST OF LIVING IN NORWAY.¹

War-time conditions in Norway have worked to greatly increase the high cost of living, so that the purchasing power of the crown has very greatly decreased. Studies of the Norwegian labor office summarized in a former article in the MONTHLY REVIEW (October, 1917, pp. 85-87) showed that the rise in prices of the items which make up the workingman's budget had increased substantially in excess of the rise of wages. In continuation of these studies the Norwegian labor office, at the request of the State food commission, undertook to gather several hundred budgets of families of moderate means, showing expenditures of those families in the months of August, 1916, and February, 1917. These studies indicate in general that while the cost per unit of consumption (adult male) of the items of the budget have very considerably increased, the actual amount of food consumption per unit of consumption (adult male) has decreased.

A summary of the more important features of this investigation of the effect of rising prices upon the family budget is here set forth.² The budget method was employed in the investigation. The families were asked to keep for a month an accurate account of the various expenditures. The same families were included in the

¹Cf. also article on Changes in the character of food consumption in Sweden, published in the MONTHLY REVIEW for May, 1918 (pp. 109-112).

²Dyrtidens virkninger paa levevilkaarene. 2den del. (Effets de la cherté des vivres sur les conditions d'existence. 2ième partie) Utgitt av det Statistiske Centralbyraa, Christiania, 1918, 75 pp. (Norges Officielle Statistik VI: 124.)

inquiry of August, 1916, and of February, 1917. Altogether, 534 account books were returned and used in the final tabulation. Not only was it possible to compare expenditures and amount of consumption of families included in the studies of 1916 and 1917, but also of a certain number of families, though not the same, in Christiania and Bergen, whose consumption for the year 1912-13 had been studied.

The occupations of the principal breadwinners were as follows:

Business managers, independent tradesmen, etc.....	63
School-teachers.....	24
Civil service and municipal employees.....	108
Office employees.....	30
Street car conductors.....	7
Factory and shop employees, etc.....	283
Casual laborers.....	15
Others.....	4
Total.....	534

Thus the majority were from the laboring classes. As respects income, the distribution of the 534 families was as follows:

Below 1,750 crowns (\$469).....	21
1,750 and under 2,000 crowns (\$536).....	57
2,000 and under 2,500 crowns (\$670).....	124
2,500 and under 3,000 crowns (\$804).....	115
3,000 and under 4,000 crowns (\$1,072).....	114
4,000 and under 5,000 crowns (\$1,340).....	44
5,000 and under 7,000 crowns (\$1,876).....	41
7,000 crowns and over.....	18
Total.....	534

The inquiry included 2,787 individuals, 1,400 being children under 15 years of age. The average size of the family was 5.22 members. In addition, there were 96 servants, 30 lodgers and roomers, and 59 lodgers, receiving only lodging or lodging and part board.

Incomes were not analyzed in the investigation, but were used only so far as was necessary as a check upon expenditures.

In considering the results of the inquiry, it may be emphasized that, while the same families were covered in the studies of August, 1916, and February, 1917, this was not true in the case of the families covered in the study of 1912-13. Hence comparisons between August, 1916, and February, 1917, are very much more accurate than between those dates and the earlier period. However, only those families in the 1912-13 inquiry were taken which represented substantially a similar income group and occupational status of the members as the families selected in August, 1916, and February, 1917.

CHANGES IN CONSUMPTION BETWEEN 1912-13 AND 1916-17.

Taking the results for the city of Christiania, it appears that the expenditure per unit of consumption (adult male) for food in 1912-13 was 27.60 crowns (\$7.40) per month. In 1916-17 it averaged 43.02 crowns (\$11.53) per month. Expenditures for rent at the two periods remained approximately the same; they increased substantially for fuel and lighting—that is, from 3.29 crowns (\$0.88) to 5.51 crowns (\$1.48) per month. On the other hand, as a corollary of increased expenditures for food, fuel, lighting, and other items, there was a reduced expenditure for clothing and higher comfort items—such as club membership, insurance, education, etc.

Similar results to the above, noted for families in Christiania, prevailed for families in Bergen. The results of these studies are noted in the following tabulations:

COMPARATIVE EXPENDITURE PER MONTH FOR DIFFERENT ITEMS OF EXPENDITURES OF FAMILIES IN CHRISTIANIA AND BERGEN, NORWAY, 1912-13 AND 1916-17.

Item.	Christiania.				Bergen.			
	Expenditure per family.		Expenditure per unit of consumption.		Expenditure per family.		Expenditure per unit of consumption.	
	1912-13	1916-17	1912-13	1916-17	1912-13	1916-17	1912-13	1916-17
Food.....	\$20.12	\$31.74	\$7.40	\$11.53	\$19.03	\$35.55	\$6.74	\$12.08
Liquors and tobacco.....	.97	.89	.38	.34	.78	1.05	.29	.37
Clothing.....	6.61	5.85	2.45	2.13	5.96	10.72	2.15	3.76
Housing.....	8.10	7.64	2.61	2.62	5.67	5.80	1.92	1.93
Fuel and lighting.....	2.41	4.28	.88	1.48	2.13	4.25	.74	1.41
Washing and cleaning.....	.82	1.09	.29	.39	.85	1.40	.30	.46
Furniture.....	.92	1.47	.30	.51	.90	1.12	.30	.37
Society dues and insurance.....	2.01	1.84	.74	.67	1.92	1.85	.69	.65
Educative, newspaper, etc.....	.80	.76	.30	.27	.67	.73	.24	.26
Amusements.....	.40	.19	.16	.07	.32	.38	.12	.14
Others.....	3.68	3.42	1.55	1.25	3.50	4.45	1.64	1.55
Total.....	46.84	59.17	17.06	21.25	41.73	67.30	15.13	22.98

AMOUNTS OF SPECIFIED ARTICLES OF FOOD CONSUMED PER MONTH IN CHRISTIANIA AND BERGEN, NORWAY, IN 1912-13 AS COMPARED WITH 1916-17.

Article.	Unit.	Christiania.				Bergen.			
		Consumption per family.		Consumption per unit of consumption (adult male).		Consumption per family.		Consumption per unit of consumption (adult male).	
		1912-13	1916-17	1912-13	1916-17	1912-13	1916-17	1912-13	1916-17
Meats.....	Pound..	24.749	19.143	9.220	6.960	20.884	19.286	7.312	6.523
Fish.....	do.....	17.553	24.780	6.534	9.015	39.220	58.660	13.852	19.859
Milk.....	Quart..	73.049	63.813	22.918	23.217	62.731	66.874	22.139	22.737
Butter.....	Pound..	4.729	2.295	1.733	.838	2.663	1.455	.941	.496
Oleomargarine.....	do.....	9.969	13.331	3.655	4.850	12.670	16.654	4.471	5.664
Cheese.....	do.....	5.104	4.522	1.658	1.642	4.974	5.567	1.770	1.889
Eggs.....	Number.	53.969	26.065	19.769	9.482	30.357	11.997	10.741	4.079
Potatoes.....	Pound..	52.910	56.438	19.841	19.621	46.958	56.658	16.535	19.180
Bread, flour, cereals.....	do.....	103.136	113.343	37.906	41.235	140.909	131.729	50.133	44.789
Sugar.....	do.....	14.475	17.443	5.194	6.259	13.805	19.597	4.918	6.665
Sirup.....	do.....	1.093	.829	.392	.302	1.444	1.925	.514	.655
Honey.....	do.....	.057	.033	.020	.013	.097	.053	.035	.018
Coffee.....	do.....	3.082	3.737	1.107	1.338	3.093	3.728	1.102	1.268
Tea.....	do.....	.044	.066	.018	.024	.119	.168	.042	.057
Chocolate or cocoa.....	do.....	.503	.452	.185	.165	.463	.348	.165	.119

The detailed table in the report indicates that the character of the food consumption had been variously changed, but not perhaps in the manner one might expect. The most conspicuous change has been in the reduction of meat consumption, particularly of fresh meats. For this have been substituted fish, the consumption of which has consequently increased considerably.

The decreased consumption of butter has resulted in the increased consumption of oleomargarine. The amount of milk consumed has remained practically the same, with an increase in consumption of fresh milk as against other forms. This is noted as particularly true in the case of the families of civil service and municipal employees. This result has been secured by reason of State and municipal subsidies, designed to keep down the price of milk. The consumption of bread has increased, and with it there is an increase in the consumption of coffee and tea.

The families have also substituted lower priced commodities. How much has been saved by this method may be roughly ascertained. The food of a family in Christiania which in 1912-13 cost 25.32 crowns (\$6.79) per unit of consumption (adult male) per month should, on the basis of the prices reported in 1916-17, have cost 42.77 crowns (\$11.46) per month; whereas the actual cost at the latter year had been reduced to 39.36 crowns (\$10.55) per month. This rough calculation does not include a sum of 3.66 crowns (\$0.98) in 1916-17 and 2.28 crowns (\$0.61) in 1912-13 actually expended for fruit and vegetables, in the respective years, comparable unit prices of which could not be calculated. Thus by buying cheaper food, 3.11 crowns (\$0.83) has been saved per unit of consumption (adult male) per month. If the amount of consumption had remained unchanged, expenditures for food from 1912-13 to 1916-17 should have increased 68.9 per cent, but the actual increase has been 55.5 per cent, a saving of 13.4 per cent.

This is the case in articles of food only. As already noted, a relatively greater saving has been effected in other items of the budget. These savings have been reflected primarily in the items of expenditure for amusements, provision of books, clothing, gifts, etc. These are the items which, while not absolute necessities, reflect most significantly, the reports state, the standard of living of the persons affected.

CHANGES IN CONSUMPTION BETWEEN AUGUST, 1916, AND FEBRUARY, 1917.

Naturally the changes in the amount consumed of different articles of food is less between August, 1916, and February, 1917, than between these dates and the more distant period of 1912-13. Some of the changes in consumption can undoubtedly be traced to differences in the season, but the Norwegian investigators are on the

whole of the opinion that this accounts for the changes only to a slight extent. The expenditures for food have increased slightly. The details of the changes in amount consumed have not been printed in the report, hence only a summary table is available for six of the more important cities of the Kingdom.

AMOUNT OF FOOD CONSUMED PER MONTH PER UNIT OF CONSUMPTION (ADULT MALE) BASED ON 278 HOUSEHOLD BUDGETS OF IDENTICAL FAMILIES EARNING GENERALLY LESS THAN 500 CROWNS (\$134) PER ANNUM, AS REPORTED IN SPECIFIED CITIES IN NORWAY, AUGUST, 1916, AND FEBRUARY, 1917.

Article.	Unit.	Christiania.		Bergen.		Trondhejm.		Drammen.		Kristianband.		Hamar.	
		August, 1916.	February, 1917.	August, 1916.	February, 1917.	August, 1916.	February, 1917.	August, 1916.	February, 1917.	August, 1916.	February, 1917.	August, 1916.	February, 1917.
Meats.....	Pound..	6.69	7.54	6.39	6.37	5.87	6.15	6.95	7.30	4.41	5.24	4.51	5.46
Fish.....	do.....	9.11	8.64	18.59	21.80	10.59	10.70	7.72	7.58	10.11	14.86	5.37	8.29
Milk, whole.....	Quart..	14.36	15.89	18.97	19.31	8.34	11.13	10.92	9.07	10.69	13.10	17.03	19.46
Milk, skimmed.....	do.....	7.31	6.16	1.65	2.20	14.65	12.24	13.04	18.57	7.50	2.59	8.56	9.11
Cream.....	do.....	.81	1.05	.61	.70	1.86	1.70	.31	1.23	1.17	.73	.90	.59
Butter.....	Pound..	.96	.72	.45	.46	.44	.57	.95	.96	.96	.29	.52	.35
Oleomargarine.....	do.....	4.55	5.08	5.25	6.07	4.30	4.79	6.61	5.87	5.08	6.45	4.60	5.31
Cheese.....	do.....	1.38	2.12	1.70	2.07	2.00	1.92	2.15	1.95	.62	1.20	1.83	2.29
Eggs.....	Number.	8.3	.6	3.0	.4	4.2	.3	6.0	1.4	6.9	.5	4.3	1.6
Bread and cakes.....	Pound..	33.96	29.01	38.11	36.99	31.42	31.59	33.64	28.17	35.07	35.70	19.61	15.11
Flour.....	do.....	4.85	11.48	4.09	5.89	9.79	10.27	7.25	24.22	4.38	8.36	20.46	25.83
Cereals.....	do.....	1.42	1.98	1.50	2.42	1.76	2.05	2.30	5.17	1.85	2.46	1.88	2.28
Potatoes.....	do.....	18.71	19.85	18.40	20.00	15.85	7.95	16.53	16.21	16.76	26.60	18.56	21.28
Sugar.....	do.....	7.49	5.45	7.07	5.73	4.79	5.25	12.02	5.49	9.54	5.71	9.15	6.37
Coffee.....	do.....	1.25	1.39	1.25	1.32	1.14	1.22	1.12	1.33	1.12	1.14	1.12	1.23

FOOD CONTROL.

FOOD CONDITIONS IN EUROPE.

As a result of conferences among the food controllers of the United States, Great Britain, France, and Italy held in London in the summer of 1918, the creation of an Inter-Allied Food Council was agreed upon. It was planned that the council should be composed of the food controller and another representative of each of the four principal allied countries and should have for its main object to provide properly for the importation of needed food supplies for the allies and to determine questions of common interest and policy affecting the food situation.

According to the plans adopted, the council will not only deal with foodstuffs but will secure an equitable sharing of essential raw materials and manufactured articles. Although chiefly concerned with the welfare of the four allied countries, the council will also provide for the needs of other countries on the side of the entente, such as Greece and Portugal, and will arrange for authorized shipments to neutrals.

The ordinary functions of the council were delegated by it to a committee of representatives consisting of two delegates from each of the four countries and sitting in permanent session in London. Its first sitting was held on July 30, and it has met regularly since that date. The chairman, Sir John Beale, is also first secretary to the British Ministry of Food. The work of the committee is to coordinate the various programs of food importation put forward on behalf of the allied countries and to arrange with the Allied Maritime Transport Council concerning questions of freight. Four executives—each dealing with specified groups of foodstuffs, as wheat, meat and fats, oilseeds, and sugar—work under the direction of the committee and report to it.

It is said that the establishment of the committee has had the effect of eliminating competition in the purchase and transportation of foodstuffs. It regulates shipments according to the needs and resources of the several countries and according to the available tonnage. In this way not only does it secure to each country its proper share of imports, but it renders it possible to deal without friction or delay with sudden emergencies necessitating further supplies of particular foodstuffs.

On the arrival of President Wilson in Europe in December, the result of investigations made by representatives of the United States

and allied Governments into the food situation in newly liberated areas, as well as in neutral and enemy territory, was laid before him and he was advised that it was the desire of the allied Governments that the United States should take the lead in the organization of relief for these populations. Under the arrangement effected, a council composed of two representatives of each Government was named to secure coordination with respect to food, finance, and shipping resources in the solution of the problems connected with the administration of relief. Mr. Herbert Hoover and Mr. Norman H. Davis were appointed as the two American representatives on the council, and Mr. Hoover was designated as director general of the undertaking. After his appointment Mr. Hoover stated in an interview that¹—

German ships, totaling nearly 3,000,000 tons, will be used for feeding Europe, and German passenger ships will be utilized for sending Americans home. A billion and a half dollars' worth of food must be imported into Europe to provide for the actual needs of the population between now and July. The liberated territories will be fed first, but much of this territory is without other governments than the municipalities, who are without credit and are therefore unable to pay for food. Poland, Armenia, the Czech and Jugo-Slav Republics are in this condition. The entente, with the United States, is conferring and planning as to the means of paying for the food. One hundred and twenty-five million persons in the liberated countries alone have to be fed.

In a cable message to the United States Food Administration² Mr. Hoover gives details of the food conditions in the countries so far investigated by the American staff under Dr. Alonzo Taylor in conjunction with the allied commissions. These surveys disclose that the shortage of meats, fats, and milk in many regions is so acute as seriously to impair the health of the people, while the mortality among children is appalling. In his message Mr. Hoover says:

The general situation in the areas covered by recent surveys is that their animals are largely reduced; their crops were far below normal on account of man and animal shortage, ravages of war, and climatic conditions. The surplus harvest above absolute needs is now rapidly approaching exhaustion, and consequently the towns and cities are in a dangerous situation.

Our reports show, specifically, as follows:

Finland.—The food is practically exhausted in the cities. While many of the peasants have some bread, other sections are mixing large amounts of straw. They are exhausted of fats, meats, and sugar, and need help to prevent renewed rise of bolshevism.

Baltic States.—The food may last one or two months on a much reduced scale. They sent a deputation to our minister at Stockholm imploring food.

Serbia.—The town bread ration is down to 3 ounces daily in the north, not accessible from Saloniki. In the south, where accessible, the British are furnishing food to the civil population. We are trying to get food in from the Adriatic.

Jugo-Slavia.—The bread ration in many towns is 3 or 4 ounces. All classes are short of fats, milk, and meat.

¹ See National Food Journal (London) for Jan. 8, 1919 (p. 243).

² Published in Official U. S. Bulletin for Jan. 8, 1919.

Vienna.—Except for supplies furnished by the Italians and Swiss, their present bread ration of 6 ounces per diem would disappear. There is much illness for the shortage of fats, the ration being 1½ ounces per week. There are no coffee, sugar, or eggs and practically no meat.

Tyrol.—The people are being fed by Swiss charity.

Poland.—The peasants probably have enough to get through. The mortality in cities, particularly among children, is appalling for lack of fats, milk, meat, and bread. The situation in bread will be worse in two months.

Roumania.—The bread supply for the entire people is estimated to last another 30 days. They are short of fats and milk. The last harvest was 60 per cent a failure.

Bulgaria.—The harvest was also a failure here. There are supplies available for probably two or three months.

Armenia.—Is already starving.

Czecho-Slovakia.—There is large suffering on account of lack of fats and milk. They have bread for two or three months and sugar for six months.

We have each country under investigation as to the total amounts required to barely sustain life and their resources to pay. The preliminary investigation by Taylor and his staff in connection with allied staffs shows the total of the above areas will require about 1,400,000 tons of imported food to get through until next harvest, costing, say, \$350,000,000 delivered.

In accordance with promises made to the Czecho-Slovak government the United States Relief Administration early in February delivered 5,000 tons of flour at Trieste for transport by rail to Prague. There were also placed at the disposition of the Czechs at Trieste 6,000 tons of pork and 10,000 tons of flour. It was announced that additional supplies would be available as fast as transportation could be arranged. The difficulty of transportation is accentuated by the fact that all trains from Trieste to Bohemia must pass through Italian, Jugo-Slav, and Austrian territory, and it is necessary to make arrangements with these other people to insure safe transit, since these territories are all extremely short of food themselves. An interallied commission composed of one representative from each of the American, British, French, and Italian Governments was established by the supreme council of supply and relief to control the transportation and distribution of food from the port of Trieste to the interior, and railroad communication to the principal parts of the Czecho-Slovak, as well as the Jugo-Slav territory, will be from this point.

A consignment of 7,000 tons of American flour for the relief of the Roumanian population, who suffered an almost total failure of their crops in 1918, was delivered early in February. Much suffering had been occasioned by Germany's requisitioning large quantities of grain from the already depleted supplies of the country. It is stated that 100,000 tons of grain was found in barges on the Danube, ready for shipment to Germany, when the allies entered Roumania, and was restored to its owners.

In Germany,¹ while conditions are still too chaotic to permit of definite conclusions, it is said that stocks of foodstuffs are sufficient

¹ Data taken from the National Food Journal (London) for Jan. 22, 1919 (p. 270).

to last only a month or two of the new year and that present rations will have to be greatly reduced and in some cases halved until further supplies are available. The potato crop, on which much reliance was placed, has been left to a large extent ungathered, owing to the release of war prisoners and the difficulties of transportation. Imports of grain and oilseeds from Russia and Roumania, upon which the supply of cereals and fats depended, are no longer possible. During the war a good proportion of the food necessary for the army was derived from occupied territory. Now that the army has returned, together with the fact that former producing areas of the empire, such as Posen, the Rhineland, and Alsace-Lorraine, are cut off from the source of German supply, the problem of sustenance becomes more difficult. It is estimated that the population now dependent on home production for support is divided approximately as follows: 61,500,000 rationed civilians (including self-suppliers), 5,500,000 returned soldiers and sailors, and 1,000,000 men still under arms. Under these conditions the new revolutionary government faces a most difficult task in undertaking to supply the food needs of the German people.

SUPREME ECONOMIC COUNCIL PROPOSED BY PRESIDENT WILSON.

An official communiqué on the Peace Conference, under date of February 8, 1919, contains the text of a resolution proposed by President Wilson, and approved by the conference, calling for the constitution of a supreme economic council to consider such questions as finance, food, etc. The resolution is as follows:¹

First, under present conditions many questions not primarily of military character, which are arising daily and which are bound to become of increasing importance as time passes, should be dealt with on behalf of the United States and the allies by civilian representatives of those Governments experienced in such questions as finance, food, blockade control, shipping, and raw materials.

Second, to accomplish this, there shall be constituted at Paris a supreme economic council to deal with such matters for the period of the armistice. The council shall absorb or replace all such other existing interallied bodies, and their powers, as it may determine from time to time. The economic council shall consist of not more than five representatives of each interested Government.

Third, there shall be added to the present international permanent armistice committee two civilian representatives of each Government, who shall consult with the allied high command, but who may report direct to the supreme economic council.

¹ See Official U. S. Bulletin for Feb. 11, 1919.

COOPERATION.

PRODUCERS' AND CONSUMERS' COOPERATION IN THE UNITED STATES AND OTHER COUNTRIES.¹

The cooperative movement which has developed into an important factor in the economic, social, and in some cases the political life of most of the European countries has had many reverses in this country in the efforts which have been made to establish effective cooperation. It has been claimed that the lack of thrift among Americans, the lack of rigid class lines, the diversity of the population, and the size of the country are all causes which have operated to retard its development. Recently, however, there is evidence of renewed interest and effort toward forming combinations of consumers and it seems possible that the war, with its accompanying high cost of living, may have the effect in this country of advancing the movement more rapidly than would otherwise have been the case.

There are two rival theories forming the basis of cooperative societies—one, represented by the Rochdale system, being the theory that all profit on prices of commodities is abstracted from the consumer and must be returned to him; the other being the copartnership idea which maintains that the workers actually employed in any industry, whether distributive or productive, should be partners with those who find the capital and those who buy the produce, and should share with them the profit, responsibilities and control. In its wider sense cooperation means that life may be best ordered by substituting for the competition where each seeks the interest of himself and his family, mutual help by which each individual consciously strives for the good of society in general. In its narrower sense it is simply a combination for the purpose of reducing prices or selling produce advantageously. It seems to be true, however, that when the movement loses sight of the ideal of education and mutual help which usually characterizes it the loyalty among members which is essential to the success of cooperative enterprises is usually lacking.

UNITED STATES.

In the United States cooperative organization has existed at various times, among the factory employees, since the last of the eighteenth century. It has usually started in times of business depression and

¹ Compiled from pamphlets and articles issued by the Cooperative League of America, 2 West Thirteenth Street, New York City; Cooperative purchasing and marketing organizations among farmers in the United States, by O. B. Jesness and W. H. Kerr (Bulletin 547, U. S. Department of Agriculture); Cooperation, the hope of the consumer, by Emerson P. Harris; The American Yearbook, 1915, 1916, 1917; the Cooperative Consumer for 1918; Cooperative movement in Russia, by J. V. Bubnoff; and Cooperation in Danish Agriculture, by H. Hertel, adapted from the Danish by Harold Faber.

unemployment. Certain of the early cooperative schemes were short-lived because they were linked up with some visionary theory or ideal which in itself was doomed to failure, others were failures almost from the start, as in aiming at the abolition of profits they sold at cost and were thus unable to make a financial success of the venture. This was the fate of the stores established by the Workingmen's Protective Union about the middle of the last century. At the close of the Civil War the movement was taken up, officially, by the labor unions, but as the stores did not hold to the Rochdale principles but became only buying agencies the movement lost the vitality which was expected for it. The Patrons of Husbandry and the Knights of Labor organized productive and distributive organizations on a large scale, but while the cooperative principle was held to by the leaders the majority saw only the immediate material benefits, the stores becoming generally mere commission houses, and in time the movement was merged in the modern aggressive labor movement of strikes and legislation.

Many isolated cooperative stores have been started at various times, a few of which have succeeded in surviving while the majority have either failed or become ordinary business ventures. One great lack which has been felt in the cooperative movement of this country is that of a central wholesale house and while probably only recently a point has been reached where such a wholesale house could advantageously be started, on the other hand cooperative stores have worked at a disadvantage in dealing with the regular selling agencies.

FARMERS' DISTRIBUTIVE ORGANIZATIONS.

There are two distinct cooperative movements in the United States, one of farmers organized mainly as producers, the other composed largely of workingmen who are organized for the most part as consumers. There are many purchasing and marketing organizations in this country, however, which while called cooperative societies are not truly cooperative organizations, since they do not adhere in all details to cooperative principles, and while it is probably true that many of these organizations would not be accepted by cooperators as properly having place in an article on this subject, still they are in a measure a part of this general movement which has been inspired largely by the desire to find relief from too heavy economic burdens. One reason given for the failure of many to organize as real cooperatives is the fact that not until recently have the laws of most of the States made provision for the organization of cooperative associations and even now special laws are lacking in a large number of the States. In 1917 there were 28 fairly comprehensive State laws on this subject. In some cases there have been new and improved laws enacted or amendments passed which show a tendency to facilitate consolidation

among cooperatives. In at least two instances, however, incorporation is made more difficult by amendments to the law which increase the amount of the incorporation fee and the number of signers necessary to the articles of incorporation.

The growth of cooperatives among farmers in the last 10 years has been steady, and cooperative enterprises are now encouraged by State and National departments of agriculture and by agricultural colleges. The number of associations of various kinds among farmers is estimated to be several thousand and a number of organizations, such as the American Society of Equity, the National Grange, and the Farmers' Educational and Cooperative Union, now promote the formation of cooperative societies. The National Conference on Marketing and Farm Credits has considered cooperation in its last four congresses and has established the National Agricultural Organization Society for the promotion of cooperation.

In nearly all of the grain States of the Middle West farmers' elevators have been started in the past few years and several of the State associations have been federated in the National Council of Farmers' Associations. Many of these farmers' organizations fail, however, to live up to cooperative principles. In some cases the reason for this is found in the tendency of these groups toward State ownership; in others it is found in the fact that local business men have assisted in starting these ventures and opposition toward reorganization along cooperative lines, difficult to overcome, has been encountered. Although this grain elevator movement, therefore, can not be considered as a strictly cooperative one, it is of importance since it has resulted in promoting the interests of the farmers. During the year 1917 there were 360 new grain elevator companies formed, some of which are doing an enormous business.

In Nebraska a producers' and consumers' movement started about four years ago. There are now 150 grain elevators in the State, the best one of which cleared over \$20,000 last year, while the savings to the shippers using the different elevators amounted to from 2 to 5 cents per bushel. The profits from these elevators are distributed on the patronage dividend plan. The farmers also sell butter and live stock cooperatively and, as they were denied admittance to the live-stock exchange on account of their cooperative principles, they started their own exchange last year which, while losing money the first seven months after it was started, finished the year showing a profit of \$12,000. The membership of the various branches, including cooperative stores, is about 40,000, and the president of the association estimated that nearly one hundred million dollars' worth of business was done last year.

Farmers' creameries have followed cooperative lines more closely than have the farmers' elevators. It is estimated that there are now 2,000 cheese factories and 3,000 cooperative creameries in the United States. Wisconsin, for example, has 308 creameries and 718 cheese factories which are cooperative. Cooperative live-stock selling associations are becoming very numerous, and Wisconsin has at least 130 which shipped last year stock valued at \$10,000,000. Cooperative meat-packing plants are also increasing rapidly. The Farmers' Cooperative Packing Co., of Madison, Wis., has about 6,000 members, while there are meat-packing plants and several fish canneries on the Pacific coast.

In Olympia, Wash., producers now operate 31 shingle mills, 2 laundries, 1 slaughterhouse, 1 packing plant, 1 fish cannery, 1 bakery, 1 milk condensery, 1 dairy, 2 printing plants, and a daily newspaper with 40,000 circulation. In process of organization are a cooperative lumber mill, shipyard, and bank.

A good deal has been done in the marketing of fruit cooperatively, there being more than a thousand fruit growers' associations throughout the country. The most conspicuous examples are found among the citrus fruit growers of California and the apple growers of the North Pacific States. As they were confronted by a special problem in that most of the fruit in those sections is grown in comparatively limited areas and must be shipped to all parts of this and other countries, they found it advisable to do more than attend to the actual selling of the fruit. The quality of fruit has been standardized by the associations, with the result that the shipping of green fruit artificially colored has been eliminated, and frequently the work of sorting and packing is done by them so that it has been possible to establish and create a demand for trade-marked brands.

The citrus industry of California is the most highly organized of all agricultural pursuits, and at least four-fifths of all the citrus fruit grown in California is sold through cooperative effort. The growing of citrus fruit as an industry dates from 1877, and by 1885 the marketing problem had become so discouraging that the Orange Growers' Protective Union was formed. Although this organization did not long outlast the opposition it met from the buyers, other exchanges were soon started. In general these exchanges, while working for the good of the members, do not follow the "one man, one vote" idea; as there is great inequality in the financial interests of the members, voting is based on acreage. The California Fruit Growers' Exchange, having a membership of about 8,000, shipped between 15 and 16 million boxes of citrus fruit last year. This exchange has no capital stock and pays no dividends but charges each member for each box of fruit handled.

Among cotton growers of the South there are some cooperatives, but they are less well organized than are the fruit, grain, or dairy farmers.

According to a study made by the United States Department of Agriculture and published in Bulletin No. 547, in September, 1917, there are 5,462 farmers' organizations of all kinds with an annual volume of business of over 625 million dollars. The elevators lead in amount of business and other associations come in the following order: Fruit and produce associations; creameries and cheese factories; miscellaneous marketing associations; cotton associations; stores; live-stock shipping associations; and tobacco associations.

COOPERATIVE BUYING ASSOCIATIONS.

While consumers' cooperation in this country follows much more closely true cooperative principles than does most of the producers' cooperation, it is a very much smaller movement. Accurate statistics are not available, but it is estimated that there are in the neighborhood of 1,000 cooperative stores in the country at the present time, the majority belonging to the agrarian population. It is said that there are probably not more than 250 cooperatives controlled by industrial workers, including the 60 stores in Louisiana, which are part of the N. O. Nelson Cooperative Association of New Orleans.

Aside from the farmers' cooperative associations the movement divides itself into several sections. In central and southern Illinois the soft-coal miners, who are strongly organized, have started cooperative stores which thus have a labor unionist and also a strong socialist backing. While these stores have had a struggle for existence, at the third annual convention of the Central States Cooperative Society held in September, 1917, it was reported that there were 50 cooperative store societies, some of them conspicuously successful, in this federation.

The Iowa Cooperative Store Federation established in 1914 by 35 stores, but now given up, had difficulty in getting managers together for common purposes, and many of the local stores suffered from the disloyalty of members, although a number of the local associations still maintain their vitality.

In Louisiana there are over 60 stores and several factories affiliated with the N. O. Nelson Cooperative Association of New Orleans which are partly financed by Mr. Nelson. These stores are not strictly cooperative in all features, due primarily, it is said, to inadequacy of the State laws.

In Oklahoma the cooperative buying movement is largely among the farmers and is very strongly socialistic, and in Chicago there is another socialist consumers' movement centered in the Socialist Exchange.

The Finnish Socialist Party has perhaps the most strongly organized cooperative federation in the country. They have about 150 cooperative societies, including stores, mills, bakeries, boarding houses, publishing houses, and newspapers. A large majority of the 200,000 Finns in this country are embraced in the cooperative movement. As an example perhaps of the limitations of cooperation in this country, due to the many different races with different ideas and customs, may be cited the fact that this Finnish movement, which has been able to develop the cooperative idea on the recreational and educational side, has probably been able to do so largely because the members are bound together through their nationality. The Finnish movement more nearly resembles the Belgian movement than any other in this country, the cooperative buying or selling being but a side issue, as the societies have all been established by the socialist locals and are used as a means for educating the members in certain political ideas.

In various sections there have been stores started by political, social, and semi-economic organizations such as the Right Relationship League, reorganized as the American Rochdale League, the California Rochdale, the American Cooperative Organization Bureau, the Northwestern Cooperative League, and the Nonpartisan League.

The California Rochdale started about 18 years ago, and in a few years had about 100 stores scattered through the Northwest, together with a central wholesale company. There was not sufficient attention paid, however, to business-like and cooperative methods and to education, and soon the stores began to fail, leaving the wholesale company as the chief sufferer. In an effort to save the movement the Pacific Cooperative League was incorporated in 1913. From this a strong organization has grown up, and a year ago the California Union of Producers and Consumers, an alliance of farmers' cooperatives and wage earners, was formed.

Added to these groups of cooperatives are the various independent stores started in different sections. An example of one of the latest manifestations of the cooperative idea is that of the development among farmers and labor unions in Seattle of both the producer and consumer phases of the movement. A cooperative market with a paid-up capital of \$41,000 has done a business of \$500,000 since it was opened about 7 months ago. At the present time it is doing a business of \$70,000 a month and has made a net profit of \$20,000 above all initial and operating expenses. The Rochdale idea is followed. The market building has its own ice and cold-storage plants, and the greater part of the meat, fruit, and vegetables sold is supplied by the farmer members. The Seattle cooperators also have in process of organization along cooperative lines the following industries:

Laundry, printing, milk condensery, shingle mill, and the fishing industry. They already had a cooperative grocery in operation.

Mention might be made, also, of the building and loan associations and mutual insurance companies which are cooperative in type and to which millions of Americans belong without, however, often taking advantage of their opportunities to share in their administration. Some States—as, for instance, Michigan—encourage these by exempting their stocks from taxation. Credit unions, which are adaptations of the European bank or credit society, are growing in numbers in this country. As the credit union is formed to achieve the same objects as the cooperative associations, that is, to encourage thrift, to promote industry and eliminate extortion, and to train its members in business methods and self-government, it is held that the credit union and the cooperative store have a common purpose and meet with common obstacles and that the development of the two should logically be together. Laws authorizing the organization of credit unions had up to November, 1917, been enacted in eight States and there were at that time 120 credit unions, mainly in New York and Massachusetts, organized under these laws.

At the recent cooperative convention held in Springfield, Ohio,¹ plans were laid for the formation of a wholesale society; for a strong federation of cooperatives, only those following the Rochdale idea to be admitted; and for extensive propaganda work throughout the country to be carried on mainly by means of the Cooperative League of America. This organization is formed for the purpose of promoting the knowledge of cooperative principles, encouraging the formation of cooperative societies, and furnishing advice and guidance to newly formed cooperative groups.

ENGLAND.

The beginning of cooperation as a modern movement is to be found in England in the first part of the nineteenth century, when for nearly 30 years the communistic ideas of Robert Owen were successfully carried out among the operatives in his cotton mills in New Lanark. Difficulties with his partners, however, caused his retirement and although his subsequent communistic attempts both in Great Britain and the United States were failures, his teachings of the conscious seeking after social good, belief in self-supporting communities, and his vision of a new moral and industrial world had a far-reaching effect not only on the working classes, whose welfare he had at heart, but on all other classes as well. His attempts were followed by the formation of workmen groups in many parts of the country for the purpose of forming self-supporting communities. These societies

¹ See MONTHLY LABOR REVIEW for November, 1918 (pp. 130-132).

started usually as buying clubs, the capital which accrued being used to start members in business with the ultimate object of buying land and forming a self-sufficing community. These cooperative societies numbered between four and five hundred, but by 1834 the movement had died out, partly for the reason that the law gave no protection to the property of cooperative societies. Reforms along this line were secured, however, to the working people by the Christian Socialists in 1852.

In 1844 a small company of weavers formed at Rochdale a cooperative society which has become the model for all subsequent distributive cooperation. The chief difference between this and earlier attempts at cooperation is to be found in the method of dealing with profits. The earlier stores had divided these either according to capital or else equally among members, but under the Rochdale plan dividends are paid each quarter to each member in proportion to his purchases. Membership, which usually begins with the first payment of 25 cents on the share of stock, is secured by purchase of one share, usually five or ten dollars in value, while the "one man, one vote" principle is adhered to, thus differentiating the plan from all stock ownership and capitalistic enterprises. No credit is allowed and goods are sold at usual retail prices, but a special effort is made to sell unadulterated goods and to give full measure. The English cooperative societies also secure good pay and good working conditions for their own employees and endeavor not to buy goods made under bad conditions. A proportion of their profits is usually set aside for educational and recreational purposes.

The producers' associations are formed to carry on their own industry on the copartnership idea and dividends based on employees' wages are not usually paid in cash but are credited to the employees as share capital. A combination of the consumers' production and the labor copartnership ideas is found in Scotland, where the cooperative production is nearly all carried on by consumers' federations. The Labor Copartnership Association exists for the purpose of furthering the cause of copartnership in cooperation, but while this form of cooperation has not stood still, consumers' cooperation is greatly in the ascendancy.

The growth of consumers' societies has been steady. For 40 years before the war the rate of increase in the membership had been five times as great as the rate of increase in population and during the war this rate has doubled. Recent figures which place the annual business done by the British cooperative societies at nearly \$1,000,000,000 show a saving to cooperators of about \$100,000,000, of which about \$65,000,000 is returned as cash dividends to members.

Not only do the English and Scottish wholesale societies manufacture most of their factory-made commodities, but the English wholesale society also has its own farms for the production of fruit and vegetables and for cattle grazing, its own coal mines, many acres of wheat lands in Canada, plantations for raising tea in Ceylon, and great banking and insurance departments. The English wholesale society returns the net profits to the stores as dividends on purchases and through the stores to all the members, but the Scottish wholesale society pays a part of the profits to employees as a dividend on wages.

The Cooperative Union (Ltd.) is a propagandist federation of the chief cooperative societies in Great Britain and some in Ireland. The different societies contribute to the funds and their legal and parliamentary interests, as well as much of the educational work and arrangements for the annual cooperative congress, are attended to by the association.

At the outbreak of the war food prices in Great Britain rose enormously as a result of the mad rush of people with ready money to lay in supplies for weeks or months ahead. The English and Scottish wholesale societies, finding that they had supplies to fill a normal demand, advised their local stores to restrict sales to individuals to their average rate of purchasing but not to raise their prices. As the general public then swung over to the cooperative stores it became necessary for the officials to instruct their stores to sell only to members. There was another rush to become members, so that the stores had temporarily to refuse to take in new members until normal conditions began to prevail again. The prices of private dealers continued to soar until in some cases they were more than twice those of the cooperative stores and when the popular agitation for regulation of prices came, the Government officials, because of the consistent stand of the cooperatives, accepted the prices of the wholesale societies as the standard.

Until very recent times the trend of the cooperative movement in England has been nonpolitical, but the cooperators have now entered the field of politics and are affiliated with the British Labor Party.

GERMANY.

Cooperative developments in a number of countries on the continent have taken the form of agricultural cooperation and credit cooperation, or people's banks, these forms of cooperation having been developed in Great Britain only comparatively recently. Conditions on the continent, however, favored the foundation of people's banks, by which the poorest peasants were enabled to free themselves from the oppression of the money lenders and to borrow money at a moderate rate of interest, and the working peasants, artisans, and

tradesmen to secure the stock and tools necessary in order to gain their independence.

The Raiffeisen banks founded in Germany about the middle of the last century were formed for the purpose of assisting the very poorest peasants and are essentially an association of neighbors who borrow a sum of money and lend it out to each other at a slightly higher rate of interest. As the officers, except the accountant, serve without pay, the expenses are small. The society confines itself to a small area and as loans are unsecured the borrowers are required to state for what purpose the loan is desired and practically all the members see that the money is used as agreed. Loans may extend over a considerable period, but power is reserved to call them in if they are misapplied. In each large district the banks are federated in a union and these unions in a general agency. Although the banks grew but slowly in the first few years after they were started, they have now spread throughout Germany and into Austria, Russia, Italy, India, and many other countries. The Schulze-Delitzsch Banks, which have grown into a powerful organization, were started in order to provide assistance for the small craftsmen, but the system partakes too much of the nature of stock ownership to be classed under cooperation.

Cooperative stores have grown rapidly in Germany since 1898. The large majority of working-class cooperatives are federated in the Central Union and middle-class cooperatives in the General Union, the former being largely socialistic while the latter is more conservative politically. Principles guiding German cooperation are practically like those of Great Britain. The societies were prohibited by law, however, from selling to nonmembers and before the war civil-service employees were liable to dismissal if they became members of cooperative societies. As a result of the maintenance of standard prices by the societies during the food panic, however, the Government removed the restriction as to membership of Government employees which resulted in increase in membership and volume of business. The most recent figures available give the membership in consumers' societies as more than 2,000,000 and about the same number in producers' and banking organizations.

AUSTRIA-HUNGARY.

In Austria-Hungary the societies have met the same opposition from the Government as in Germany and until the war, although there were a large number of cooperators, the chief development was in the Raiffeisen banks and in agricultural societies. Distributive societies have grown more rapidly since the war and have now a membership in Austria of more than 3,000,000. These societies show the same lines of political cleavage as in Germany, those belonging to the Central Wholesale Society being socialistic, while members of

the General Union are less radical in their views. The Government, in spite of its former opposition, called upon the Vienna wholesale society in 1916 to assist by organizing cooperatively several hundred thousand Government workers in munition and other factories and the society soon succeeded, in spite of difficulties, in adapting itself to this much increased volume of business. The Hungarian wholesale society reported a membership of about 300,000 in 1916 and a large increase in business. It is said to be admitted that the population was much better off in localities where there were cooperative societies even though the societies had to contend with the same difficulties in getting supplies as other dealers.

FRANCE.

French cooperation has developed from the middle of the last century up to about the beginning of the war mainly along agricultural lines. The *Syndicats Agricoles* which are not technically cooperative societies but are rather trade-unions of cultivators have a large membership and have led to the formation of a large number of true cooperatives. Cooperative production in France differs from that of England in that it is rare that anyone is admitted to membership who does not belong to the trade. Producers' societies are engaged in a great variety of industries but sell little to the distributive societies, the Government buying many of their products. State loans are made to the rural loan banks and during the war the Government relied on the societies for the distribution of certain foods and other necessities, and also loaned the wholesale society money to start cooperative restaurants. In spite of the fact that nearly 30 per cent of the cooperatives were in the invaded territory it was shown at their recent annual congress that their societies had increased from 900 in 1914 to 1,500 in 1917.

Laws favorable to cooperative societies were passed in 1917 by Parliament and credit of 2,000,000 francs (\$386,000) authorized to the distributive societies. The office of agricultural reconstitution, during the summer and fall of 1917, founded agricultural cooperatives in 120 villages in the Departments of the Somme, Aisne, and Pas-de-Calais through the special mission of agricultural cooperation. These cooperatives included 8,000 people, a large proportion being farmers, and nearly 100,000 acres of land under cultivation. These societies were nearly all destroyed in the spring of 1918, but the mission is now trying to restore them and to create other cooperatives to stock them with farm implements and cattle. The twenty-million-dollar agricultural credit recently voted is being used in part to establish these cooperatives.

DENMARK.

Cooperation in Denmark has reached a larger proportion of the population than in any other country and while there are many consumers' societies the main development has been in agricultural cooperation. This movement is confined largely to the last 30 years and has worked almost a revolution in the condition of the inhabitants, as the country has been transformed through this agency from one of the poorest to one of the richest in proportion to its population in Europe. These associations for collecting and exporting eggs, for improving breeds of stock, for buying fertilizers and farm and household implements, and the cooperative dairies, bacon factories, etc., have not only benefited the producers through the savings effected through the better management and decreased expense of production, but through the improvement in the grade of products which has resulted from the spread of scientific methods.

Cooperative credit associations and banks, live stock insurance societies and building societies are managed also by the farmers who make up nearly 40 per cent of the population. The consumers' societies are united in the Cooperative Wholesale Society which in addition to its main office and warehouses has branches in 12 towns and has built a number of factories. In 1917 the volume of business done by agricultural and consumers' societies banks and insurance companies was more than one and one-quarter billion dollars. Part of the savings of the societies are turned over to the Social Democratic Party for purposes of propaganda.

BELGIUM.

In Belgium the history of cooperation covers the last 40 years and while the movement was inspired by the English societies the first organization was along the line of cooperative bakeries. The members of the first society, the Vooruit, allowed their profits to accumulate to form an insurance fund and also started the first of the social centers, "maison du peuple," as a means of uniting the members against the opposition of the clergy. The profits of the bakeries, the consumers' societies and the wholesale societies are not returned to the members as dividends but provide through the insurance department, sickness and unemployment benefits and medical and nursing attendance, and permit the establishment of the "houses of the people" in various centers. The movement is somewhat different from that in most countries in that it has been from the first largely political and has been looked upon by the Socialist Party as a means of organizing the working classes for political and economic emancipation, and of providing funds for political warfare. In spite of the invasion of the country by Germany, cooperation has not been destroyed but has even been able to increase its membership, and the credit banks have done a larger business than ever before.

RUSSIA.

The Russian cooperative movement covers a period of more than 50 years and the forms of organization include the "artels"—associations formed to carry out certain units of work or industries or personal services on the joint responsibility and on the joint account of the members—agricultural societies and associations, consumers' societies, credit and loan saving societies, and cooperative unions. Government persecution prevented the growth of these societies until recently, but an idea of the rapid growth of the movement in Russia during the war may be gained from the fact that in January, 1914, there were 10,000 consumers' societies and in January, 1917, this number had increased to 20,000. The most recent figures place the number of societies in all forms of cooperation at 50,000, with 20,000,000 members. The Moscow Narodny Bank centralizes and coordinates the movement throughout Russia and Siberia. In Siberia the first form of cooperation was the creamery associations but the movement follows that in Russia and recently a central cooperative bureau has been formed in Vladivostok to coordinate the activities of the various cooperative units. The Moscow Union of Cooperative Societies, the most important union, representing about 4,000 cooperative stores, had a turnover of 200,000,000 rubles (\$103,000,000) in 1917 and for 1918 it was expected that the figures would reach 700,000,000 rubles (\$360,500,000).

OTHER COUNTRIES.

The history of cooperation in other countries in Europe is similar to the ones already discussed. In Switzerland the cooperative societies were victors in a fight with the beef trust and in Sweden the sugar trust was vanquished by them. In Switzerland and Holland more than one-fourth of the population are cooperators. In Italy the main interest is in the peoples' banks and the workingmen's provident societies although there are many consumers' societies. In Norway, Spain, Ireland and Finland a large proportion of the inhabitants are cooperators, while Japan in 1913 had 900,000 members in its various societies and India had 18,000 agricultural societies with 700,000 members, and 1,000 other societies. Even in Palestine, in spite of the oppression by the Turks, a society formed in 1914 has grown from the original 450 members to 3,000 and has succeeded in bettering the conditions of the members who had been reduced almost to starvation.

EMPLOYMENT AND UNEMPLOYMENT.

EMPLOYMENT CONDITIONS IN THE UNITED STATES.

A weekly telegraphic report of the conditions relating to the labor supply is received from many cities throughout the country by the United States Employment Service of the Department of Labor. These reports together with trade paper digests and other data are issued weekly by the Industrial Conditions Section of the War Trade Board and afford a general survey of trade and labor conditions.

The following table shows estimated fluctuations in the labor supply over approximately a three-month period. There was a steady decrease in labor shortage in the cities reporting that condition, from the second week in the period up to the last date, March 1, while the amount of unemployment indicated in the column showing estimated surplus increased rapidly from 10,368 on November 30, 1918, to 358,890 on March 1, 1919.

CONDITION OF EMPLOYMENT IN IMPORTANT CITIES IN THE UNITED STATES NOVEMBER 30, 1918, TO MARCH 1, 1919.

Week ending—	Cities reporting.	Concerns reporting.	Employees on pay roll.	Cities showing shortage.	Estimated shortage.	Cities showing surplus.	Estimated surplus.	Cities showing industrial conditions.		
								Good.	Unsettled.	Acute.
1918.										
November 30	108	5,706	3,108,507	28	45,578	10	10,368	83	10	5
December 7	122	6,515	3,555,066	29	48,226	16	22,200	91	8	5
December 14	122	6,901	3,568,448	30	47,130	26	30,000	95	7	4
December 21	120	6,738	3,628,833	25	41,002	37	66,350	88	7	7
December 28	122	6,669	3,496,453	26	35,542	41	91,889	91	6	7
1919.										
January 4	121	6,846	3,499,709	27	33,397	47	120,589	87	9	6
January 11	122	6,795	3,358,516	22	20,033	46	175,951	82	8	8
January 18	122	6,873	3,428,172	18	18,644	65	211,700	83	12	12
January 25	122	6,898	3,462,529	18	14,350	61	258,332	83	14	9
February 1	122	6,923	3,479,874	16	11,360	69	292,831	78	17	10
February 8	122	6,922	3,420,261	17	9,313	72	323,685	75	14	17
February 15	122	6,928	3,386,090	18	8,943	74	343,397	74	15	18
February 22	122	6,928	3,396,940	18	8,014	82	367,130	74	17	16
March 1	122	6,971	3,443,809	14	5,416	78	358,890	70	16	18

The table following shows the changes in labor conditions for certain selected cities. These cities are chosen because of their location in the different geographical sections of the country and indicate that the rising surplus in the labor supply is not confined to a few localities but is very general throughout the country.

SELECTED CITIES REPORTING LABOR SURPLUS OR SHORTAGE, DECEMBER 7, 1918,
TO MARCH 1, 1919.

Week ending—	New England.		Middle Atlantic.		South Atlantic.		East Central.		West Central.		Moun- tain.	Pacific.	
	Bos- ton.	New Haven.	Buf- falo.	Pitts- burg.	Balti- more.	Nor- folk.	De- troit.	Cleve- land.	Min- ncap- olis.	St. Louis.	Butte	San Fran- cisco.	Sea- ttle.
1918.													
December 7:													
Surplus.....		(1)	6,000				(1)	(1)	(1)	(1)		(1)	
Shortage.....	(2)	(1)		7,000	(2)	(2)	(1)	(1)	(1)	(1)			(2)
December 14:													
Surplus.....		(1)	3,000					(1)	(1)	(1)	(1)	7,000	
Shortage.....	(2)	(1)		5,000	(2)	2,000		(1)	(1)	(1)	(1)		5,000
December 21:													
Surplus.....			8,000				(1)		(1)	(2)	(1)	7,000	
Shortage.....	(2)			9,000	6,500	2,500	(1)		(1)		(1)		4,000
December 28:													
Surplus.....	(1)	(3)	10,000				15,000	10,700		(2)	(2)	7,500	
Shortage.....	(1)			10,000	7,400	2,500			(1)				(2)
1919.													
January 4:													
Surplus.....	3,700	(4)	10,000				20,000	15,000		(2)	(2)	7,500	
Shortage.....				7,000	6,800	2,250							(2)
January 11:													
Surplus.....	452	(5)	12,000	(6)			20,000	20,000	(1)	(2)	(2)	8,000	(2)
Shortage.....				4,000	4,800	3,600			(1)				(1)
January 18:													
Surplus.....	(1)	5,000	13,000				25,000	40,000	2,000	(1)		8,000	(1)
Shortage.....	(1)			5,000	3,000	1,503				(1)			
January 25:													
Surplus.....	(1)	4,500	15,000	1,200			30,000	55,000	4,000	(1)	10,000	8,000	8,000
Shortage.....	(1)			⁸ 5,000	3,000	1,800				(1)			
February 1:													
Surplus.....	(1)	6,000	17,000	8,000			33,000	65,000	5,000	(1)	7,500	4,000	10,000
Shortage.....	(1)			⁸ 3,000	2,600	1,700				(1)			
February 8:													
Surplus.....	4,515	6,000	18,000	11,600			35,000	70,000	5,000	448	7,500	5,000	10,000
Shortage.....				⁸ 2,500		700	1,500						
February 15:													
Surplus.....	4,360	6,000	19,000	16,000			25,000	75,000	7,000	(2)	18,000	7,000	12,000
Shortage.....				⁸ 1,900		500	1,350						
February 22:													
Surplus.....	4,410	6,500	20,000	19,000			25,000	75,000	7,000	(1)	16,000	8,200	12,000
Shortage.....				⁸ 1,700		500	2,500			(1)			
March 1:													
Surplus.....	4,760	7,000	20,000	19,000			25,000	75,000	7,000	(1)	12,000	8,200	12,000
Shortage.....				⁸ 1,700		500	1,500			(1)			

¹ None.² Not reported.³ 2,500 to 3,000.⁴ 3,000 to 4,000.⁵ 4,000 to 5,000.⁶ Clerks, number not reported.⁷ Shortage in shipyards.⁸ Miners.

EMPLOYMENT IN SELECTED INDUSTRIES IN JANUARY, 1919.

The Bureau of Labor Statistics received and tabulated reports concerning the volume of employment in January, 1919, from representative manufacturing establishments in 13 industries.

Comparing the figures for January of this year with those from identical establishments for January, 1918, it appears that in four industries there was an increase in the number of people employed and in nine a decrease. Car building and repairing showed an increase of 8.2 per cent in this respect, and woolen and men's ready-made clothing decreases of 32.9 and 22.2 per cent, respectively.

Eleven industries show an increase in the total amount of the pay roll for January, 1919, as compared with January, 1918. Decreases are shown in two industries. The largest increases—60.7, 47, and

37.3 per cent—appear in car building and repairing, iron and steel, and paper making, respectively. The larger decrease, 27.8 per cent, is shown in woolen.

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS IN JANUARY, 1918, AND JANUARY, 1919.

Industry.	Estab-lish-ments reporting for Janu-ary, both years.	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 (-).
			Janu-ary, 1918.	Janu-ary, 1919.		January, 1918.	January, 1919.	
Automobile manufacturing...	49	1 week..	106,993	112,984	+ 5.6	\$2,277,082	\$2,979,959	+30.9
Boots and shoes.....	73	do.....	59,161	56,659	- 4.2	916,930	1,174,794	+23.1
Car building and repairing...	52	½ month..	64,339	69,821	+ 8.2	2,501,427	4,019,065	+60.7
Cigar manufacturing.....	56	1 week..	19,813	17,667	-10.8	252,809	285,884	+13.1
Men's ready-made clothing...	39	do.....	29,108	22,651	-22.2	509,511	488,660	- 4.1
Cotton finishing.....	16	do.....	14,084	12,332	-12.4	217,438	233,456	+ 7.4
Cotton manufacturing.....	52	do.....	47,841	46,822	- 2.1	599,747	761,348	+26.9
Hosiery and underwear.....	67	do.....	32,512	29,982	- 7.8	366,435	438,286	+19.6
Iron and steel.....	100	½ month..	180,162	183,418	+ 1.8	8,559,587	12,582,482	+47.0
Leather manufacturing.....	31	1 week..	14,092	12,734	- 9.6	241,094	282,415	+17.1
Paper making.....	54	do.....	28,780	29,888	+ 3.2	454,184	623,669	+37.3
Silk.....	37	2 weeks..	11,996	10,742	-10.5	262,829	336,370	+28.0
Woolen.....	48	1 week..	46,232	31,025	-32.9	726,894	525,113	-27.8

The following table shows the number of persons actually working on the last full day of the reported pay period in January, 1918, and January, 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 JANUARY, 1918, AND JANUARY, 1919.

Industry.	Estab-lish-ments reporting for January, both years.	Period of pay roll.	Number actually working on last full day of reported pay period in January—		Per cent of increase (+) or decrease (-).
			1918.	1919.	
Automobile manufacturing.....	28	1 week....	66,369	72,519	+ 9.3
Boots and shoes.....	25	do.....	14,043	11,926	-15.1
Car building and repairing.....	50	½ month..	53,186	60,520	+13.8
Cigar manufacturing.....	18	do.....	5,350	4,379	-18.2
Men's ready-made clothing.....	4	do.....	3,905	3,164	-19.0
Cotton finishing.....	12	do.....	9,855	7,987	-19.0
Cotton manufacturing.....	32	do.....	24,158	23,748	- 1.7
Hosiery and underwear.....	23	do.....	13,683	12,478	- 8.7
Iron and steel.....	77	½ month..	136,085	141,295	+ 3.8
Leather manufacturing.....	14	1 week....	8,715	8,200	- 5.9
Paper making.....	19	do.....	11,042	10,865	- 1.6
Silk.....	19	2 weeks..	6,900	5,864	-15.0
Woolen.....	40	1 week....	38,031	24,228	-36.3

In comparing the reports of the same industries for January, 1919, with those of December, 1918, four show an increase in the number of persons on the pay roll and nine a decrease. Silk shows the largest increase, 2.9 per cent, while the greatest decrease, 18.1 per cent, appears in woolen.

Of the 13 industries reporting, only one, boots and shoes, shows an increase in the total amount of the pay roll in January, 1919, as compared with December, 1918. A marked decrease of 25.2 per cent appears in woolen.

The figures for January, 1919, were affected by labor troubles, plants not working full time, and the completion of Government contracts. The last was especially the case of woolen.

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS IN DECEMBER, 1918, AND JANUARY, 1919.

Industry.	Establishments reporting for December and January.	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 (-).
			December, 1918.	January, 1919.		December, 1918.	January, 1919.	
Automobile manufacturing...	50	1 week...	124,902	117,844	- 5.7	\$3,329,139	\$3,041,762	- 8.6
Boots and shoes.....	69	do.....	50,607	51,029	+ .8	1,058,795	1,080,340	+ 2.0
Car building and repairing.....	47	½ month.....	62,790	61,267	- 2.4	3,831,438	3,593,615	- 6.2
Cigar manufacturing.....	55	1 week.....	18,650	17,606	- 5.6	313,644	284,684	- 9.2
Men's ready-made clothing.....	37	do.....	21,007	19,329	- 8.0	435,578	419,412	- 3.7
Cotton finishing.....	16	do.....	13,537	12,332	- 8.9	277,347	233,456	-15.8
Cotton manufacturing.....	51	do.....	46,382	46,682	+ .6	791,456	759,334	- 4.1
Hosiery and underwear.....	57	do.....	28,524	27,459	- 3.7	451,611	401,803	-11.0
Iron and steel.....	91	½ month.....	172,230	169,521	- 1.6	12,226,726	11,608,565	- 5.1
Leather manufacturing.....	33	1 week.....	13,381	13,438	+ .4	302,326	291,773	- 3.5
Paper making.....	54	do.....	29,855	29,688	- .6	655,151	623,669	- 4.8
Silk.....	36	2 weeks.....	10,272	10,572	+ 2.9	340,130	329,803	- 3.0
Woolen.....	50	1 week.....	38,412	31,445	-18.1	713,527	533,596	-25.2

A comparatively small number of establishments reported as to the number of persons working on the last full day of reported pay periods. The following table gives in comparable form the figures for December, 1918, and January, 1919:

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS ON THE LAST FULL DAY'S OPERATION IN DECEMBER, 1918, AND JANUARY, 1919.

Industry.	Establishments reporting for December and January.	Period of pay roll.	Number actually working on last full day of reported pay period in—		Per cent of increase (+) or decrease (-).
			December, 1918.	January, 1919.	
Automobile manufacturing.....	28	1 week....	71,650	70,164	- 2.1
Boots and shoes.....	32	do.....	14,063	13,790	- 1.9
Car building and repairing.....	45	½ month....	53,123	53,333	+ .4
Cigar manufacturing.....	16	1 week.....	4,556	4,241	- 6.9
Men's ready-made clothing.....	7	do.....	3,791	3,754	- 1.0
Cotton finishing.....	13	do.....	9,845	8,212	-16.6
Cotton manufacturing.....	31	do.....	23,194	23,596	+ 1.7
Hosiery and underwear.....	21	do.....	12,066	11,413	- 5.4
Iron and steel.....	79	½ month....	139,578	135,738	- 2.8
Leather manufacturing.....	19	1 week.....	9,517	9,809	+ 3.1
Paper making.....	22	do.....	13,577	13,417	- 1.2
Silk.....	22	2 weeks....	6,518	6,750	+ 3.6
Woolen.....	46	1 week.....	31,996	25,566	-20.1

CHANGES IN WAGE RATES.

During the period December 15, 1918, to January 15, 1919, there were establishments in 9 of the 13 industries which reported increases in wage rates, and two—boots and shoes and hosiery and underwear—which reported decreases. Of the establishments reporting many did not answer the inquiry relative to this item, but in such cases it is not likely that any changes were made.

Automobile manufacturing.—One plant granted percentage increases of 20, 14, 9, and 4, affecting 71, 20, 6, and 3 per cent of the employees, respectively. The average productive hourly rate in one establishment was increased 0.012 cent.

Boots and shoes.—An increase of 20 to 40 per cent to about 60 per cent of the force was given by one plant and an increase of 11 to 12.5 per cent was granted to 2 per cent of the help in another establishment. The employees in two plants received 10 per cent bonuses, which were paid in war saving stamps. Another establishment gave an increase of about 8 per cent to 8 per cent of the force. Three plants reported the discontinuance of the 10 per cent production bonus.

Cigar manufacturing.—One factory reported an increase of 10 per cent, but failed to give the number of persons receiving the increase. Thirty per cent of the force in one establishment received an increase of about 7.5 per cent. The entire force in one shop received an increase, the rate of which was not reported.

Men's ready-made clothing.—An increase of 7 per cent to 8 per cent of the force was granted by one concern. The week workers' hours in one establishment were reduced, but the piecework rates were increased to compensate for the shorter week, thus increasing the wages approximately \$2 per week.

Cotton finishing.—One company reported an increase to 5 per cent of the force but failed to state the amount of the advance.

Hosiery and underwear.—All of the employees in one factory received a 10 per cent bonus on their earnings for 1918. Another establishment reported an increase, but no further data were given. In one mill the bonuses were discontinued.

Iron and steel.—In one plant all of the employees of operating departments, excluding clerks, were granted an increase of 5 cents an hour on day-work rates. In another plant the basic eight-hour day was discontinued.

Paper making.—An increase of about 8 per cent, affecting about 11 per cent of the force, was given in one mill.

Silk.—One establishment granted an increase of 10 per cent to 90 per cent of the force.

INDEX NUMBERS OF EMPLOYMENT AND OF PAY ROLL, JANUARY, 1915,
TO JANUARY, 1919.

Index numbers showing relatively the variation in the number of persons employed and in pay-roll totals in 13 industries by months from January, 1915, to January, 1919, have been compiled and are presented in the two following tables. These index numbers are based on the figures for "Employment in selected industries," appearing in this and preceding issues of the REVIEW. The seven industries shown in the first table are the only ones for which the bureau has comparable data as far back as January, 1915. Therefore, January, 1916, is taken as the basis of comparison.

The number of persons whose names appeared on the pay roll for the base month is represented by 100. The amount of money carried on the pay rolls is likewise represented by 100. To illustrate, if the number of persons employed in the iron and steel industry in January, 1916, is taken as 100, then the number employed in that industry in January, 1919, was 136; that is, it had increased 36 per cent; and if the money pay roll in January, 1916, be taken as 100, the pay roll in January, 1919, represented 265; or, in other words, the amount paid in wages was more than two and one-half times as much in January, 1919, as in January, 1916.

The increase in the amount of pay roll for car building and repairing during the past months is due mainly to the increase in wage rates granted by the Director General of Railroads. These rate increases were retroactive, but the figures for this industry have not been revised, as the amount of the additional wages due and payable under the new rates for each month are not available.

INDEX NUMBERS OF EMPLOYMENT AND OF PAY ROLL, JANUARY, 1915, TO
JANUARY, 1919.

[January, 1916=100.]

Month and year.	Boots and shoes.		Cotton finishing.		Cotton manufacturing.		Hosiery and underwear.		Iron and steel.		Silk.		Woolen manufacturing.	
	Number on pay roll.	Amt. of pay roll.	Number on pay roll.	Amt. of pay roll.	Number on pay roll.	Amt. of pay roll.	Number on pay roll.	Amt. of pay roll.	Number on pay roll.	Amt. of pay roll.	Number on pay roll.	Amt. of pay roll.	Number on pay roll.	Amt. of pay roll.
1915.														
January.....	87	80	85	81	101	98	87	76	74	62	91	83	88	81
February.....	87	77	94	90	101	103	91	81	71	65	93	90	88	80
March.....	83	71	91	89	103	105	91	85	77	72	93	92	91	84
April.....	77	61	93	92	102	103	94	85	80	75	90	85	93	88
May.....	79	66	93	93	103	104	96	90	82	74	90	88	94	86
June.....	80	71	87	86	102	99	98	92	85	81	90	85	89	79
July.....	81	73	92	85	103	99	95	90	87	75	89	85	92	79
August.....	82	76	90	88	101	100	94	89	90	83	91	87	90	78
September.....	82	76	90	87	101	101	98	89	93	87	92	87	99	90
October.....	90	89	94	92	102	94	100	98	97	91	94	94	99	82
November.....	94	97	104	94	103	99	101	100	97	93	97	100	102	94
December.....	109	103	97	100	102	98	104	105	97	101	98	100	103	98
1916.														
January.....	100	100	100	100	100	100	100	100	100	100	100	100	100	100
February.....	100	99	101	105	101	108	101	105	102	113	97	105	102	108
March.....	101	101	103	107	101	110	103	108	105	115	100	109	102	109
April.....	99	97	98	103	101	111	104	108	104	115	101	108	104	110
May.....	98	99	95	110	101	116	105	111	108	126	99	108	105	117
June.....	99	102	96	110	102	115	105	110	109	123	100	110	103	112
July.....	100	101	96	107	102	112	104	102	110	111	101	100	101	110
August.....	99	98	97	107	100	112	102	102	113	125	100	103	97	104
September.....	98	98	96	109	100	114	104	108	115	130	99	104	101	111
October.....	98	99	96	110	100	110	106	112	115	135	100	109	102	108
November.....	102	113	99	114	100	115	107	119	117	138	98	108	103	116
December.....	107	125	101	126	102	123	108	124	118	144	100	112	105	128
1917.														
January.....	108	126	99	123	101	121	107	121	122	152	100	112	107	132
February.....	108	128	99	122	102	123	108	120	123	149	99	114	106	131
March.....	107	126	99	124	101	125	109	124	124	159	98	118	108	131
April.....	105	117	96	121	101	122	106	117	124	148	97	115	105	124
May.....	104	122	98	132	100	127	108	126	127	176	95	118	106	140
June.....	105	132	98	134	100	135	107	128	129	176	93	113	104	139
July.....	102	123	94	124	101	135	105	126	130	165	93	107	104	140
August.....	97	122	94	123	99	129	103	122	134	183	91	107	102	136
September.....	91	121	95	125	98	133	104	125	133	179	89	107	104	142
October.....	93	121	95	128	98	135	105	133	135	212	88	111	107	155
November.....	101	137	98	140	100	153	106	144	136	214	88	111	110	168
December.....	101	162	100	146	101	160	108	148	136	207	88	111	112	175
1918.														
January.....	101	161	96	132	100	153	105	134	134	184	86	102	107	159
February.....	102	158	96	129	95	140	107	135	135	190	83	104	105	139
March.....	103	172	98	141	100	162	108	159	137	206	89	120	109	172
April.....	99	166	94	147	98	168	108	161	136	206	83	123	109	186
May.....	97	166	93	149	96	173	107	166	138	236	87	127	106	180
June.....	96	173	93	158	96	179	107	165	139	235	87	124	106	180
July.....	98	176	97	169	97	192	108	175	137	220	85	121	105	185
August.....	96	173	95	161	97	189	107	171	138	245	83	123	104	199
September.....	95	183	92	165	95	193	105	175	137	249	79	127	103	191
October.....	89	171	88	152	87	163	95	155	138	282	79	128	95	162
November.....	92	156	89	147	92	164	101	148	135	257	76	107	98	148
December.....	95	207	92	170	98	206	101	179	138	279	77	127	90	156
1919.														
January.....	95	211	84	143	99	198	97	159	136	265	79	123	74	117

INDEX NUMBERS OF EMPLOYMENT AND OF PAY ROLL, FEBRUARY, MARCH, OR NOVEMBER, 1915, TO JANUARY, 1919.

[January, 1916=100.]

Month and year.	Automobile manufacturing.		Car building and repairing.		Cigar manufacturing.		Men's ready-made clothing.		Leather manufacturing.		Paper manufacturing.	
	Number on pay roll.	Amt. of pay roll.	Number on pay roll.	Amt. of pay roll.	Number on pay roll.	Amt. of pay roll.	Number on pay roll.	Amt. of pay roll.	Number on pay roll.	Amt. of pay roll.	Number on pay roll.	Amt. of pay roll.
1915.												
February.....			71	71			98	98				
March.....			80	87	106	91	92	86				
April.....			67	71	90	88	80	70				
May.....			86	91	98	92	94	86				
June.....			87	97	94	94	95	95				
July.....			92	104	96	99	97	107				
August.....			89	92	92	94	83	86				
September.....			95	97	97	93	80	83				
October.....			99	108	106	109	84	95				
November.....	99	108	104	113	108	116	88	107	97	91	84	92
December.....	100	100	108	133	106	111	81	93	101	103	96	99
1916.												
January.....	100	100	100	100	100	100	100	100	100	100	100	100
February.....	112	111	104	121	95	94	98	105	112	111	105	109
March.....	114	117	109	132	99	97	100	106	111	105	103	106
April.....	112	114	110	132	93	96	97	106	110	108	104	107
May.....	113	119	109	133	90	96	102	105	106	109	106	112
June.....	109	115	111	134	91	98	105	116	104	112	108	118
July.....	116	105	108	126	91	99	105	122	106	113	107	117
August.....	117	119	109	125	90	97	97	118	110	118	109	122
September.....	123	132	113	128	93	105	93	112	101	111	102	118
October.....	132	148	111	132	97	112	95	116	111	129	103	122
November.....	129	155	117	145	93	110	101	126	113	131	101	124
December.....	125	135	116	154	96	117	92	117	116	141	114	138
1917.												
January.....	133	137	111	136	97	111	107	117	124	141	118	135
February.....	134	149	112	134	98	113	107	123	121	145	117	135
March.....	135	158	109	142	100	117	110	132	119	142	117	136
April.....	133	153	104	130	92	106	110	123	114	133	116	135
May.....	130	156	105	144	92	113	113	135	109	133	113	141
June.....	125	146	104	144	94	118	118	144	106	129	115	144
July.....	118	141	108	134	94	117	113	151	105	126	111	139
August.....	120	136	107	146	87	107	108	141	104	130	103	138
September.....	125	153	96	129	91	114	103	136	104	136	109	143
October.....	126	160	103	153	98	127	101	139	104	144	110	148
November.....	122	165	108	166	103	137	104	154	111	157	111	161
December.....	121	156	113	170	103	136	107	162	114	172	114	160
1918.												
January.....	119	137	113	151	103	129	102	147	111	163	112	146
February.....	119	142	112	154	101	131	105	155	108	154	109	147
March.....	123	158	111	167	104	141	101	159	106	165	113	168
April.....	124	161	108	166	103	142	101	154	102	161	112	171
May.....	124	172	109	177	88	121	101	168	101	175	113	174
June.....	126	175	102	163	94	138	101	170	104	192	113	181
July.....	122	170	110	196	96	139	102	172	106	192	114	191
August.....	118	177	116	240	92	121	98	163	105	194	114	204
September.....	120	182	119	242	93	135	94	154	102	188	114	203
October.....	121	192	125	271	87	125	86	146	98	177	106	194
November.....	123	174	126	263	92	137	85	139	99	172	112	191
December.....	114	174	125	250	95	155	83	147	100	198	116	217
1919.												
January.....	108	159	122	234	89	141	76	142	101	191	115	206

AGREEMENTS BETWEEN EMPLOYERS AND EMPLOYED, AND COLLECTIVE BARGAINING.

GROWTH OF EMPLOYEES' REPRESENTATION AND COLLECTIVE BARGAINING.

The year 1918 witnessed a remarkable growth in acceptance of the principle that employees are entitled to a voice in determining the conditions under which they work, and of the practice of collective bargaining. The employers declaring for one or both of these features fall into three groups. The first is composed of a number of large corporations in the fuel and iron and steel industries which adopted voluntarily some form of employees' representation providing for collective bargaining and the adjustment of grievances, and establishing machinery for frequent conferences between employers and employees on matters which concern both. The second comprises the employers concerned in a number of cases in which industrial disputes were brought before the National War Labor Board where some provision for collective bargaining was made part of the award. Usually the award did not provide for much beyond the establishment of shop committees through which wage questions should be settled, but sometimes the committees were given a wider scope, and in at least one case they were directly and specifically given equal rights with the management in deciding an important question of policy. The third group comprises a number of firms and corporations adopting some plan of cooperation between employer and employee, worked out in greater detail than most of the awards of the War Labor Board, but usually not quite so extensive as the agreements drawn up by the first group.

COLLECTIVE BARGAINING VOLUNTARILY ADOPTED BY CERTAIN INDUSTRIES.

The lead in this movement in 1918 was taken by the Standard Oil Co., which in March requested its employees in its New Jersey plants to choose delegates who should meet at a dinner the officials of the company to consider a plan for cooperation between the two bodies in what might be called the employees' side of the industry, i. e., everything except the details of business policy and administration. The scheme there adopted was later extended to all the company's plants. A few months later the Bethlehem Steel Corporation launched a plan providing for employees' representation,¹ and

¹ At the time the Bethlehem Steel Corporation was preparing for the introduction of its plan, a dispute in the Bethlehem plant was brought before the National War Labor Board, which, as part of its award handed down July 31, 1918, ordered the formation of committees of the workers for the purpose of collective bargaining with the employers. Consequently the Bethlehem plan has been put into operation in all the plants of the corporation except the Bethlehem plant, where the committees ordered by the National War Labor Board have been elected.

not long after that the Midvale Steel & Ordnance Co., with its subsidiary plants, and the Lukens Steel Co. introduced plans of the same general character. In December the Youngstown Sheet and Tube Co. fell into line, while the Inland Steel Co. published a similar plan to become effective January 1, 1919. During the year, also, the Colorado Fuel and Iron Co., which had first inaugurated a plan of the kind in 1915,¹ remodeled its scheme, making it more democratic.

The plan adopted for the representation of employees is much the same in all these systems. The employees are grouped, usually on geographical lines, and each division elects representatives, the basis of representation varying from 100 to 300. In the Bethlehem plan, the basis varies with the size of the plant, ranging from 1 representative for each 100 employees in plants having fewer than 1,500 employees, to 1 for each 300 in plants having over 10,000. The representative holds office for one year, but may be recalled if he proves unsatisfactory to his electors. Usually it is specified that he must be one of the wage earners, as distinguished from the clerical and managerial forces, and that he must have been in the employ of the company for a period varying from six months to one year. Several plans stipulate that he must be an American citizen, or at least must have taken out his first naturalization papers. In some cases voting for representatives is confined to workers who have been with the company a certain length of time. The method of election is usually carefully prescribed. "Nominations and elections," states the Bethlehem plan, "shall be by secret ballot, and so conducted as to avoid undue influence or interference with voters in any manner whatever, and to prevent any fraud in the counting of the ballots." The other plans express the same purpose in other words, and all contain careful provisions to secure these ends.

Within a given time after the elections the representatives must meet and organize, and thereafter they are to hold regular meetings, either monthly or at such intervals as they may determine.² Under the Midvale plan there must be a meeting every three months between all the elected representatives of the men and the officials of the company. Under the Bethlehem, Youngstown, and Inland Steel plans, each of the standing committees organized among the employees' representatives is to meet on alternate months with an equal number of representatives of the management; in addition, an annual conference is to be held between all the employees' representatives and the management. The Standard Oil and the Lukens

¹ See MONTHLY REVIEW for December, 1915, pp. 12-22.

² Under the Standard Oil plan, as presented to the employees, this point is left rather vague. Joint conferences of employees' representatives and company representatives are to be held at least quarterly but whether the employees' representatives are to meet by themselves, and if so, how often, and on whose call, are matters not touched upon.

Steel plans also provide for an annual conference of this kind, and the latter plan also provides for meetings between the plant committees and the management, whenever desired.

The range of subjects which these committees are expected to handle varies considerably. In all cases they deal with disputes between the workers and the management. Usually it is provided that an employee who is dissatisfied with some detail of his treatment shall take up the matter, either in person or through his representative, with his immediate superior, and if it is not settled by this means the representative takes it to the appropriate committee, where it is discussed between the management and the representatives, being appealed, if necessary, from one body to another until it reaches arbitration by some method agreed upon. In addition to this the representatives are expected to express the men's point of view on subjects closely affecting them. Sometimes the plan simply provides that the representatives shall form a committee to discuss with the management matters of common interest; sometimes committees are planned to cover a variety of subjects. Thus the Bethlehem plan provides for the organization of committees to deal with the following subjects:

- Rules.
- Ways and means.
- Safety and prevention of accident.
- Practice, methods, and economy.
- Employees' transportation.
- Wages, piecework, bonus, and tonnage schedules.
- Employment and working conditions.
- Housing, domestic economies, and living conditions.
- Health and works sanitation.
- Education and publications.
- Pensions and relief.
- Athletics and recreation.
- Continuous employment and condition of industry.

The Midvale plan does not mention any subjects for standing committees, but states that the representatives of the employees are "to act on their behalf in all matters pertaining to conditions of employment, the adjustment of differences, and all other matters affecting the relation of the employees to the company." The Youngstown plan provides for a list of committees much like that of the Bethlehem plan, but adds that the general committee of the employees' representatives "shall have jurisdiction to consider all matters not falling within the scope of any other committee constituted and acting hereunder." In some of these agreements, wages are expressly mentioned as included in the matters to be settled between representatives and management; in the others, there is usually some phrase such as "matters of common interest,"

or "matters pertaining to the interest and welfare of the employees," wide enough to include wages.

The committees provide a definite and formal manner of bringing the employees' point of view before the management, but this method is supplemented, in a number of the plans, by the appointment of special agents known as management representatives, or some similar term, whose whole business is to keep in touch with the men, help to discover and remove difficulties before they reach the stage of formal complaint, confer frequently with the employees' representatives, and facilitate the smooth working of the plan. Usually this official plays an important part in introducing the plan, arranging the machinery for the first election, etc., and upon his good faith and interest the successful establishment of the plan largely depends. It is not intended that he shall encroach upon the field of the committees' work, but he may prevent misunderstandings from arising and thus lessen materially the amount of work they are called upon to do.

In most of the plans it is provided that regular meetings of the committees shall be held in the company's time, the men receiving full pay for the time devoted to them. If a committee desires a special meeting, and if the chairman of the employees' and of the employer's representatives agree that such a meeting is desirable, it, too, is held in the company's time. One or two of the plans contain careful provisions to protect the representatives against discrimination on the part of unfriendly foremen on account of anything they may say or do in their official capacity.

A third feature in several of the plans is the method of dealing with the question of arbitrary discharge. A rather typical section dealing with this question is as follows:

1. The right of the company to hire and suspend or discharge men shall not be limited, except as expressly provided herein.
2. Any employee guilty of any of the following offenses shall be subject to immediate discharge without notice:
 - (a) Disloyalty to the United States Government by act or utterance.
 - (b) Any offense against the criminal law of the State.
 - (c) Assault upon, or attempt to injure, another person.
 - (d) Wanton destruction of property.
 - (e) Refusal to obey a reasonable order of his superior officer.
 - (f) Intoxication while on duty.
3. For offenses of a less serious character, such as carelessness, failure to report for duty regularly and at the proper time, inefficiency, etc., it shall be the duty of the officers to secure efficiency by giving the offender at least one caution, which, if not heeded, may be followed by dismissal without further notice.
4. Any employee discharged for cause may demand that such cause be clearly stated to him, and shall have the right of appeal to the general superintendent, either in person or through his elected representative.

All these plans imply a considerable degree of democracy in the management of the industry. They not only provide for adjustment of disputes and collective bargaining, but they give the employees a chance through their representatives to meet and confer on questions hitherto supposed to belong to the management, and they insure regular meetings between the representatives of employers and employees to consider these matters. In some of the preambles the desire for securing a democratic administration is given as one of the reasons for proposing the plan. The following expresses this purpose more explicitly but not more plainly than some of the others:

The board of directors and officers of Co., recognizing the fact that the prosperity of their companies is inseparably bound up with the general welfare of their employees, propose, with the cooperation and assent of their employees and for their mutual interests, to establish a plan for representation of employees, which will hereafter govern all relations between the companies and their employees. * * *

We recognize the right of wage earners to bargain collectively with their employers and we hereby invite all employees to meet with the officers of their respective companies for the purpose of considering, and if practicable, adopting a plan of representation by the employees which shall be thoroughly democratic and entirely free from interference by the companies or any official or agent thereof.

COLLECTIVE BARGAINING UNDER AWARDS OF THE NATIONAL WAR LABOR BOARD.

The awards of the National War Labor Board concerning collective bargaining usually provided a much less comprehensive arrangement than the agreements outlined above. The right of workers to bargain collectively through committees was recognized by the board as a basic principle, and was embodied in many of its findings. In most cases, this right is referred to rather briefly. A common form is the following:

The principles upon which this board is founded guarantee the right to employees to organize and bargain collectively, and there should be no discrimination or coercion directed against proper activities of this kind. Employees in the exercise of their right to organize also should not use coercive measures of any kind to compel persons to join their unions, nor to induce employers to bargain or deal with their unions.

As the right of workers to bargain collectively through committees is recognized by the board, the company should recognize and deal with such committees after they have been constituted by employees of the company.

In one of the early cases coming before it the board went into more detail, providing that under the supervision of an examiner appointed by the board the workers should elect representative department committees. The duties of these committees are rather definitely restricted:

The duties of the department committees shall be confined to the adjustment of disputes which the shop foremen and the division superintendents and the employees have been unable to adjust.

The department committees shall meet annually and shall select from among their number three employees who shall be known as the committee on appeals. This

committee shall meet with the management for the purpose of adjusting disputes which the department committees have failed to adjust.¹

Practically the same findings on this point were given in the case of the Smith & Wesson Arms Co. and the Bethlehem plant, and and then, September 16, 1918, the board handed down an award in which the principle of collective bargaining was given a highly important extension. The dispute before the board was between the employees and employers of the Wheeling Mold & Foundry Co. over the interpretation of a previous award, fixing an eight-hour day, and providing for time and a half for all overtime. The company contended that this latter provision authorized overtime whenever the company desired it; the employees held that it did not. The decision sustained the contention of the employees, but to avoid undue rigidity the following provision for modification was made:

1. *Hours.*—The molders employed by the Wheeling Mold & Foundry Co., at Wheeling, W. Va., shall not be required or permitted to work more than eight hours within any day of 24 hours, except in cases of emergency, and then under the following terms and conditions:

(a) Overtime shall be paid for at the rate of time and a half for all hours worked in excess of 8 hours, with double time for Sundays and holidays.

(b) The question whether or not an emergency exists, together with the length of time over which such emergency may extend, and the number of extra hours per day, shall be determined by agreement between the management and the working molders in the shop.

(c) For the purpose of effectuating the agreement mentioned in paragraph *b*, a permanent committee of four persons is hereby created, two of whom shall be designated by the management of the plant and two by the working molders in the shop, the assent of at least three of whom shall be necessary for permission to work more than 8 hours in any day of 24 hours.²

This differs both from the agreements between employer and employee earlier discussed and from the other awards which had up to this date been given by the National War Labor Board in that no provision was made for arbitrating the difference if the two parties could not agree. For the first time, the employees had a decisive voice in a question of management; if the employer could not convince them that an emergency existed, he simply could not call upon them to work overtime. Up to date, the company has not gone out of business, so it is to be presumed that the employees' representatives were amenable to reason when an emergency really did exist. Before the signing of the armistice, the board had extended the same arrangement to four other companies, between whom and their employees the same dispute had arisen concerning the meaning of an eight-hour day.

¹ National War Labor Board, Docket No. 19, *Employees v. General Electric Co.*, Pittsfield, July 31, 1918.

² National War Labor Board, Docket No. 37b, *Employees v. Wheeling Mold & Foundry Co.*, Sept. 16, 1918.

Generally speaking, however, the National War Labor Board did not give the workers anything approaching a decisive voice; its awards usually declared for collective bargaining, without specifying the exact method or the extent of the field to be covered. Frequently the National War Labor Board itself remained in the background as final arbiter, while the examiner appointed by the board took the part played in the coal and fuel plans by the employer's representative. These features appear in one of the most detailed awards handed down by the board concerning this matter, which ran as follows:¹

1. COLLECTIVE BARGAINING.

(a) That there be elected forthwith shop committees, in conformity with a plan approved by the board.

(b) That the secretary of the National War Labor Board shall appoint an examiner, who shall supervise and conduct these elections.

(c) That a general committee shall be created, consisting of three members to represent the workers and three members to represent the employers. The members of the general committee representing the workers shall be selected by the members of the shop committees acting jointly, under supervision of the examiner.

(d) That the employers shall forthwith select their representatives to meet with the representatives of the workers on the shop committees and the general committee.

2. WAGES.

(a) Within five days after their selection, the representatives of the workers and employers on each shop committee shall meet for the purpose of adjusting all disputes and matters of controversy in this case which affect the wages of the shop represented by said committee.

Failure to reach a decision on any matters coming before the shop committee within 45 days from the time the matter was first taken up, it shall be referred to the general committee for adjudication. In the event of failure of this committee to reach a decision, the matter shall be referred to the examiner of the National War Labor Board, who shall promptly report the matter to the National War Labor Board for decision.

(b) Within five days after its selection the said general committee shall meet for the purpose of adjusting—

(1) All matters referred from the shop or departmental committees; and

(2) All matters in controversy in this case which affect wage conditions of the plant as a whole, but which have not been settled through the medium of the shop committees.

(c) In any case where there is doubt or dispute between shop committees and the general committee as to original jurisdiction of matters to be adjusted, the question of jurisdiction shall be decided promptly by the examiner of the National War Labor Board.

OTHER COLLECTIVE BARGAINING AGREEMENTS ADOPTED.

The third group mentioned at the outset of this article consists of employers outside the large fuel and iron and steel corporations who without pressure from the National War Labor Board have adopted some form of collective bargaining or employees' representation or both. These agreements differ widely in extent and detail. The agreement of the Atlanta Gas Light Co. is of interest in its explicit

¹ Docket No. 231, General Electric Co., Lynn, Mass., Oct. 24, 1918.

acceptance of a union already organized as the channel through which the employees, whether or not members of the union, shall present their views. In December, 1918, some disagreement arose between the company and some of its gas fitters who had joined a union, which was ended by an agreement signed in January, to become effective March 18, 1919. In this, the open shop principle is explicitly established, matters of hours and wages are agreed upon, arbitration in case of disagreement is provided for, and then follows this paragraph:

In order that harmonious relations may be advanced between the company and said local union which will result in improved working conditions to the employees and more efficient and satisfactory service to the company, and which will result also in the most satisfactory service to the public, it is agreed that there shall be appointed a joint committee between the company and said local union. On the part of the local union, the committee shall consist of five members, employees of the company, appointed by the local union. This committee shall meet with a like committee of the company's officers, appointed by the company, for the purpose of discussing and deciding on the conditions of work and other regulations and conditions that would improve and better the service and promote the best interest of both parties hereto. This committee shall meet on the first Thursday of each month, and oftener if necessary, upon call. The committee representing the union will have its own chairman and secretary. The committee representing the company will be regulated as the company deems best.

In many of the other cases in which employees' representation was adopted it was a foregone conclusion that the representatives would be union men, since the union organization could be at once utilized to put forward and support union members, but in very few such agreements is the union openly recognized as spokesman for the employees.

The Philadelphia Rapid Transit Co. established a plan of special interest, as it makes an approach to craft representation as against the industrial representation of most of the schemes. This company had had a cooperative welfare scheme in operation for some seven years past, but as part of its adaptation to war conditions, revised and enlarged this plan. As presented to the employees, the revision "included life insurance, sick benefits, pensions, wages, and representation through duly elected committees." It was specially designed to secure two things to the employees:

1. The workers shall have a free and independent vote for representatives for proper collective bargaining; and
2. Proper committee organization of such representatives so that class and group contact may be assured, and the integrity of workers' committees be established and maintained as such.

A rather complicated system of representation was provided. Each depot, station or division elects two representatives, who constitute a branch committee for employees. All the branch commit-

teemen elected by the workers at the several depots, stations or divisions are then grouped according to the department from which they are elected) five departments being recognized, namely, transportation, rolling stock and buildings, electrical, way, and general offices departments), forming department committees. Each department committee annually elects two of its members who serve on a general committee for employees. The management appoints branch, department, and general committees for the employers, not to exceed in number the corresponding committees of employees. Department committees meet every alternate month, and general committees every month. Disputes between employees and employers are to be referred from the branch committees to the department committees, thence to the general committees, and if not settled there, go to arbitration. Apart from work in settling industrial disputes, no precise field of effort is outlined for the committees, but in general they are to promote harmonious relations. The work of the general committees is thus defined:

It shall be the duty of the general committees to devise ways and means for furthering the efforts of the various department committees for the greatest possible good, to promote harmony and good fellowship among all employees of the company, to formulate plans for submission to the several department committees, and to render every assistance within their power toward advancement of the interests of the employees and the betterment of the service.

Further, the general committees shall possess the power to review, modify or reverse any findings or decisions of the department committees, and may in their judgment change any portion of this plan or any modification thereof or the composition of any of the committees, or any of their various respective functions.

Another feature of interest, not found in any of the schemes hitherto considered, is the close connection between the plans for employees' representation and for the welfare association. Several of the iron and steel and fuel companies introduced extensive plans for employees' welfare, including insurance, pension, and retirement plans, but these were independent of the employees' representation plans, although sometimes introduced at the same time. In the Philadelphia plan, however, the affairs of the cooperative welfare association are to be administered by a cooperative council consisting of the two general committees—the employer's and the employees'.

It is not possible to say for how many employees the principles of collective bargaining and employees' representation were put into effect during 1918. The awards of the National War Labor Board affected a number of cases, often involving large bodies of employees, but no definite figures concerning these are available. The iron and steel companies which adopted representation plans had approximately 140,000 employees, not including the 30,000 or more in the

Bethlehem plant who were brought under the collective bargaining award of the National War Labor Board. It is safe to say that both principles have acquired a standing not likely to be shaken by subsequent developments, and that as far as reports have been received concerning the working of these plans, they seem to be proving satisfactory.

AGREEMENT FOR THE ADJUSTMENT OF RAILROAD LABOR DISPUTES.

General Order No. 53, issued in January, 1919, by the Director General of Railroads, provides for the creation of Railway Board of Adjustment No. 3, to adjust all controversies growing out of interpretation or application of the provisions of certain wage schedules or agreements which are not promptly adjusted by the officials and employees of any one of the railroads operated by the Government, the activities of this board, however, being confined to the settlement of disputes affecting members of the Order of Railroad Telegraphers, the Switchmen's Union of North America, the Brotherhood of Railway Clerks, and the United Brotherhood of Maintenance-of-Way Employees. The order is practically identical with General Order No. 13, which was published in full in the MONTHLY REVIEW for May, 1918 (pp. 180-182), and General Order No. 29, which was noted in the MONTHLY LABOR REVIEW for July, 1918 (p. 132), and is therefore not repeated in this connection. The signers of this new memorandum of understanding on the part of the Railroad Administration are the regional directors, R. H. Aish-ton, B. L. Winchell, N. D. Maher, A. H. Smith, C. H. Markham, B. F. Bush, and Hale Holden; and the signers on the part of the employees are S. E. Heberling, president Switchmen's Union of North America; A. E. Barker, president United Brotherhood of Maintenance-of-Way Employees, and Railway Shop Laborers; H. B. Perham, president Order of Railway Telegraphers; and Jas. J. Forrester, president of Brotherhood of Railway Clerks.

WAGES AND HOURS OF LABOR.

NEW WAGE ORDER ISSUED BY DIRECTOR GENERAL OF RAILROADS.

Under General Order No. 27, issued by the Director General of Railroads on May 25, 1918, and published in the MONTHLY REVIEW for June, 1918 (pp. 1-21), certain employees of railroads under Federal control were granted increases in wages. Subsequently, on July 25, Supplement No. 4 to this general order was issued, providing for increases of wages of employees in the mechanical departments of railroads under Federal control, and this supplement was printed in full in the MONTHLY LABOR REVIEW for September (pp. 131-134). Two other supplements to General Order No. 27 provide for wage increases for all clerks, station employees, stationary enginemen, boiler washers, power transfer and turntable operators, and common laborers in shops, roundhouses, stations, storehouses, and warehouses, and for all maintenance-of-way department employees working on track, bridges, and buildings, including painters, masons, and concrete workers, water-supply employees, plumbers, etc. These are, respectively, Supplement No. 7 and Supplement No. 8, issued on September 1, and they were noted in the MONTHLY LABOR REVIEW for October (pp. 130-139). There have been numerous other supplements, amendments, addenda, and interpretations to General Order No. 27 put out from time to time by the Director General of Railroads, and these should be referred to if full and accurate understanding of the original order and subsequent supplements is to be obtained. These miscellaneous data have not been published or noted in the MONTHLY LABOR REVIEW.

In November two more supplements to General Order No. 27 were issued. These were effective October 1, 1918. Supplement No. 10 affected wages and working conditions of telegraphers, telephone operators (except switchboard operators), agent telegraphers, agent telephoners, towermen, lever men, tower and train directors, block operators, and staffmen. Supplement No. 11 fixed rates of pay, rules for overtime, and working conditions for agents whose regular assignment does not require the sending or receiving of railroad train orders by telephone or telegraph.

ISSUANCE OF SUPPLEMENT NO. 13.

These two supplements, however, have been superseded by Supplement No. 13, issued on December 28, 1918, applicable to the occupations noted above. The text of this supplement is as follows:

Effective October 1, 1918, for positions held by telegraphers, telephone operators (except switchboard operators), agents, agent telegraphers, agent telephoners, towermen, lever men, tower and train directors, block operators, and staffmen the following

rates of pay, rules for overtime, and working conditions upon railroads under Federal control are hereby ordered, superseding General Order No. 27, its supplements Nos. 10 and 11, and in lieu thereof.

ARTICLE I.

(a) All employees herein specified shall be paid on the hourly basis except those provided for in Article IV.

(b) To determine the hourly basis for positions held by monthly paid employees, multiply by 12 the regular monthly rate in effect as of January 1, 1918, prior to the application of General Order No. 27 (exclusive of all compensation for extra services), divide by 306 (number of working days for the year), and apply provisions of section (e) of this article.

(c) To determine the hourly rate for positions held by weekly paid employees, multiply by 52 the regular weekly rate in effect as of January 1, 1918, prior to the application of General Order No. 27 (exclusive of all compensation for extra services), divide by 306 (number of working days for the year), and apply provisions of section (e) of this article.

(d) To determine the hourly rate for positions held by daily paid employees, multiply the daily rate in effect as of January 1, 1918, prior to the application of General Order No. 27 (exclusive of all compensation for extra services), by 365, divide the result by 306 (number of working days for the year), and apply provisions of section (e) of this article.

(e) Employees who were on January 1, 1918, prior to the application of General Order No. 27, paid on a basis of 10 hours or more to constitute a day's work, shall receive one-eighth of the wages received for 10 hours on January 1, 1918, prior to the application of General Order No. 27, as their basic hourly rate; employees working less than 10 hours and over 8 hours shall receive one-eighth of the wages received for the number of hours recognized as a day's work.

(f) Where there are no regularly assigned or established daily hours for the purpose of computing the hourly rate, daily hours shall be regarded as 10, one-eighth of which shall be the hourly rate.

(g) In determining the hourly rate, fractions less than one-fourth of 1 cent shall be as one-fourth of 1 cent; over one-fourth and under one-half, as 1 cent; over one-half and under three-fourths, as three-fourths of 1 cent; over three-fourths, as 1 cent.

ARTICLE II—RATES OF PAY.

For positions held by telegraphers, telephone operators (except switchboard operators), agents (except as provided in Article IV), agent telegraphers, agent telephoners, towermen, lever men, tower and train directors, block operators and staffmen, to the rates in effect on January 1, 1918, prior to the application of General Order No. 27, add 13 cents per hour and 2 cents per hour additional in lieu of vacations (applicable to all roads irrespective of present practice). Where this increase fails to establish a rate of 48 cents per hour, establish a minimum rate of 48 cents per hour.

ARTICLE III.—PRESERVATION OF RATES AND CLASSIFICATION.

(a) The minimum rates and all rates in excess thereof, as herein established, and higher rates which have been authorized since January 1, 1918, shall be preserved.

(b) The entering of employees in the positions occupied in the service or changing their classification or work shall not operate to establish a less favorable rate of pay or condition of employment than is herein established.

(c) Where existing pay-roll classification does not conform to Article II, employees performing service in the classes specified therein, shall be classified in accordance therewith.

ARTICLE IV—EXCEPTIONS.

The provisions of this order will not apply:

(a) To cases where salaries less than \$30 per month are paid to individuals for special service which only takes a portion of their time from outside employment or business.

(b) To agents whose compensation as of January 1, 1918, was upon a commission basis or upon a combination of salary and commissions (not including express or outside commissions).

(c) To agents whose duties are supervisory and who do not perform routine office work, nor the small nontelegraph stations (except where they are now included in agreements), which, on account of the varying character and extent of their work and responsibilities, can not be intelligently treated as a class.

The Federal manager on each railroad is hereby instructed to consider the individual cases of the smaller nontelegraph stations, or stations paid on a commission basis or on a combination of salary and commission, both as to compensation and working conditions, with committees of employees, and where agreement can be reached are authorized to put the same into effect.

In case of disagreement, either as to compensation and/or working conditions, or as to whether a station comes properly under the terms of this article, the exact points of such disagreement shall be reported to the Board of Railroad Wages and Working Conditions through the regional director for consideration and recommendation to me.

ARTICLE V—HOURS OF SERVICE, OVERTIME, AND CALLS.

(a) Eight consecutive hours, exclusive of the meal hour, shall constitute a day's work, except that where two or more shifts are worked, eight consecutive hours with no allowance for meals shall constitute a day's work.

(b) Overtime shall be computed at the rate of time and one-half time. Even hours shall be paid for at the end of each pay period, fractions thereof will be carried forward.

(c) When notified or called to work outside of established hours, employees will be paid a minimum allowance of two hours at overtime rate.

(d) Employees will not be required to suspend work during regular hours or to absorb overtime.

ARTICLE VI—UNITED STATES MAIL.

When the carrying of United States mail and parcel post by the employees herein specified becomes unduly burdensome or interferes with the proper operation of trains, they will be relieved from such work.

ARTICLE VII—DISCIPLINE AND GRIEVANCES.

(a) An employee disciplined, or who considers himself unjustly treated, shall have a fair and impartial hearing, provided written request is presented to his immediate superior within five (5) days of the date of the advice of discipline, and the hearing shall be granted within five (5) days thereafter.

(b) A decision will be rendered within seven (7) days after completion of hearing. If an appeal is taken, it must be filed with the next higher official and a copy furnished the official whose decision is appealed within five (5) days after date of decision. The hearing and decision on the appeal shall be governed by the time limits of the preceding section.

(c) At the hearing, or on the appeal, the employees may be assisted by a committee of employees or by one or more duly accredited representatives.

(d) The right of appeal by employees or representatives, in regular order of succession and in the manner prescribed, up to and inclusive of the highest official designated by the railroad to whom appeals may be made is hereby established.

(e) An employee on request will be given a letter stating the cause of discipline. A transcript of the evidence taken at the investigation or on the appeal will be furnished on request to the employee or representative.

(f) If the final decision decrees that charges against the employee were not sustained, the record shall be cleared of the charge; if suspended or dismissed the employee will be returned to former position and paid for all time lost.

(g) Committees of employees shall be granted leave of absence and free transportation for the adjustment of differences between the railroad and the employees.

(h) Where the time limits in discipline and grievance rules now in effect are more extensive they may be preserved.

ARTICLE VIII—RULES FOR APPLICATION OF THIS ORDER.

(a) The pay for female employees, for the same class of work, shall be the same as that of men, and their working conditions must be healthful and fitted to their needs. The laws enacted for the government of their employment must be observed.

(b) If the operation of this order creates either unreasonably low, or excessively high, rates, for service, individual cases and circumstances considered, it will be the duty of the Board of Railroad Wages and Working Conditions to investigate, on complaint, and recommend equitable treatment therefor.

(c) Vacations with pay are abolished, effective January 1, 1919.

ARTICLE IX—INTERPRETATION OF THIS ORDER.

The rates of pay and rules herein established shall be incorporated into existing agreements and into agreements which may be reached in the future, on the several railroads; and should differences arise between the management and the employees of any of the railroads as to such incorporation, intent, or application of this order, such question of differences shall be referred through the Director of the Division of Labor as prescribed in Supplement 6 and 6a to General Order No. 27 for decision, subject always to review by the Director General.

Agreements or practices, except as changed by this order, remain in effect.

UNION SCALES OF LAUNDRY WORKERS, THEATRICAL EMPLOYEES, AND WAITERS.

The union scales of wages and hours of labor as of May 15, 1918, and May 15, 1917, have been published in the MONTHLY LABOR REVIEW as follows: In the September, 1918, issue, for the principal occupations in the building, granite and stone, and metal trades, and in freight handling in important industrial cities of the North Atlantic section of the United States; in the October issue, for the same occupations in the leading industrial cities of the North Central States; in the November issue, for the same occupations in the leading cities of the South Atlantic, South Central, and Western States; in the December issue, for the principal occupations in the bakery, millwork, and printing trades, and of chauffeurs, teamsters, and drivers, in the leading industrial cities of the North Atlantic and South Atlantic States; in the January, 1919, issue, for the principal

occupations in the bakery, millwork, and newspaper printing trades in the chief industrial cities of the North Central, South Central, and Western States; in the February, 1919, issue, for the principal occupations in the book and job printing trades and of chauffeurs, teamsters, and drivers in the leading industrial cities of the North Central, South Central, and Western States. In continuation of this subject there are published in this issue of the LABOR REVIEW, the union scales as of the above-named dates of laundry workers, theatrical employees, and waiters in important industrial cities in all sections of the United States. Known changes since May 15, 1918, are indicated in footnotes. The scales as of the two dates are printed in parallel columns for convenient comparison between the two years.

The information was collected by special agents of the United States Bureau of Labor Statistics in personal calls on the local union officials.

UNION SCALE OF WAGES AND HOURS OF LABOR IN SPECIFIED TRADES, BY GEOGRAPHICAL DIVISIONS AND CITIES, MAY 15, 1918, AND MAY 15, 1917.

LAUNDRY WORKERS.

Geographical division and city.	May 15, 1918.				Hours: Full days; Saturdays; full week.	Mos. with Saturday half holiday.	May 15, 1917.		Hours: Full days; Saturdays; full week.
	Rate of wages—						Rate of wages—		
	Per hour.	Per week, full time.	For over-time.	For Sundays and holidays.			Per hour.	Per week, full time.	
NORTH ATLANTIC.									
Boston, Mass.:									
Button girls, manglers, and shakers, or towel folders.	<i>Cts.</i> 14.1	<i>Dolls.</i> 7.00	2	1 2	9 - 4 ³ / ₄ -49 ³ / ₄	12	<i>Cts.</i> 14.1	<i>Dolls.</i> 7.00	9 - 4 ³ / ₄ -49 ³ / ₄
Coat folders, dampeners, route girls, or stock-room hands.	16.1	8.00	2	1 2	9 - 4 ³ / ₄ -49 ³ / ₄	12	16.1	8.00	9 - 4 ³ / ₄ -49 ³ / ₄
Extractors.	20.1	10.00	2	1 2	9 - 4 ³ / ₄ -49 ³ / ₄	12	20.1	10.00	9 - 4 ³ / ₄ -49 ³ / ₄
Starchers.	24.1	12.00	2	1 2	9 - 4 ³ / ₄ -49 ³ / ₄	12	24.1	12.00	9 - 4 ³ / ₄ -49 ³ / ₄
Washers.	34.2	17.00	2	1 2	9 - 4 ³ / ₄ -49 ³ / ₄	12	34.2	17.00	9 - 4 ³ / ₄ -49 ³ / ₄
NORTH CENTRAL.									
Detroit, Mich.: Ironers.	2 7.0		1	3 1	4 9 - 9 - 45		5.0		4 9 - 9 - 45
Kansas City, Mo.: Inside workers.	16.7	9.00	1	1 1	9 - 9 - 54		(⁵)	(⁵)	(⁵)
SOUTH CENTRAL.									
Little Rock, Ark.:									
Head sorters (men).	33.3	18.00	1 ¹ / ₂	1 ¹ / ₂	9 - 9 - 54		33.3	18.00	9 - 9 - 54
Linen washers (men).	23.2	12.50	1 ¹ / ₂	1 ¹ / ₂	9 - 9 - 54		23.2	12.50	9 - 9 - 54
Shirt washers (men).	27.8	15.00	1 ¹ / ₂	1 ¹ / ₂	9 - 9 - 54		27.8	15.00	9 - 9 - 54
Hand ironers, mangle hands, markers, and sorters.	13.9	7.50	1 ¹ / ₂	1 ¹ / ₂	9 - 9 - 54		13.9	7.50	9 - 9 - 54
Shirt machine operators (women).	14.8	8.00	1 ¹ / ₂	1 ¹ / ₂	9 - 9 - 54		14.8	8.00	9 - 9 - 54

¹ For holidays; do not work on Sundays.

² Per shirt.

³ For holidays; do not work on Sundays and Mondays.

⁴ Hours vary, but total 45 per week.

⁵ Not organized on May 15, 1917.

UNION SCALE OF WAGES AND HOURS OF LABOR IN SPECIFIED TRADES, BY GEOGRAPHICAL DIVISIONS AND CITIES, MAY 15, 1918, AND MAY 15, 1917—Continued.

LAUNDRY WORKERS—Continued.

Geographical division and city.	May 15, 1918.				Hours: Full days; Saturdays; full week.	Mos. with Saturday half holiday.	May 15, 1917.		Hours: Full days; Saturdays; full week.
	Rate of wages—						Rate of wages—		
	Per hour.	Per week, full pay.	For over-time.	For Sun-days and holi-days.			Per hour.	Per week, full time.	
WESTERN.									
Butte, Mont.:									
Head collar machine operators, head starchers, hand washers (women), or shirt finishers.....	Cts. 35.4	Dolls. 17.00	1½	1½	8 - 8 - 48		Cts. 29.2	Dolls. 14.00	8 - 8 - 48
Head mangle girls.....	37.5	18.00	1½	1½	8 - 8 - 48		31.3	15.00	8 - 8 - 48
Head markers and distributors or head washers.....	62.5	30.00	1½	1½	8 - 8 - 48		52.1	25.00	8 - 8 - 48
Head markers' assistants.....	54.2	23.00	1½	1½	8 - 8 - 48		47.9	23.00	8 - 8 - 48
Head markers on rough dry Collar machine operators' assistants, flannel steamers, flat-work counters, hand ironers, machine hands, seamsters, shirt folders, or starchers.....	52.1	25.00	1½	1½	8 - 8 - 48		45.8	22.00	8 - 8 - 48
Flat washers.....	31.3	15.00	1½	1½	8 - 8 - 48		25.0	12.00	8 - 8 - 48
Mangle girls, feeders, and shakers.....	53.1	25.50	1½	1½	8 - 8 - 48		46.9	22.50	8 - 8 - 48
Markers and distributors, or wringers.....	27.1	13.00	1½	1½	8 - 8 - 48		20.8	10.00	8 - 8 - 48
Shirt machine operators.....	43.8	21.00	1½	1½	8 - 8 - 48		37.5	18.00	8 - 8 - 48
San Francisco, Cal.:	40.6	19.50	1½	1½	8 - 8 - 48		34.4	16.50	8 - 8 - 48
Head collar ironers.....	25.0	12.00	1½	1½	8 - 8 - 48		22.9	11.00	8 - 8 - 48
Head markers and distributors or head washers.....	49.5	23.75	1½	1½	8 - 8 - 48		47.4	22.75	8 - 8 - 48
Head starchers.....	35.4	17.00	1½	1½	8 - 8 - 48		33.3	16.00	8 - 8 - 48
Collar ironers, cuff press operators, shirt hands on neck bands, shirt-waist machine operators, sleeve machine hands, wrist-band machine operators, or yoke machine operators.....	20.8	10.00	1½	1½	8 - 8 - 48		18.8	9.00	8 - 8 - 48
Collar rubbers, seamstresses, shirt dippers, or shirt rubbers.....	21.9	10.50	1½	1½	8 - 8 - 48		19.8	9.50	8 - 8 - 48
Dampeners, dry-house hands, operators on tumblers, starchers, or ladies' work, or tiers on plain work in mangle room....	22.9	11.00	1½	1½	8 - 8 - 48		20.8	10.00	8 - 8 - 48
Flannel body ironers, shirt body ironers, starch body ironers, or steam press machine operators.....	24.0	11.50	1½	1½	8 - 8 - 48		21.9	10.50	8 - 8 - 48
Jumbo ironers.....	26.0	12.50	1½	1½	8 - 8 - 48		21.0	11.50	8 - 8 - 48
Mangle girls.....	19.8	9.50	1½	1½	8 - 8 - 48		17.7	8.50	8 - 8 - 48
Markers and distributors, sorters, weighers, or wringer men.....	40.1	19.25	1½	1½	8 - 8 - 48		38.0	18.25	8 - 8 - 48
Polishers or shirt press operators.....	30.2	14.50	1½	1½	8 - 8 - 48		28.1	13.50	8 - 8 - 48
Shakers on mangles.....	18.8	9.00	1½	1½	8 - 8 - 48		16.7	8.00	8 - 8 - 48
Shirt finishers or tiler ironers.....	33.3	16.00	1½	1½	8 - 8 - 48		31.3	15.00	8 - 8 - 48
Wash-room helpers.....	33.9	16.25	1½	1½	8 - 8 - 48		31.8	15.25	8 - 8 - 48
Seattle, Wash.:									
Head collar girls.....	26.0	12.50	(²)	1	8 - 8 - 48		26.0	12.50	8 - 8 - 48
Head mangle feeders or head folders and stackers (women).....	22.9	11.00	(²)	1	8 - 8 - 48		22.9	11.00	8 - 8 - 48

¹ Scale became 29.2 cents on June 17, 1918.

² Overtime work for women prohibited by State law.

³ Scale became 27.1 cents on June 17, 1918.

UNION SCALE OF WAGES AND HOURS OF LABOR IN SPECIFIED TRADES, BY GEOGRAPHICAL DIVISIONS AND CITIES, MAY 15, 1918, AND MAY 15, 1917—Continued.

LAUNDRY WORKERS—Continued.

Geographical division and city.	May 15, 1918.						May 15, 1917.			
	Rate of wages—				Hours: Full days; Saturdays; full week.	Mos. with Saturday half holidays.	Rate of wages—		Hours: Full days; Saturdays; full week.	
	Per hour.	Per week, full pay.	For over-time.	For Sundays and holidays.			Per hour.	Per week, full time.		
WESTERN—concluded.										
Seattle, Wash.—Continued.										
Head markers and sorters (men).....	Cts. 37.0	Dolls. 20.00		Regular rate multiplied by— 1½	1	9 - 9 -54		Cts. 37.0	Dolls. 20.00	9 - 9 -54
Head markers and sorters (women).....	33.3	16.00	(3)		1	8 - 8 -48	33.3	16.00		8 - 8 -48
Head starchers (women)....	28.1	13.50	(3)		1	8 - 8 -48	28.1	13.50		8 - 8 -48
Head washermen.....	41.7	22.50	1½		1	9 - 9 -54	41.7	22.50		9 - 9 -54
Body ironers (women).....	28.1	13.50	(3)		1	8 - 8 -48	28.1	13.50		8 - 8 -48
Cuff and neckband machine operators, sleeve- ers, or starchers (women)....	21.9	10.50	(3)		1	8 - 8 -48	21.9	10.50		8 - 8 -48
Drying-house hands, fancy ironers, garment-press operators, mangle flat counters, tiers and check- ers, or shirt finishers (women).....	25.0	12.00	(3)		1	8 - 8 -48	25.0	12.00		8 - 8 -48
Mangle shakers and polers, second feeders and sec- ond folders, or shirt fold- ers (women).....	20.8	10.00	(3)		1	8 - 8 -48	20.8	10.00		8 - 8 -48
Markers and sorters (men), washermen and wringer men.....	33.3	18.00	1½		1	9 - 9 -54	33.3	18.00		9 - 9 -54
Markers and sorters (wo- men) or seamstresses....	27.1	13.00	(3)		1	8 - 8 -48	27.1	13.00		8 - 8 -48
Plain ironers, sock darners or tiers, sorters, and list- ers (women).....	22.9	11.00	(3)		1	8 - 8 -48	22.9	11.00		8 - 8 -48
Polishers and bosom press operators.....	27.1	13.00	(3)		1	8 - 8 -48	27.1	13.00		8 - 8 -48

¹ Scale became 41.7 cents on June 17, 1918.

² Scale became 37.5 cents on June 17, 1918.

³ Overtime work for women prohibited by State law.

⁴ Scale became 31.3 cents on June 17, 1918.

⁵ Scale became 46.3 cents on June 17, 1918.

⁶ Scale became 27.1 cents for cuff and neckband machine operators and 25 cents for sleeve-ers and starchers on June 17, 1918.

⁷ Scale became 27.1 cents for drying-house hands, fancy ironers, garment-press operators, or shirt finishers and 29.2 cents for mangle flat counters, tiers, and checkers on June 17, 1918.

⁸ Scale became 25 cents for mangle shakers and polers or shirt folders and 26.1 cents for second feeders and second folders on June 17, 1918.

⁹ Scale became 37 cents for markers, sorters, and wringermen and 41.7 cents for washermen on June 17, 1918.

¹⁰ Scale became 31.3 cents for markers and sorters and 29.2 cents for seamstresses on June 17, 1918.

¹¹ Scale became 25 cents for plain ironers and 28.1 cents for tiers, sorters, and listers on June 17, 1918.

¹² Scale became 29.2 cents on June 17, 1918.

UNION SCALE OF WAGES AND HOURS OF LABOR IN SPECIFIED TRADES, BY GEOGRAPHICAL DIVISIONS AND CITIES, MAY 15, 1918, AND MAY 15, 1917—Continued.

THEATRICAL EMPLOYMENT.

CARPENTERS.

Geographical division and city.	May 15, 1918.					May 15, 1917.			
	Rate of wages—				Hours: Full days; Saturdays; full week.	Mos. with Saturday half holidays.	Rate of wages—		Hours: Full days; Saturdays; full week.
	Per hour.	Per week, full pay.	For overtime.	For Sundays and holidays.			Per hour.	Per week, full time.	
NORTH ATLANTIC.									
Boston, Mass.:									
Burlesque and vaudeville houses, 2 to 4 shows per day.....	Cts. 46.3	Dolls. 25.00	1 75c.	² 75c.	9 - 9 - 54	.....	Cts. 46.3	Dolls. 25.00	9 - 9 - 54
Combination houses, and vaudeville and moving-picture houses, 5 or more shows per day.....	55.6	30.00	1 75c.	² 75c.	9 - 9 - 54	.....	55.6	30.00	9 - 9 - 54
Stock houses.....	55.6	35.00	1 75c.	² 75c.	10½-10½-63	.....	55.6	35.00	10½-10½-63
Bridgeport, Conn.:									
Combination houses.....	72.9	35.00	1 62½c.	² 125c.	8 - 8 - 48	.....	72.9	35.00	8 - 8 - 48
Stock houses.....	52.1	25.00	1 62½c.	² 125c.	8 - 8 - 48	.....	50.0	24.00	8 - 8 - 48
Buffalo, N. Y.....	62.5	30.00	1 50c.	² 75c.	8 - 8 - 48	.....	58.3	28.00	8 - 8 - 48
Assistants.....	52.1	25.00	1 50c.	² 75c.	8 - 8 - 48	.....	47.9	23.00	8 - 8 - 48
Fall River, Mass.....	(4)	25.00	1	² 100c.	(4)	.....	(4)	22.00	(4)
New York, N. Y.....	65.6	31.50	2	2	8 - 8 - 48	.....	56.3	27.00	8 - 8 - 48
Philadelphia, Pa.....	(4)	27.50	(5)	6 1	(4)	.....	(4)	27.50	(4)
Pittsburgh, Pa.:									
Burlesque and vaudeville houses.....	59.3	32.00	1 100c.	1 100c.	9 - 9 - 54	.....	51.9	28.00	9 - 9 - 54
Combination houses.....	55.6	30.00	1 100c.	1 100c.	9 - 9 - 54	.....	46.3	25.00	9 - 9 - 54
Stock burlesque houses.....	64.8	35.00	1	1	9 - 9 - 54	.....	55.6	30.00	9 - 9 - 54
Providence, R. I.....	(4)	28.00	1 60c.	² 75c.	(4)	.....	(4)	25.00	(4)
Rochester, N. Y.....	66.7	28.00	2	2	7 - 7 - 42	.....	66.7	28.00	7 - 7 - 42
Scranton, Pa.....	54.2	26.00	1 62½	7 2	8 - 8 - 48	.....	47.9	23.00	8 - 8 - 48
Springfield, Mass.:									
Class A houses.....	(4)	27.00	1 55c.	² 100c.	(4)	.....	(4)	27.00	(4)
Class B houses.....	(4)	27.00	1 50c.	² 100c.	(4)	.....	(4)	27.00	(4)
Class C houses.....	(4)	25.00	1 50c.	² 100c.	(4)	.....	(4)	25.00	(4)
Worcester, Mass.:									
Combination houses.....	47.9	23.00	1	7 2	8 - 8 - 48	.....	47.9	23.00	8 - 8 - 48
Stock houses.....	54.2	26.00	1	7 2	8 - 8 - 48	.....	54.2	26.00	8 - 8 - 48
Vaudeville houses.....	52.1	25.00	1	7 2	8 - 8 - 48	.....	47.9	23.00	8 - 8 - 48
SOUTH ATLANTIC.									
Atlanta, Ga.....	862.5	30.00	1	8 2	8 - 8 - 48	.....	52.1	25.00	8 - 8 - 48
Baltimore, Md.:									
Burlesque houses.....	946.3	25.00	1 65c.	² 65c.	9 - 9 - 54	.....	46.3	25.00	9 - 9 - 54
Combination houses.....	946.3	25.00	1 65c.	² 65c.	9 - 9 - 54	.....	46.3	25.00	9 - 9 - 54
Stock houses.....	1045.5	30.00	1 65c.	² 65c.	11 - 11 - 66	.....	45.5	30.00	11 - 11 - 66
Vaudeville houses.....	1151.9	28.00	1 65c.	² 65c.	9 - 9 - 54	.....	51.9	28.00	9 - 9 - 54
Jacksonville, Fla.....	1244.6	25.00	1 50c.	1	8 - 8 - 56	.....	44.6	25.00	8 - 8 - 56
Richmond, Va.:									
Combination houses.....	60.6	20.00	1	6 1	5 - 8 - 33	.....	60.6	20.00	5 - 8 - 33
Vaudeville houses.....	37.9	25.00	1	6 1	11 - 11 - 66	.....	37.9	25.00	11 - 11 - 66
Washington, D. C.....	1334.0	27.50	1 70c.	1	13½-13½-81	.....	29.6	24.00	13½-13½-81

1 Rate in cents per hour.

2 Rate in cents per hour for Sundays; for holidays, regular rate.

3 Hours irregular, but total 48 per week.

4 Variable.

5 No pay for overtime.

6 For holidays; do not work on Sundays.

7 For Sundays; for holidays, regular rate.

8 Scale became 72.9 cents on Sept. 2, 1918.

9 Scale became 55.6 cents on Sept. 1, 1918.

10 Scale became 53 cents on Sept. 1, 1918.

11 Scale became 64.8 cents on Apr. 1, 1918.

12 Scale became 58 cents on Sept. 1, 1918.

13 Scale became 46.7 cents on Aug. 1, 1918.

UNION SCALE OF WAGES AND HOURS OF LABOR IN SPECIFIED TRADES, BY GEOGRAPHICAL DIVISIONS AND CITIES, MAY 15, 1918, AND MAY 15, 1917—Continued.

THEATRICAL EMPLOYMENT—Continued.

CARPENTERS—Continued.

Geographical division and city.	May 15, 1918.				Hours: Full days; Saturdays; full week.	Mos. with Saturday half holidays.	May 15, 1917.		Hours: Full days; Saturdays; full week.
	Rate of wages—						Rate of wages—		
	Per hour.	Per week, full pay.	For overtime.	For Sundays and holidays.			Per hour.	Per week, full time.	
NORTH CENTRAL.									
Chicago, Ill.:									
Houses A.....	<i>Cts.</i> 47.3	<i>Dolls.</i> 26.50	2	1	8 - 8 - 56		<i>Cts.</i> 47.3	<i>Dolls.</i> 26.50	8 - 8 - 56
Houses B.....	50.0	28.00	2	1	8 - 8 - 56		50.0	28.00	8 - 8 - 56
Cincinnati, Ohio:	49.1	27.50	1	1	8 - 8 - 56		49.1	27.50	8 - 8 - 56
Cleveland, Ohio:									
Regular companies.....	58.8	30.00	2	1	8½ - 8½ - 51		49.0	25.00	8½ - 8½ - 51
Stock companies.....	52.9	27.00	2	1	8½ - 8½ - 51		(1)	(1)	(1)
Detroit, Mich.....	57.3	27.50	² 75c.	1	8 - 8 - 48		57.3	27.50	8 - 8 - 48
Grand Rapids, Mich.....	57.1	24.00	² 50c.	1	6 - 6 - 42		57.1	24.00	6 - 6 - 42
Indianapolis, Ind.:									
Class A houses.....	(3)	25.00		4 1	(3)		(3)	25.00	(3)
Class B houses.....	(3)	25.00		5 1	(3)		(3)	25.00	(3)
Class C houses.....	(3)	27.00		1	(3)		(3)	25.00	(3)
Kansas City, Mo.:									
Assistants.....	⁹ 58.0	32.50	1½	1	8 - 8 - 56		58.0	32.50	8 - 8 - 56
Milwaukee, Wis.:	7 50.0	28.00	1½	1	8 - 8 - 56		50.0	28.00	8 - 8 - 56
Combination and vaudeville houses.....	(3)	26.00	² 50c.	1	(3)		(3)	26.00	(3)
Stock houses.....	(3)	26.50	² 50c.	1	(3)		(3)	26.50	(3)
Minneapolis, Minn.....	49.1	27.50	² 56c.	1	8 - 8 - 56		49.1	27.50	8 - 8 - 56
Omaha, Nebr.....	49.1	27.50	² 50c.	1	8 - 8 - 56		49.1	27.50	8 - 8 - 56
St. Louis, Mo.:									
Carpenters—									
Combination houses.....	49.1	27.50	² 65c.	1	8 - 8 - 56		49.1	27.50	8 - 8 - 56
Stock houses.....	62.5	35.00	² 65c.	1	8 - 8 - 56		62.5	35.00	8 - 8 - 56
Vaudeville houses.....	64.3	36.00	² 65c.	1	8 - 8 - 56		64.3	36.00	8 - 8 - 56
Assistants—									
Combination houses.....	40.2	22.50	² 65c.	1	8 - 8 - 56		40.2	22.50	8 - 8 - 56
Stock houses.....	53.6	30.00	² 65c.	1	8 - 8 - 56		53.6	30.00	8 - 8 - 56
Vaudeville houses.....	49.1	27.50	² 65c.	1	8 - 8 - 56		49.1	27.50	8 - 8 - 56
St. Paul, Minn.....	57.3	27.50	² 50c.	1	8 - 8 - 48		57.3	27.50	8 - 8 - 48
Wichita, Kans.:									
Carpenters.....	45.8	22.00	1½	⁹ 1½	8 - 8 - 48		37.5	18.00	8 - 8 - 48
Assistants.....	37.5	18.00	1½	⁹ 1½	8 - 8 - 48		(10)	(10)	(10)
SOUTH CENTRAL.									
Birmingham, Ala.:									
Combination houses.....	62.5	30.00	² 50c.	⁹ 2	8 - 8 - 48		62.5	30.00	8 - 8 - 48
Stock and vaudeville houses.....	62.5	30.00	² 50c.	⁹ 2	8 - 8 - 48		52.1	25.00	8 - 8 - 48
Dallas, Tex.....	(3)	¹³ 35.00		1	(3)		(3)	26.25	(3)
Houston, Tex.....	⁶ 53.6	30.00	² 50c.	1	8 - 8 - 56		53.6	30.00	8 - 8 - 56
Little Rock, Ark.:									
Carpenters—									
Burlesque houses.....	¹² 46.3	25.00		4 1	¹³ 11 - 8 - 54		41.7	22.50	¹³ 11 - 8 - 54
Vaudeville houses.....	¹⁴ 52.1	25.00	² 60c.	⁹ 1½	¹⁵ 10 - 7 - 48		46.9	22.50	¹⁵ 10 - 7 - 48
Assistants.....	¹⁴ 43.8	21.00	² 60c.	⁹ 1½	¹³ 10 - 7 - 48		39.6	19.00	¹³ 10 - 7 - 48

1 Not reported.

2 Rate in cents per hour.

3 Variable.

4 For holidays; do not work on Sundays.

5 For holidays; for Sundays, 1 show, \$3, 2 shows \$5.

6 Scale became 62.5 cents on Sept. 1, 1918.

7 Scale became 53.6 cents on Sept. 1, 1918.

8 Hours vary, but total 48 per week.

9 For Sundays; for holidays, regular rate.

10 Not organized on May 15, 1917.

11 Scale became \$40 on Aug. 25, 1918.

12 Scale became 50 cents on Sept. 1, 1918.

13 11 hours on Mondays and Thursdays; 8 hours on Tuesdays, Wednesdays, Fridays, and Saturdays.

14 Scale became 56.3 cents on Sept. 1, 1918.

15 10 hours on Mondays and Thursdays; 7 hours on Tuesdays, Wednesdays, Fridays, and Saturdays.

UNION SCALE OF WAGES AND HOURS OF LABOR IN SPECIFIED TRADES, BY GEOGRAPHICAL DIVISIONS AND CITIES, MAY 15, 1918, AND MAY 15, 1917—Continued.

THEATRICAL EMPLOYMENT—Continued.

CARPENTERS—Concluded.

Geographical division and city.	May 15, 1918.					Mos. with Saturday half holidays.	May 15, 1917.		
	Rate of wages—				Hours: Full days; Saturdays; full week.		Rate of wages—		Hours: Full days; Saturdays; full week.
	Per hour.	Per week, full pay	For over-time.	For Sundays and holidays.			Per hour.	Per week, full time.	
SOUTH CENTRAL—concluded.									
Louisville, Ky.....	1 44.6	25.00	2 50c.	1	8 - 8 - 56	44.6	25.00	8 - 8 - 56	
Memphis, Tenn.....	3 38.5	30.00	4 55c.	5 1	6 78	38.5	30.00	6 78	
Nashville, Tenn.....	7 52.1	25.00	.....	1	8 - 8 - 48	52.1	25.00	8 - 8 - 48
New Orleans, La.:									
Combination houses.....	37.4	27.50	1	1	10½-10½-73½	37.4	27.50	10½-10½-73½	
Stock and vaudeville houses.....	45.8	30.00	1	1	8½-11½-65½	45.8	30.00	8½-11½-65½	
WESTERN.									
Butte, Mont.....	62.5	35.00	6 75c.	1	8 - 8 - 56	62.5	35.00	8 - 8 - 56	
Denver, Colo.:									
Combination houses.....	62.5	30.00	(9)	(9)	8 - 8 - 48	62.5	30.00	8 - 8 - 48	
Stock houses.....	72.9	35.00	(9)	(9)	8 - 8 - 48	72.9	35.00	8 - 8 - 48	
Los Angeles, Cal.....	62.5	30.00	1	1	8 - 8 - 48	(10)	(10)	(10)	
Portland, Ore.....	71.4	40.00	4 65c.	1	8 - 8 - 56	62.5	35.00	8 - 8 - 56	
Salt Lake City, Utah:									
Combination houses.....	53.6	30.00	4 75c.	1	8 - 8 - 56	53.6	30.00	8 - 8 - 56	
Stock houses.....	62.5	35.00	4 75c.	1	8 - 8 - 56	62.5	35.00	8 - 8 - 56	
San Francisco, Cal.....	67.0	37.50	4 75c.	1	11 8 - 8 - 56	62.5	35.00	11 8 - 8 - 56	
Seattle, Wash.:									
Combination houses.....	1467.7	32.50	4 75c.	1	8 - 8 - 48	67.7	32.50	8 - 8 - 48	
Stock houses.....	1872.9	35.00	4 75c.	1	8 - 8 - 48	72.9	35.00	8 - 8 - 48	
Vaudeville houses.....	1467.7	32.50	4 75c.	1	8 - 8 - 48	67.7	32.50	8 - 8 - 48	
Spokane, Wash.....	58.0	32.50	4 75c.	1	8 - 8 - 56	58.0	32.50	8 - 8 - 56	

ELECTRICIANS.

NORTH ATLANTIC.								
Boston, Mass.:								
Combination and vaudeville houses.....	46.3	25.00	4 75c.	15 75c.	9 - 9 - 54	46.3	25.00	9 - 9 - 54
Moving-picture houses.....	62.5	30.00	4 75c.	16 1	8 - 8 - 48	62.5	30.00	8 - 8 - 48
Stock houses.....	47.6	30.00	4 75c.	16 75c.	10½-10½-63	47.6	30.00	10½-10½-63
Vaudeville houses.....	37.0	20.00	4 75c.	16 75c.	9 - 9 - 54	37.0	20.00	9 - 9 - 54
Bridgeport, Conn.....	41.7	20.00	4 62½c.	16 125c.	8 - 8 - 48	37.5	18.00	8 - 8 - 48
Buffalo, N. Y.....	52.1	25.00	4 50c.	15 75c.	17 8 - 8 - 48	47.9	23.00	17 8 - 8 - 48
Fall River, Mass.....	(18)	18.00	1	15 75c.	(18)	(18)	15.00	(18)
New York.....	65.6	31.50	2	2	8 - 8 - 48	56.3	27.00	8 - 8 - 48
Philadelphia, Pa.....	(18)	25.00	.....	19 1	(18)	(18)	25.00	(18)

1 Scale became 50 cents on Sept. 1, 1918.

2 Rate in cents per hour until midnight; 75 cents per hour thereafter.

3 Scale became 44.9 cents on Sept. 1, 1918.

4 Rate in cents per hour.

5 For overtime on Sundays, 75 cents per hour.

6 Various, but total 78 per week.

7 Scale became 57.3 cents on Sept. 1, 1918.

8 Rate in cents per hour; double time after 2 a. m.

9 For extra and broken time from 8 a. m. to midnight, 50 cents per hour; after midnight, \$1 per hour.

10 Not organized on May 15, 1917.

11 Hours vary, but total 56 per week.

12 Scale became 72.9 cents on July 8, 1918.

13 Scale became 83.3 cents on July 8, 1918.

14 Scale became 78.1 cents on July 8, 1918.

15 Rate in cents per hour for Sundays; for holidays, regular rate.

16 For holidays; for Sunday nights, \$1.50.

17 Hours irregular but average 48 per week.

18 Variable.

19 For holidays; do not work on Sundays.

UNION SCALE OF WAGES AND HOURS OF LABOR IN SPECIFIED TRADES, BY GEOGRAPHICAL DIVISIONS AND CITIES, MAY 15, 1918, AND MAY 15, 1917—Continued.

THEATRICAL EMPLOYMENT—Continued.

ELECTRICIANS—Continued.

Geographical division and city.	May 15, 1918.					May 15, 1917.			
	Rate of wages—				Hours: Full days; Saturdays; full week.	Mos. with Saturday half holidays.	Rate of wages—		Hours: Full days; Saturdays; full week.
	Per hour.	Per week, full pay.	For over-time.	For Sundays and holidays.			Per hour.	Per week, full time.	
NORTH ATLANTIC—contd.									
Pittsburgh, Pa.:									
Burlesque and vaudeville houses.....	51.9	28.00	² 100c.	² 100c.	9-9-54	.....	51.9	28.00	9-9-54
Combination houses.....	¹ 46.3	25.00	² 100c.	² 100c.	9-9-54	.....	46.3	25.00	9-9-54
Moving-picture houses.....	55.6	30.00	² 100c.	² 100c.	9-9-54	.....	55.6	30.00	9-9-54
Providence, R. I.....	⁽³⁾	21.00	² 60c.	⁴ 75c.	(3)	⁽³⁾	18.00	(3)
Scranton, Pa.....	47.9	23.00	² 67½c.	⁶ 2	8-8-48	.....	41.7	20.00	8-8-48
Springfield, Mass.....	⁽²⁾	22.00	² 50c.	⁴ 100c.	(3)	⁽²⁾	22.00	(3)
Worcester, Mass.:									
Combination houses.....	50.0	18.00	1	⁶ 2	6-6-36	.....	50.0	18.00	6-6-36
Stock houses.....	41.7	20.00	1	⁶ 2	8-8-48	.....	37.5	18.00	8-8-48
Vaudeville houses.....	47.9	23.00	1	⁶ 2	8-8-48	.....	45.8	22.00	8-8-48
SOUTH ATLANTIC.									
Atlanta, Ga.....	⁶ 52.1	25.00	1	⁶ 2	8-8-48	.....	41.7	20.00	8-8-48
Baltimore, Md.:									
Burlesque houses.....	⁷ 35.2	19.00	² 65c.	⁴ 65c.	9-9-54	.....	35.2	19.00	9-9-54
Combination houses.....	⁸ 38.9	21.00	² 65c.	⁴ 65c.	9-9-54	.....	38.9	21.00	9-9-54
Stock houses.....	⁹ 37.9	25.00	² 65c.	⁴ 65c.	11-11-66	.....	37.9	25.00	11-11-66
Vaudeville houses.....	¹⁰ 46.3	25.00	² 65c.	² 65c.	9-9-54	.....	46.3	25.00	9-9-54
Jacksonville, Fla.....	¹¹ 35.7	20.00	² 50c.	1	8-8-56	.....	35.7	20.00	8-8-56
Richmond, Va.....	50.8	16.75	² 60c.	¹² 1	5-8-33	.....	50.8	16.75	5-8-33
Washington, D. C.....	¹² 26.5	21.50	² 70c.	.....	13½-13½-81	.....	22.2	18.00	13½-13½-81
NORTH CENTRAL.									
Chicago, Ill.:									
Houses A.....	47.3	26.50	2	1	8-8-56	.....	47.3	26.50	8-8-56
Houses B.....	50.0	28.00	2	1	8-8-56	.....	50.0	28.00	8-8-56
Cincinnati, Ohio.....	40.2	22.50	1	1	8-8-56	.....	40.2	22.50	8-8-56
Cleveland, Ohio:									
Combination houses.....	49.0	25.00	2	1	8½-8½-51	.....	39.2	20.00	8½-8½-51
Stock houses.....	52.9	27.00	2	1	8½-8½-51	⁽¹⁴⁾	⁽¹⁴⁾	⁽¹⁴⁾
Detroit, Mich.....	57.3	27.50	² 75c.	1	8-8-48	.....	57.3	27.50	8-8-48
Indianapolis, Ind.:									
Class A houses.....	⁽³⁾	20.00	.....	¹² 1	(3)	⁽³⁾	20.00	(3)
Class B houses.....	⁽⁸⁾	20.00	.....	¹⁶ 1	(3)	⁽³⁾	20.00	(3)
Class C houses.....	⁽⁸⁾	22.00	.....	¹² 1	(3)	⁽³⁾	22.00	(3)
Kansas City, Mo.....	¹⁴ 50.0	28.00	¹ ½	1	8-8-56	.....	50.0	28.00	8-8-56
Assistants.....	¹⁷ 32.1	18.00	¹ ½	1	8-8-56	.....	32.1	18.00	8-8-56
Milwaukee, Wis.:									
Combination and vaudeville houses.....	⁽⁸⁾	22.00	² 50c.	1	(8)	⁽⁸⁾	22.00	(8)
Stock houses.....	⁽⁸⁾	22.50	² 50c.	1	(8)	⁽⁸⁾	22.50	(8)
Minneapolis, Minn.....	44.6	25.00	² 50c.	1	8-8-56	.....	44.6	25.00	8-8-56

¹ Scale became 55.6 cents on Aug. 1, 1918.

² Rate in cents per hour.

³ Variable.

⁴ Rate in cents per hour for Sundays; for holidays, regular rate.

⁵ For Sundays; for holidays, regular rate.

⁶ Scale became 62.5 cents on Sept. 1, 1918.

⁷ Scale became 44.4 cents on Sept. 1, 1918.

⁸ Scale became 50 cents on Sept. 1, 1918.

⁹ Scale became 47 cents on Sept. 1, 1918.

¹⁰ Scale became 55.6 cents on Sept. 1, 1918.

¹¹ Scale became 49.1 cents on Sept. 1, 1918.

¹² For holidays; do not work on Sundays.

¹³ Scale became 36.3 cents on Aug. 1, 1918.

¹⁴ Not reported.

¹⁵ For holidays; for Sundays, 1 show \$3, 2 shows \$5.

¹⁶ Scale became 53.6 cents on Sept. 1, 1918.

¹⁷ Scale became 35.7 cents on Sept. 1, 1918.

UNION SCALE OF WAGES AND HOURS OF LABOR IN SPECIFIED TRADES, BY GEOGRAPHICAL DIVISIONS AND CITIES, MAY 15, 1918, AND MAY 15, 1917—Continued.

THEATRICAL EMPLOYMENT—Continued.

ELECTRICIANS—Concluded.

Geographical division and city.	May 15, 1918.					May 15, 1917.				
	Rate of wages—				Hours: Full days; Saturdays; full week.	Mos. with Saturday half holidays.	Rate of wages—		Hours: Full days; Saturdays; full week.	
	Per hour.	Per week, full pay.	For over-time.	For Sundays and holidays.			Per hour.	Per week, full time.		
NORTH CENTRAL—contd.										
Omaha, Nebr.:										
Burlesque and vaudeville houses.....	40.2	22.50	1 50c.	1	8 - 8 - 56		Cts. 40.2	Dolls. 22.50	8 - 8 - 56	
Picture houses.....	44.6	25.00	1 50c.	1	8 - 8 - 56		39.3	22.00	8 - 8 - 56	
St. Louis, Mo.:										
Combination houses.....	40.2	22.50	1 65c.	1	8 - 8 - 56		40.2	22.50	8 - 8 - 56	
Stock houses.....	53.6	30.00	1 65c.	1	8 - 8 - 56		53.6	30.00	8 - 8 - 56	
Vaudeville houses.....	49.1	27.50	1 65c.	1	8 - 8 - 56		49.1	27.50	8 - 8 - 56	
St. Paul, Minn.....	52.1	25.00	1 50c.	1	8 - 8 - 48		52.1	25.00	8 - 8 - 48	
Wichita, Kans.....	45.8	22.00	1 1/2	3 1/2	8 - 8 - 48		37.5	18.00	8 - 8 - 48	
Assistants.....	31.3	15.00	1 1/2	3 1/2	8 - 8 - 48		(4)	(4)	(4)	
SOUTH CENTRAL.										
Birmingham, Ala.:										
Houses A.....	52.1	25.00	1 50c.	3 2	8 - 8 - 48		41.7	20.00	8 - 8 - 48	
Houses B.....	50.0	30.00	1 75c.	3 2	10 - 10 - 60		52.1	25.00	10 - 10 - 60	
Dallas, Tex.....	(6)	26.25		1	(6)		(6)	(6)	(6)	
Houston, Tex.....	7 37.5	21.00	1 50c.	1	8 - 8 - 56		37.5	21.00	8 - 8 - 56	
Louisville, Ky.....	8 37.5	21.00	1 50c.	1	8 - 8 - 56		37.5	21.00	8 - 8 - 56	
Memphis, Tenn.....	9 32.1	25.00	1 55c.	1	(10)		32.1	25.00	(10)	
Nashville, Tenn.....	11 37.5	18.00	1 35c.	1	8 - 8 - 48		37.5	18.00	8 - 8 - 48	
WESTERN.										
Butte, Mont.....	56.3	31.50	1 75c.	1	8 - 8 - 56		56.3	31.50	8 - 8 - 56	
Denver, Colo.:										
Combination houses.....	62.5	30.00	(12)	1	8 - 8 - 48		52.1	25.00	8 - 8 - 48	
Stock houses.....	72.9	35.00	(12)	1	8 - 8 - 48		62.5	30.00	8 - 8 - 48	
Los Angeles, Cal.....	62.5	30.00	1	1	8 - 8 - 48		(13)	(18)	(18)	
Portland, Oreg.....	53.6	30.00	1 65c.	1	8 - 8 - 56		49.1	27.50	8 - 8 - 56	
Salt Lake City, Utah.....	44.6	25.00	1 75c.	1	8 - 8 - 56		44.6	25.00	8 - 8 - 56	
San Francisco, Cal.....	58.0	32.50	1 75c.	1	14 8 - 8 - 56		53.6	30.00	14 8 - 8 - 56	
Seattle, Wash.:										
Combination and vaudeville houses.....	57.3	27.50	1 75c.	1	8 - 8 - 48		57.3	27.50	8 - 8 - 48	
Stock houses.....	62.5	30.00	1 75c.	1	8 - 8 - 48		62.5	30.00	8 - 8 - 48	
Spokane, Wash.....	44.6	25.00	1 75c.	1	8 - 8 - 56		44.6	25.00	8 - 8 - 56	

¹ Rate in cents per hour.

² Hours vary, but total 48 per week.

³ For Sundays; for holidays, regular rate.

⁴ No scale in effect on May 15, 1917.

⁵ Variable.

⁶ Scale became \$35 on Aug. 25, 1918.

⁷ Scale became 53.6 cents on Sept. 1, 1918.

⁸ Scale became 42.9 cents on July 1, 1918.

⁹ Scale became 38.5 cents on Sept. 1, 1918.

¹⁰ Various, but total 78 per week.

¹¹ Scale became 46.9 cents on Sept. 1, 1918.

¹² For extra and broken time from 8 a. m. to midnight, 50 cents per hour; after midnight, \$1 per hour.

¹³ Not organized on May 15, 1917.

¹⁴ Hours vary, but total 56 per week.

UNION SCALE OF WAGES AND HOURS OF LABOR IN SPECIFIED TRADES, BY GEOGRAPHICAL DIVISIONS AND CITIES, MAY 15, 1918, AND MAY 15, 1917—Continued.

THEATRICAL EMPLOYMENT—Continued.

MOVING-PICTURE OPERATORS.

Geographical division and city.	May 15, 1918.					May 15, 1917.			
	Rate of wages—				Hours: Full days; Saturdays; full week.	Mos. with Saturday half holidays.	Rate of wages—		Hours: Full days; Saturdays; full week.
	Per hour.	Per week, full pay.	For over-time.	For Sundays and holidays.			Per hour.	Per week, full time.	
NORTH ATLANTIC.	<i>Cts.</i>	<i>Dolls.</i>	<i>Regular rate multiplied by—</i>				<i>Cts.</i>	<i>Dolls.</i>	
Boston, Mass.	57.1	24.00	¹ 100c.	² 1	7 - 7 -42		47.6	20.00	7 - 7 -42
Bridgeport, Conn.:									
Houses of less than 500 seats.....	57.1	\$16.00	1½	1	4 - 4 -28		57.1	\$16.00	4 - 4 -28
Houses of 500 to 999 seats...	73.2	\$20.50	1½	1	4 - 4 -28		73.2	\$20.50	4 - 4 -28
Houses of 1,000 seats or more—									
Evening shows only.....	80.4	\$22.50	1½	1	4 - 4 -28		80.4	\$22.50	4 - 4 -28
Afternoon and evening shows.....	62.2	30.50	1½	1	6 7½- 7½-49		62.2	30.50	6 7½- 7½-49
Continuous shows—									
Regular operator.....	62.0	28.50	1½	1	6 7 - 7 -46		62.0	28.50	6 7 - 7 -46
Relief operator.....	92.9	13.94	1½	1	2½- 2½-15		92.9	13.94	2½- 2½-15
Buffalo, N. Y.:									
Evening shows only.....	69.4	25.00	1½	1½	6 - 6 -36		62.5	22.50	6 - 6 -36
Evening shows and Sunday matinee.....	55.6	20.00	1½	1½	6 - 6 -36		55.6	20.00	6 - 6 -36
Afternoon and evening shows, vaudeville.....	77.8	28.00	1½	1½	6 - 6 -36		69.4	25.00	6 - 6 -36
Continuous shows—									
12.30 to 11 p. m., 2 men to a shift—									
First men.....	77.8	28.00	1½	1½	6 - 6 -36		69.4	25.00	6 - 6 -36
Second men.....	69.4	25.00	1½	1½	6 - 6 -36		62.5	22.50	6 - 6 -36
Third and fourth men.....	62.5	22.50	1½	1½	6 - 6 -36		55.6	20.00	6 - 6 -36
12 noon to 11 p. m., 2 operators.....	69.4	25.00	1½	1½	6 - 6 -36		62.5	22.50	6 - 6 -36
12 noon to 11 p. m., vaudeville—									
First men.....	77.8	28.00	1½	1½	6 - 6 -36		69.4	25.00	6 - 6 -36
Second men.....	69.4	25.00	1½	1½	6 - 6 -36		62.5	22.50	6 - 6 -36
10 a. m. to 11 p. m.—									
First men.....	77.8	28.00	1½	1½	6 - 6 -36		62.5	22.50	6 - 6 -36
Second men.....	69.4	25.00	1½	1½	6 - 6 -36		62.5	22.50	6 - 6 -36
Third men.....	55.6	20.00	1½	1½	6 - 6 -36		50.0	18.00	6 - 6 -36
Fall River, Mass.:									
Houses using 1 operator....	66.7	24.00	¹ 100c.	⁷ 1	6 - 6 -36		47.6	20.00	7 - 7 -42
Houses using 2 operators—									
Chiefs.....	69.4	25.00	¹ 100c.	⁷ 1	6 - 6 -36		(8)	(8)	(8)
Assistants.....	58.3	21.00	¹ 100c.	⁷ 1	6 - 6 -36		(8)	(8)	(8)
Newark, N. J.:									
Six days per week.....	⁹ 42.9	18.00	2	¹⁰ 2	7 - 7 -42		42.9	18.00	7 - 7 -42
Seven days per week.....	¹¹ 49.0	24.00	2	1	7 - 7 -49		49.0	24.00	7 - 7 -49
New Haven, Conn.:									
Continuous shows—									
Houses of less than 500 seats.....	48.7	19.00	¹ 65c.	¹² 1½	6½- 6½-39		40.0	18.00	7½- 7½-45
Houses of 500 or more seats—									
Chiefs.....	58.3	21.00	¹ 65c.	¹² 1½	6 - 6 -36		55.6	20.00	6 - 6 -36
Assistants.....	52.8	19.00	¹ 65c.	¹² 1½	6 - 6 -36		50.0	18.00	6 - 6 -36
Vaudeville houses—									
Chiefs.....	80.0	24.00	¹ 75c.	¹² 1	5 - 5 -30		55.6	20.00	6 - 6 -36
Assistants.....	70.0	21.00	¹ 65c.	¹² 1½	5 - 5 -30		50.0	18.00	6 - 6 -36

¹ Rate in cents per hour.
² For holidays; for Sundays, full day's pay for 5 hours' work.
³ For Saturday matinee, not to exceed 3 hours, \$1.50 additional.
⁴ For Saturday matinee, not to exceed 3 hours, \$1.67 additional.
⁵ For Saturday matinee, not to exceed 3 hours, \$2 additional.
⁶ 4 hours on Sunday.
⁷ For holidays; for Sundays, \$3.50 for 3½ hours or less.
⁸ Not reported.
⁹ Scale became 50 cents on June 1, 1918.
¹⁰ For Sundays; for holidays, regular rate.
¹¹ Scale became 57.1 cents on June 1, 1918.
¹² For holidays; for Sundays, \$1 per hour.

UNION SCALE OF WAGES AND HOURS OF LABOR IN SPECIFIED TRADES, BY GEOGRAPHICAL DIVISIONS AND CITIES, MAY 15, 1918, AND MAY 15, 1917—Continued.

THEATRICAL EMPLOYMENT—Continued.

MOVING-PICTURE OPERATORS—Continued.

Geographical division and city.	May 15, 1918.				Hours: Full days; Saturdays; full week.	Mos. with Saturday half holidays.	May 15, 1917.		Hours: Full days; Saturdays; full week.
	Rate of wages—						Rate of wages—		
	Per hour.	Per week, full pay.	For overtime.	For Sundays and holidays.			Per hour.	Per week, full time.	
NORTH ATLANTIC—contd.									
New York, N. Y.:									
Continuous shows—									
5 to 10 cents admission—									
5 p. m. to 11 p. m., 1 shift, 12 noon to midnight, 2 shifts, or 11 a. m. to 11 p. m., 2 shifts.....									
	Cts.	Dolls.	Regular rate multiplied by—			Cts.	Dolls.		
	50.0	21.00	1 75c.	1	6 - 6 - 42	37.5	15.75	6 - 6 - 42	
5 p. m. to 11 p. m., 1 shift daily and 2 matinees per week.....									
	49.0	24.00	1 75c.	1	7 - 7 - 49	36.7	18.00	7 - 7 - 49	
2 p. m. to 11 p. m., 1 shift.....									
	50.0	28.00	1 75c.	1	8 - 8 - 56	37.5	21.00	8 - 8 - 56	
11 a. m. to midnight, 2 shifts, or 10 a. m. to 11 p. m., 2 shifts.....									
	50.0	22.75	1 75c.	1	6½ - 6½ - 45½	37.5	17.07	6½ - 6½ - 45½	
9 a. m. to 11 p. m., 2 shifts.....									
	50.0	24.50	1 75c.	1	7 - 7 - 49	37.5	18.37	7 - 7 - 49	
15 to 50 cents admission—									
2 p. m. to 11 p. m., 1 shift.....									
	60.0	33.60	1 90c.	1	8 - 8 - 56	45.0	25.20	8 - 8 - 56	
11 a. m. to 11 p. m., 2 shifts.....									
	60.0	25.20	1 90c.	1	6 - 6 - 42	45.0	18.90	6 - 6 - 42	
9 a. m. to 11 p. m., 2 shifts.....									
	60.0	29.40	1 90c.	1	7 - 7 - 49	44.9	22.00	7 - 7 - 49	
Temporary jobs, 1 week or more.....									
	70.0	39.20	1 90c.	1	8 - 8 - 56	52.5	29.40	8 - 8 - 56	
More than 50 cents admission, 2 p. m. to 11 p. m., 1 shift.....									
	65.0	36.40	1 90c.	1	8 - 8 - 56	48.8	27.30	8 - 8 - 56	
Philadelphia, Pa.:									
Houses A.....									
	57.1	16.00	1 75c.	1	4 - 8 - 28	57.1	16.00	4 - 8 - 28	
Houses B.....									
	71.4	20.00	1	1	4 - 8 - 28	53.6	15.00	4 - 8 - 28	
Houses C.....									
	41.7	20.00	1	1	8 - 8 - 48	37.5	18.00	8 - 8 - 48	
Houses D.....									
	47.6	20.00	1 75c.	1	7 - 7 - 42	47.6	20.00	7 - 7 - 42	
Houses E.....									
	43.8	21.00	1 75c.	1	8 - 8 - 48	43.8	21.00	8 - 8 - 48	
Houses F.....									
	59.5	25.00	1	1	7 - 7 - 42	42.9	18.00	7 - 7 - 42	
Pittsburgh, Pa.:									
6.30 p. m. to closing time.....									
	50.0	15.00	1 75c.	3 1	5 - 5 - 30	50.0	15.00	5 - 5 - 30	
12 noon to closing time, with supper relief—									
Motor-driven machines.....									
	445.8	27.50	1 75c.	3 1	10 - 10 - 60	45.8	27.50	10 - 10 - 60	
Other than motor-driven machines.....									
	50.0	30.00	1 75c.	3 1	10 - 10 - 60	50.0	30.00	10 - 10 - 60	
8.30 a. m. to closing time, 2 men, 2 shifts—									
Motor-driven machines.....									
	50.0	22.50	1 75c.	3 1	7½ - 7½ - 45	50.0	22.50	7½ - 7½ - 45	
Other than motor-driven machines.....									
	52.1	25.00	1 75c.	3 1	8 - 8 - 48	52.1	25.00	8 - 8 - 48	
Vaudeville or pictures, matinee and evening shows.....									
	52.1	25.00	1 75c.	3 1	8 - 8 - 48	52.1	25.00	8 - 8 - 48	
Vaudeville, 1 p. m. to closing time, with supper relief.....									
	54.2	26.00	1 75c.	3 1	8 - 8 - 48	54.2	26.00	8 - 8 - 48	
Providence, R. I.....									
	61.1	22.00	1 75c.	9 2	6 - 6 - 36	61.1	22.00	6 - 6 - 36	

¹ Rate in cents per hour.

² Scale became 60 cents on Sept. 1, 1918.

³ For holidays; for Sundays, \$1.50 per hour.

⁴ Scale became 54.2 cents on Sept. 1, 1918.

⁵ Scale became 58.3 cents on Sept. 1, 1918.

⁶ Scale became 61.1 cents on Sept. 1, 1918.

⁷ Scale became 62.5 cents on Sept. 1, 1918.

⁸ Scale became 67.7 cents on Sept. 1, 1918.

⁹ For Sundays; for holidays, regular rate.

UNION SCALE OF WAGES AND HOURS OF LABOR IN SPECIFIED TRADES, BY GEOGRAPHICAL DIVISIONS AND CITIES, MAY 15, 1918, AND MAY 15, 1917—Continued.

THEATRICAL EMPLOYMENT—Continued.

MOVING-PICTURE OPERATORS—Continued.

Geographical division and city.	May 15, 1918.				Hours: Full days; Saturdays; full week.	Mos. with Saturday half holidays.	May 15, 1917.		Hours: Full days; Saturdays; full week.
	Rate of wages—						Rate of wages—		
	Per hour.	Per week, full pay.	For over-time.	For Sundays and holidays.			Per hour.	Per week, full time.	
NORTH ATLANTIC—concl'd.									
Rochester, N. Y.:	<i>Cts.</i>	<i>Dolls.</i>	<i>Regular rate multiplied by—</i>				<i>Cts.</i>	<i>Dolls.</i>	
Class A houses.....	71.4	30.00	1 60c.	1	6 - 6 -42				(²)
Class B houses.....	66.7	28.00	1 60c.	1	6 - 6 -42		66.7	28.00	6 - 6 -42
Class C houses.....	61.9	26.00	1 60c.	1	6 - 6 -42		61.9	26.00	6 - 6 -42
Scranton, Pa.:									
5 hours per day.....	45.0	13.50	1 60c.	³ 2	5 - 5 -30		45.0	13.50	5 - 5 -30
8 hours per day.....	43.8	21.00	1 60c.	³ 2	8 - 8 -48		37.5	18.00	8 - 8 -48
Springfield, Mass.:									
Evening shows and Saturday matinee, not more than 3 hours per show...	85.7	18.00	1 75c.	4 1	3 - 6 -21		81.0	17.00	3 - 6 -21
Houses of 1,000 seats or less—									
Two shows per day.....	66.7	24.00	1 75c.	4 1	6 - 6 -36		55.6	20.00	6 - 6 -36
Continuous shows, 2 operators—									
6 to 9 hours per day...	77.7	21.00	1 75c.	4 1	4½ - 4½-27		66.6	18.00	4½ - 4½-27
9 to 12 hours per day...	63.9	23.00	1 75c.	4 1	6 - 6 -36		58.3	21.00	6 - 6 -36
Houses of more than 1,000 seats—									
Two shows per day.....	69.4	25.00	1 75c.	4 1	6 - 6 -36		61.1	22.00	6 - 6 -36
Continuous shows, 2 operators—									
6 to 9 hours per day...	85.2	23.00	1 75c.	4 1	4½ - 4½-27		74.1	20.00	4½ - 4½-27
9 to 12 hours per day...	66.7	24.00	1 75c.	4 1	6 - 6 -36		58.3	21.00	6 - 6 -36
Worcester, Mass.:									
Houses of less than 600 seats—									
Chiefs.....	61.1	22.00	1	³ 2	6 - 6 -36		61.1	22.00	6 - 6 -36
Assistants.....	55.6	20.00	1	³ 2	6 - 6 -36		55.6	20.00	6 - 6 -36
Houses of 600 seats or more—									
Chiefs.....	66.7	24.00	1	³ 2	6 - 6 -36		66.7	24.00	6 - 6 -36
Assistants.....	58.3	21.00	1	³ 2	6 - 6 -36		58.3	21.00	6 - 6 -36
SOUTH ATLANTIC.									
Atlanta, Ga.:									
Class A.....	83.3	30.00	1½	⁵ 1	6 - 6 -36		72.0	25.92	6 - 6 -36
Class C.....	50.0	24.00	1½	⁵ 1	8 - 8 -48		43.8	21.00	8 - 8 -48
Baltimore, Md.:									
Evening shows only.....	46.7	14.00	1 50c.	³ 2	5 - 5 -30		46.7	14.00	5 - 5 -30
Two-men houses, separate shifts.....	41.0	16.00	1	2	6½ - 6½-39		41.0	16.00	6½ - 6½-39
9 hours per day with supper relief, also vaudeville or other houses running 2 or more shows per day.....	42.6	23.00	1 50c.	³ 2	9 - 9 -54		42.6	23.00	9 - 9 -54
Jacksonville, Fla.:									
Class A houses—									
Chiefs.....	7 71.4	25.00	1 50c.	1	5 - 5 -35		71.4	25.00	5 - 5 -35
Assistants.....	7 57.1	20.00	1 50c.	1	5 - 5 -35		57.1	20.00	5 - 5 -30
Class B houses—									
Chiefs.....	8 65.5	27.50	1 50c.	1	6 - 6 -42		65.5	27.50	6 - 6 -42
Assistants.....	8 53.6	22.50	1 50c.	1	6 - 6 -42		53.6	22.50	6 - 6 -42
Vaudeville houses.....	9 63.5	20.00	1 50c.	1	4½ - 4½-31½		57.1	18.00	4½ - 4½-31½

1 Rate in cents per hour.

2 Not reported.

3 For Sundays; for holidays regular rate.

4 For holidays; for Sundays \$1 per hour.

5 For holidays; for Sundays \$1.50 per hour.

6 On account of shortage of men, each operator worked double shifts and received double pay.

7 Scale became 78.6 cents on July 15, 1918.

8 Scale became 71.4 cents on July 15, 1918.

9 Scale became 87.3 cents on July 15, 1918.

UNION SCALE OF WAGES AND HOURS OF LABOR IN SPECIFIED TRADES, BY GEOGRAPHICAL DIVISIONS AND CITIES, MAY 15, 1918, AND MAY 15, 1917—Continued.

THEATRICAL EMPLOYMENT—Continued.

MOVING-PICTURE OPERATORS—Continued.

Geographical division and city.	May 15, 1918.						May 15, 1917.		
	Rate of wages—				Hours: Full days; Saturdays; full week.	Mos. with Saturday half holidays.	Rate of wages—		Hours: Full days; Saturdays; full week.
	Per hour.	Per week, full pay.	For over-time.	For Sundays and holidays.			Per hour.	Per week, full time.	
SOUTH ATLANTIC—concluded.									
Richmond, Va.:									
6 hours per day—									
First men.....	¹ 58.3	21.00	² 60c.	³ 1	6 - 6 - 36	58.3	21.00	6 - 6 - 36	
Second men.....	⁴ 52.8	19.00	² 60c.	³ 1	6 - 6 - 36	52.8	19.00	6 - 6 - 36	
6½ hours per day—									
First men.....	⁵ 53.8	21.00	² 60c.	³ 1	6½ - 6½ - 39	53.8	21.00	6½ - 6½ - 39	
Second men.....	⁶ 48.7	19.00	² 60c.	³ 1	6½ - 6½ - 39	48.7	19.00	6½ - 6½ - 39	
Washington, D. C.:									
55 hours or more per week.....	⁷ 45.0	24.75	⁸ 60c.	1	⁹ 8 - 8 - 55	45.0	24.75	⁹ 8 - 8 - 55	
Evenings only.....	¹⁰ 48.6	18.00	⁸ 60c.	1	⁹ 5 - 5 - 37	48.6	18.00	⁹ 5 - 5 - 37	
NORTH CENTRAL.									
Chicago, Ill.:									
Houses of less than 300 seats—									
Evening shows only.....	75.0	26.25	(11)	1	5 - 5 - 35	65.0	22.75	5 - 5 - 35	
6 hours per day.....	75.0	31.50	(11)	1	6 - 6 - 42	65.0	27.30	6 - 6 - 42	
7 hours per day.....	75.0	36.75	(11)	1	7 - 7 - 49	65.0	31.85	7 - 7 - 49	
Afternoon and evening shows.....	75.0	42.00	(11)	1	8 - 8 - 56	65.0	36.40	8 - 8 - 56	
Pictures or vaudeville, evening shows only.....	75.0	21.00	(11)	1	4 - 4 - 28	65.0	18.20	4 - 4 - 2	
Houses of 300 to 899 seats—									
Evening shows only.....	82.1	23.00	(11)	1	4 - 4 - 28	75.0	21.00	4 - 4 - 28	
Do.....	80.7	28.25	(11)	1	5 - 5 - 35	70.7	24.75	5 - 5 - 35	
6 hours per day.....	79.8	33.50	(11)	1	6 - 6 - 42	69.8	29.30	6 - 6 - 42	
7 hours per day.....	79.1	38.75	(11)	1	7 - 7 - 49	69.1	33.85	7 - 7 - 49	
Afternoon and evening shows.....	78.6	44.00	(11)	1	8 - 8 - 56	68.6	38.40	8 - 8 - 56	
Houses of 900 to 1,499 seats—									
Evening shows only.....	89.3	25.00	(11)	1	4 - 4 - 28	83.9	23.50	4 - 4 - 28	
Do.....	86.4	30.25	(11)	1	5 - 5 - 35	76.4	26.75	5 - 5 - 35	
6 hours per day.....	84.5	35.50	(11)	1	6 - 6 - 42	74.5	31.30	6 - 6 - 42	
7 hours per day.....	83.1	40.75	(11)	1	7 - 7 - 49	73.2	35.85	7 - 7 - 49	
Afternoon and evening shows.....	85.7	48.00	(11)	1	8 - 8 - 56	72.1	40.40	8 - 8 - 56	
Houses of 1,500 seats and over—									
Evening shows only.....	107.1	30.00	(11)	1	4 - 4 - 28	101.8	28.50	4 - 4 - 28	
Do.....	95.0	33.25	(11)	1	5 - 5 - 35	85.0	29.75	5 - 5 - 35	
6 hours per day.....	91.7	38.50	(11)	1	6 - 6 - 42	81.7	34.30	6 - 6 - 42	
7 hours per day.....	89.3	43.75	(11)	1	7 - 7 - 49	79.3	38.85	7 - 7 - 49	
Afternoon and evening shows.....	87.5	49.00	(11)	1	8 - 8 - 56	77.5	43.40	8 - 8 - 56	
Pictures with vaudeville shift—									
5 hours per day.....	85.0	29.75	(11)	1	5 - 5 - 35	80.0	28.00	5 - 5 - 35	
6 hours per day.....	75.0	31.50	(11)	1	6 - 6 - 42	71.4	30.00	6 - 6 - 42	
Vaudeville.....	75.0	42.00	(11)	1	8 - 8 - 56	71.4	40.00	8 - 8 - 56	

¹ Scale became 75 cents on Sept. 1, 1918.

² Rate in cents per hour.

³ For holidays; do not work on Sundays.

⁴ Scale became 69.4 cents on Sept. 1, 1918.

⁵ Scale became 69.2 cents on Sept. 1, 1918.

⁶ Scale became 64.1 cents on Sept. 1, 1918.

⁷ Scale became 60 cents on May 20, 1918.

⁸ Rate in cents per hour; time and one half after completion of an 8-hour day.

⁹ 7 hours on Sunday.

¹⁰ Scale became 54.1 cents on May 20, 1918.

¹¹ 25 cents per reel.

UNION SCALE OF WAGES AND HOURS OF LABOR IN SPECIFIED TRADES, BY GEOGRAPHICAL DIVISIONS AND CITIES, MAY 15, 1918, AND MAY 15, 1917—Continued.

THEATRICAL EMPLOYMENT—Continued.

MOVING-PICTURE OPERATORS—Continued.

Geographical division and city.	May 15, 1918.				Hours: Full days; Saturdays; full week.	Mos. with Saturday half holidays.	May 15, 1917.		Hours: Full days; Saturdays; full week.
	Rate of wages—						Rate of wages—		
	Per hour.	Per week, full pay.	For over-time.	For Sundays and holidays.			Per hour.	Per week, full time.	
NORTH CENTRAL—continued.									
Cincinnati, Ohio:	<i>Cts.</i>	<i>Dolls.</i>	<i>Regular rate multiplied by—</i>				<i>Cts.</i>	<i>Dolls.</i>	
6 evening shows per week.....	.....	17.50	(1)	² 1	(²)	.....	(³)	(³)	(³)
11 hours per day, 2 operators.....	63.6	21.00	(1)	4 1	5½- 5½-33	.....	(³)	(³)	(³)
14 hours per day, 2 operators.....	58.3	24.50	(1)	4 1	7 - 7 -42	.....	(³)	(³)	(³)
15 hours per day, 2 operators.....	47.8	26.00	(1)	4 1	7½- 7½-45	.....	( )	(³)	(³)
Cleveland, Ohio:									
Evening shows only.....	66.7	22.00	5 100c.	.....	6 4 - 4 -33	.....	(³)	(³)	(³)
10 hours per day, 2 operators.....	62.9	22.00	5 100c.	.....	5 - 5 -35	.....	59.3	20.75	5 - 5 -35
12 hours per day, 2 operators.....	62.5	26.25	5 100c.	.....	6 - 6 -42	.....	57.1	24.00	6 - 6 -42
14 hours per day, 2 operators.....	62.3	30.50	5 100c.	.....	7 - 7 -49	.....	54.1	26.50	7 - 7 -49
16 hours per day, 2 operators.....	62.5	35.00	5 100c.	.....	8 - 8 -56	.....	54.5	30.50	8 - 8 -56
Davenport, Iowa:									
Evening shows and 2 matinees per week.....	44.1	15.00	5 50c.	1	7 4 - 7 -34	.....	44.1	15.00	7 4 - 7 -34
Afternoon and evening shows.....	42.9	21.00	5 50c.	1	7 - 7 -49	.....	36.7	18.00	7 - 7 -49
Vaudeville houses.....	72.0	18.00	5 50c.	1	8 3 - 5 -25	.....	72.0	18.00	8 3 - 5 -25
Des Moines, Iowa:									
Evening shows and 1 matinee per week.....	84.6	16.50	5 55c.	1	9 2½- 4½-19½	.....	(¹⁰)	(¹⁰)	(¹⁰)
Afternoon and evening shows.....	55.0	15.40	5 55c.	1	4 - 4 -28	.....	(¹⁰)	(¹⁰)	(¹⁰)
Vaudeville and pictures, afternoon and evening... ..	44.6	25.00	5 55c.	1	8 - 8 -56	.....	(¹⁰)	(¹⁰)	(¹⁰)
Detroit, Mich.:									
Houses of 300 seats or less.....	50.5	20.20	5 80c.	5 80c.	11 5 - 5 -40	.....	45.0	18.00	11 5 - 5 -40
Houses of more than 300 seats.....	53.0	21.20	5 80c.	5 80c.	11 5 - 5 -40	.....	47.5	19.00	11 5 - 5 -40
Houses of 500 seats or less, 7-hour shift.....	55.1	27.00	5 80c.	5 80c.	7 - 7 -49	.....	46.9	23.00	7 - 7 -49
Houses of more than 500 seats, 7-hour shift.....	57.1	28.00	5 80c.	5 80c.	7 - 7 -49	.....	46.9	23.00	7 - 7 -49
Houses of more than 600 seats, 8 hours.....	57.1	32.00	5 80c.	5 80c.	8 - 8 -56	.....	46.4	24.00	8 - 8 -56
Vaudeville and pictures—									
Houses of 700 seats or less, 6½-hour shifts.....	63.7	29.00	5 80c.	5 80c.	6½- 6½-45½	.....	50.5	23.00	6½- 6½-45½
Houses of over 700 seats—									
5½-hour shifts.....	77.9	30.00	5 80c.	5 80c.	5½- 5½-38½	.....	59.7	23.00	5½- 5½-38
9 hours.....	76.2	48.00	5 80c.	5 80c.	9 - 9 -63	.....	55.6	35.00	9 - 9 -63½

1 25 cents per 1,000-foot reel or fraction thereof.
 2 For holidays; for Sunday matinee, \$2; Sunday night, \$4.
 3 Not reported.
 4 For holidays; for Sunday, \$4.
 5 Rate in cents per hour.
 6 9 hours on Sunday.
 7 7 hours on Sunday.
 8 5 hours on Sunday.
 9 4½ hours on matinee day.
 10 Not organized on May 15, 1917.
 11 10 hours on Sunday.

UNION SCALE OF WAGES AND HOURS OF LABOR IN SPECIFIED TRADES, BY GEOGRAPHICAL DIVISIONS AND CITIES, MAY 15, 1918, AND MAY 15, 1917—Continued.

THEATRICAL EMPLOYMENT—Continued.

MOVING-PICTURE OPERATORS—Continued.

Geographical division and city.	May 15, 1918.					May 15, 1917.			
	Rate of wages—				Hours: Full days; Saturdays; full week.	Mos. with Saturday half holidays.	Rate of wages—		Hours: Full days; Saturdays; full week.
	Per hour.	Per week, full pay.	For over-time.	For Sundays and holidays.			Per hour.	Per week, full time.	
NORTH CENTRAL—continued.									
Grand Rapids, Mich.:	<i>Cts.</i>	<i>Dolls.</i>	<i>Regular rate multiplied by—</i>			<i>Cts.</i>	<i>Dolls.</i>		
Class A houses.....	41.8	19.00	1 60c.	1	6½-6½-45½	37.4	17.00	6½-6½-45½	
Class B houses.....	54.7	14.50	1 60c.	1	2 3½-3½-26½	47.2	12.50	2 3½-3½-26½	
Class C houses.....	51.6	23.50	1 60c.	1	6½-6½-45½	44.0	20.00	6½-6½-45½	
Indianapolis, Ind.:									
Class A houses.....	47.6	3 15.00	1 75c.	1	4½-4½-31½	41.3	4 13.00	4½-4½-31½	
Class B houses.....	46.8	18.00	1 75c.	1	5½-5½-38½	30.0	21.00	10-10-70	
Class C houses.....	44.9	22.00	(5)	1	7-7-49	38.3	18.75	7-7-49	
Class D houses.....	42.6	23.00	1 75c.	1	6 9-9-54	31.2	24.00	11-11-77	
Class E houses.....	43.1	25.00	1 150c.	1	7 10-10-58	34.5	20.00	10-6-58	
Kansas City, Mo.:									
Suburban evening shows..	62.5	8 17.50	1½	1	4-4-28	56.1	8 15.70	4-4-28	
Afternoon and evening shows.....	55.0	30.80	1½	1	8-8-56	50.0	28.00	8-8-56	
Continuous shows, 2 shifts—									
9 a. m. to 11 p. m.....	55.0	26.95	1½	1	7-7-49	50.0	24.50	7-7-49	
10 a. m. to 11 p. m.....	55.0	25.03	1½	1	6½-6½-45½	50.0	22.75	6½-6½-45½	
11 a. m. to 11 p. m.....	55.0	23.10	1½	1	6-6-42	50.0	21.00	6-6-42	
12 noon to 11 p. m.....	55.0	21.18	1½	1	5½-5½-38½	50.0	19.25	5½-5½-38½	
Milwaukee, Wis.:									
3-hour shows.....	9 73.1	19.00	1 75c.	1	10 3-4-26	69.2	18.00	10 3-4-26	
4-hour shows.....	1 68.8	22.00	1 75c.	1	12 4-4-32	65.6	21.00	12 4-4-32	
6-hour shifts.....	1 61.9	26.00	1 75c.	1	6-6-42	59.5	25.00	6-6-42	
7-hour shifts.....	1 56.1	27.50	1 75c.	1	7-7-49	54.1	26.50	7-7-49	
Vaudeville houses A.....	1 57.1	24.00	1 75c.	1	6-6-42	54.8	23.00	6-6-42	
Vaudeville houses B.....	1 59.5	25.00	1 75c.	1	6-6-42	57.1	24.00	6-6-42	
Minneapolis, Minn.:									
Vaudeville and pictures—									
Afternoon and evening shows.....	39.7	25.00	1 50c.	1	9-9-63	35.7	22.50	9-9-63	
3 or 4 shows per day.....	35.7	22.50	1 50c.	1	9-9-63	31.7	20.00	9-9-63	
12 noon to 11 p. m.....	42.2	32.50	1 50c.	1	11-11-77	39.0	30.00	11-11-77	
Pictures only—									
12 noon to 11 p. m.....	42.2	32.50	1 50c.	1	11-11-77	39.0	30.00	11-11-77	
11 a. m. to 11 p. m.....	42.9	36.00	1 50c.	1	12-12-84	39.9	33.50	12-12-84	
10 a. m. to 11 p. m.....	43.4	39.50	1 50c.	1	13-13-91	40.7	37.00	13-13-91	
7 p. m. to 11 p. m., and daily matinees 12 noon to 5 p. m.....	40.5	25.50	1 50c.	1	9-9-63	36.5	23.00	9-9-63	
7 p. m. to 11 p. m. daily, and Saturday and Sunday matinees, 2 to 5 p. m.....	52.9	18.00	1 50c.	1	10 4-7-34	50.0	17.00	10 4-7-34	
7 p. m. to 11 p. m. daily, and Sunday matinee, 2 to 5 p. m.....	51.6	16.00	1 50c.	1	10 4-4-31	51.6	16.00	10 4-4-31	

1 Rate in cents per hour.

2 5½ hours on Sunday.

3 And \$2 for each matinee.

4 And \$1.50 for each matinee.

5 75 cents per hour until midnight; \$1.50 per hour thereafter.

6 9 hours on Sundays, Tuesdays, Thursdays, and Saturdays; 6 hours on Mondays, Wednesdays, and Fridays.

7 10 hours on Sundays, Tuesdays, Thursdays, and Saturdays; 6 hours on Mondays, Wednesdays, and Fridays.

8 And \$2.50 for Sunday matinee not exceeding 3 hours.

9 Scale became 76.9 cents on Sept. 30, 1918.

10 7 hours on Sunday.

11 Scale became 71.9 cents on Sept. 30, 1918.

12 8 hours on Sunday.

13 Scale became 64.3 cents on Sept. 30, 1918.

14 Scale became 87.1 cents on Sept. 30, 1918.

15 Scale became 59.5 cents on Sept. 30, 1918.

16 Scale became 61.9 cents on Sept. 30, 1918.

UNION SCALE OF WAGES AND HOURS OF LABOR IN SPECIFIED TRADES, BY GEOGRAPHICAL DIVISIONS AND CITIES, MAY 15, 1918, AND MAY 15, 1917—Continued.

THEATRICAL EMPLOYMENT—Continued.

MOVING-PICTURE OPERATORS—Continued.

Geographical division and city.	May 15, 1918.					May 15, 1917.			
	Rate of wages—				Hours: Full days; Saturdays; full week.	Mos. with Saturday half holidays.	Rate of wages—		Hours: Full days; Saturdays; full week.
	Per hour.	Per week, full pay.	For over-time.	For Sundays and holidays.			Per hour.	Per week, full time.	
NORTH CENTRAL—concluded.									
Moline and Rock Island, Ill.:									
Evening shows and 2 matinees per week.....	Cts. 44.1	Dolls. 15.00	Regular rate multiplied by— 1 50c.	1	2 4 - 7 - 34		Cts. 44.1	Dolls. 15.00	2 4 - 7 - 34
Afternoon and evening shows.....	42.9	21.00	1 50c.	1	2 7 - 7 - 49		36.7	18.00	2 7 - 7 - 49
Omaha, Nebr.:									
Suburban houses, evening shows and Sunday matinee.....	62.5	17.50	3 65c.	1	2 3½ - 3½ - 28		56.1	15.70	2 3½ - 3½ - 28
8 hours or more per day, first men.....	50.0	28.00	3 65c.	1	8 - 8 - 56		36.0	20.16	8 - 8 - 56
More than 8 hours per day, second men.....	50.0	17.50	3 65c.	1	5 - 5 - 35		36.0	12.60	5 - 5 - 35
Peoria, Ill.....	47.6	20.00	3 60c.	1	6 - 6 - 42		45.2	19.00	6 - 6 - 42
St. Louis, Mo.:									
Evening shows only.....	71.4	20.00	1 50c.	1	4 - 4 - 28		71.4	20.00	4 - 4 - 28
12 hours per day, 2 shifts.....	65.5	27.50	1 50c.	1	6 - 6 - 42		65.5	27.50	6 - 6 - 42
St. Paul, Minn.:									
Evening shows with Sunday matinee.....	70.8	17.00	1 50c.	1	6 3 - 3 - 24		66.7	16.00	6 3 - 3 - 24
Vaudeville and pictures, 1 to 10.30 p. m., with intermission from 5 to 7.....	54.3	28.50	1 50c.	1	7½ - 7½ - 52½		47.6	25.00	7½ - 7½ - 52½
Continuous pictures, 11 a. m. to 10.30 p. m., with intermission from 5 to 7.....	41.0	28.00	1 50c.	1	9½ - 9½ - 68½		36.6	25.00	9½ - 9½ - 68½
Wichita, Kans.....	37.5	18.00	1 40c.	8 60c.	8 - 8 - 48		33.3	16.00	8 - 8 - 48
SOUTH CENTRAL.									
Birmingham, Ala.:									
Chiefs.....	926.9	21.00	1 50c.	10 1	9 13 - 13 - 78		26.9	21.00	13 - 13 - 78
Assistants.....	1123.1	18.00	1 50c.	10 1	11 13 - 13 - 78		23.1	18.00	13 - 13 - 78
Dallas, Tex.:									
Chiefs.....	1254.9	25.00	1 60c.	1	13 6½ - 6½ - 45½		54.9	25.00	13 6½ - 6½ - 45½
Assistants.....	1433.0	15.00	1 40c.	1	13 6½ - 6½ - 45½		33.0	15.00	13 6½ - 6½ - 45½
Vaudeville houses.....	1544.6	25.00	1 60c.	1	8 - 8 - 56		44.6	25.00	8 - 8 - 56
Houston, Tex.:									
Chiefs.....	54.9	25.00	1 60c.	1	13 6½ - 6½ - 45½		44.0	20.00	13 6½ - 6½ - 45½
Assistants.....	33.3	15.00	1 60c.	1	13 6½ - 6½ - 45½		27.8	12.50	13 6½ - 6½ - 45½
Little Rock, Ark.:									
Continuous pictures or pictures and burlesque—									
Chiefs.....	1641.7	25.00	1 40c.	17 1	10 - 10 - 60		37.5	22.50	10 - 10 - 60
Assistants.....	1621.7	13.00	1 30c.	17 1	10 - 10 - 60		18.3	11.00	10 - 10 - 60
Vaudeville and pictures.....	1837.5	18.00	1 60c.	17 1	19 10 - 7 - 48		35.4	17.00	19 10 - 7 - 48

1 Rate in cents per hour.
 2 7 hours on Sunday.
 3 Rate in cents per hour until midnight; double time thereafter.
 4 And \$2 for each matinee of not over 4 hours.
 5 And \$1 for Saturday matinee; \$2 for other matinees of not over 3 hours.
 6 6 hours on Sunday.
 7 Scale became 41.7 cents on June 1, 1918.
 8 Rate in cents per hour for Sundays; for holidays, regular rate.
 9 Scale became 64.1 cents and 39 hours on July 1, 1918.
 10 For holidays; for Sundays, \$4 per day.
 11 Scale became 56.4 cents and 39 hours on July 1, 1918.
 12 Scale became 65.9 cents on Aug. 20, 1918.
 13 Time actually worked; maximum, 8 hours per day, 56 per week.
 14 Scale became 49.5 cents on Aug. 20, 1918.
 15 Scale became 58 cents on Aug. 20, 1918.
 16 Scale became 50 cents on Sept. 1, 1918.
 17 For holidays; do not work on Sundays.
 18 Scale became 45.8 cents on Sept. 1, 1918.
 19 10 hours on Monday and Thursdays; 8 hours on other days.

UNION SCALE OF WAGES AND HOURS OF LABOR IN SPECIFIED TRADES, BY GEOGRAPHICAL DIVISIONS AND CITIES, MAY 15, 1918, AND MAY 15, 1917—Continued.

THEATRICAL EMPLOYMENT—Continued.

MOVING-PICTURE OPERATORS—Continued.

Geographical division and city.	May 15, 1918.						May 15, 1917.		
	Rate of wages—				Hours: Full days; Saturdays; full week.	Mos. with Saturday half holidays.	Rate of wages—		Hours: Full days; Saturdays; full week.
	Per hour.	Per week, full pay.	For over-time.	For Sundays and holidays.			Per hour.	Per week, full time.	
SOUTH CENTRAL—concluded.									
Louisville, Ky.:	<i>Cts.</i>	<i>Dolls.</i>	<i>Regular rate multiplied by—</i>				<i>Cts.</i>	<i>Dolls.</i>	
Evening shows only.....	49.3	18.00	1 50c.	1	2 36½		49.3	18.00	2 36½
Continuous shows, 2 operators—									
Union A.....	53.6	22.50	1 50c.	1	6 - 6 - 42		53.6	22.50	6 - 6 - 42
Union B.....	46.9	22.50	1 50c.	1	4 48		46.9	22.50	4 48
Union B ⁵	52.1	25.00	1 50c.	1	4 48		52.1	25.00	4 48
Memphis, Tenn.:									
Suburban shows, evenings only.....	64.3	18.00	1 50c.	1	4 - 4 - 28		64.3	18.00	4 - 4 - 28
Houses of less than 350 seats, 3 shifts.....	67.9	19.00	1 50c.	1	4 - 4 - 28		67.9	19.00	4 - 4 - 28
Houses of 350 to 699 seats, 3 shifts.....	75.0	21.00	1 50c.	1	4 - 4 - 28		75.0	21.00	4 - 4 - 28
Houses of 700 seats or more, 3 shifts.....	78.6	22.00	1 50c.	1	4 - 4 - 28		78.6	22.00	4 - 4 - 28
Vaudeville, afternoon and evening shows.....	53.6	30.00	1 50c.	1	8 - 8 - 56		53.6	30.00	8 - 8 - 56
Nashville, Tenn.:									
First-class houses—									
Chiefs.....	46.2	18.00	1	7 2	8 39		35.9	14.00	8 39
Assistants.....	35.9	14.00	1	7 2	8 39		30.8	12.00	8 39
Second-class houses and suburban shows.....	50.0	12.00	1 35c.	7 2	4 - 4 - 24		33.3	8.00	4 - 4 - 24
New Orleans, La.:									
Suburban shows.....	42.6	14.70	1 60c.	1	9 4½ - 6 - 34½		42.6	14.70	9 4½ - 6 - 34½
Houses of less than 1,200 seats.....	37.8	18.50	1 60c.	1	7 - 7 - 49		37.8	18.50	7 - 7 - 49
Houses of 1,200 seats or more.....	51.0	25.00	1 60c.	1	7 - 7 - 49		51.0	25.00	7 - 7 - 49
WESTERN.									
Butte, Mont.....	75.0	42.00	12 1	1	8 - 8 - 56		75.0	42.00	8 - 8 - 56
Denver, Colo.....	53.6	30.00	(12)	1	8 - 8 - 56		44.6	25.00	8 - 8 - 56
Los Angeles, Cal.:									
Evening shows only.....	67.3	16.50	1 50c.	1	3½ - 3½ - 24½		57.1	14.00	3½ - 3½ - 24½
Houses of less than 500 seats.....	40.2	22.50	1 50c.	1	8 - 8 - 56		33.9	19.00	8 - 8 - 56
Houses of 500 to 1,499 seats.....	44.6	25.00	1 60c.	1	8 - 8 - 56		37.5	21.00	8 - 8 - 56
Moving-picture studios.....	52.1	25.00	1 75c.	1 75c.	8 - 8 - 48		52.1	25.00	8 - 8 - 48
Picture houses of 1,500 or more seats charging 10 cents or more admission, or vaudeville, or other houses using scenery, stage lights, and stage hands.....	71.4	30.00	1 75c.	1	6 - 6 - 42		59.5	25.00	6 - 6 - 42

¹ Rate in cents per hour.

² Hours vary, but total 36½ per week.

³ Scale became 59.5 cents per hour on July 29, 1918.

⁴ Hours vary, but total 48 per week.

⁵ Operators keep machines in repair.

⁶ Owing to shortage of men 2 operators did the work and received the pay of 3.

⁷ For Sundays; for holidays, regular rate.

⁸ Hours vary, but total 39 per week.

⁹ 6 hours on Sunday.

¹⁰ Scale became 45.9 cents on Nov. 1, 1918.

¹¹ Scale became 76.9 cents on Nov. 1, 1918.

¹² Double time after 2 a. m. and before 8 a. m.

¹³ 75 cents per hour until midnight; double time thereafter.

UNION SCALE OF WAGES AND HOURS OF LABOR IN SPECIFIED TRADES, BY GEOGRAPHICAL DIVISIONS AND CITIES, MAY 15, 1918, AND MAY 15, 1917—Continued.

THEATRICAL EMPLOYMENT—Continued.

MOVING-PICTURE OPERATORS—Concluded.

Geographical division and city.	May 15, 1918.					May 15, 1917.			
	Rate of wages—				Hours: Full days; Saturdays; full week.	Mos. with Saturday half holidays.	Rate of wages—		Hours: Full days; Saturdays; full week.
	Per hour.	Per week, full pay.	For over-time.	For Sundays and holidays.			Per hour.	Per week, full time.	
WESTERN—concluded.									
Portland, Oreg.:	<i>Cts.</i>	<i>Dolls.</i>	<i>Regular rate multiplied by—</i>				<i>Cts.</i>	<i>Dolls.</i>	
Picture shows.....	53.6	1 30.00	2 75c.	1	8 - 8 - 56	-----	44.6	25.00	8 - 8 - 56
Vaudeville.....	58.0	32.50	2 75c.	1	8 - 8 - 56	-----	49.1	27.50	8 - 8 - 56
Salt Lake City, Utah.....	61.2	30.00	2 75c.	1	7 - 7 - 49	-----	61.2	30.00	7 - 7 - 49
San Francisco, Cal.....	62.5	30.00	2 75c.	1	8 - 8 - 48	-----	62.5	30.00	8 - 8 - 48
Seattle, Wash.....	75.0	27.00	2 125c.	1	6 - 6 - 36	-----	75.0	27.00	6 - 6 - 36
Spokane, Wash.....	65.5	27.50	2 100c.	1	6 - 6 - 42	-----	65.5	27.50	6 - 6 - 42

WAITERS.

NORTH ATLANTIC.									
Boston, Mass.:									
Hotels.....	12.5	8.10	2 35c.	1	11 -10 -65	-----	10.6	6.92	11 -10 -65
Restaurants—									
Class A men.....	18.5	12.00	2 35c.	2 35c.	11 -10 -65	-----	18.5	12.00	11 -10 -65
Class B men.....	16.7	9.00	2 35c.	2 35c.	11 -10 -65	-----	16.7	9.00	11 -10 -65
Cafés and restaurants—									
With meals (women).....	11.1	6.00	1	1	9 - 9 - 54	-----	11.1	6.00	9 - 9 - 54
Without meals (women).....	16.7	9.00	1	1	9 - 9 - 54	-----	16.7	9.00	9 - 9 - 54
Buffalo, N. Y.:									
Hotels (American plan).....	22.0	13.85	2 35c.	6 1	10½-10½-63	-----	22.0	13.85	10½-10½-63
Hotels (European plan), cafés, restaurants, and grillrooms.....	15.9	10.00	2 35c.	6 1	10½-10½-63	-----	15.9	10.00	10½-10½-63
Newark, N. J.:									
Full-day service.....	7 13.3	8.00	2 50c.	1	10 -10 -60	-----	13.3	8.00	10 -10 -60
Evening service.....	9 16.7	6.00	2 50c.	1	9 6 - 6 - 36	-----	16.7	6.00	6 - 6 - 36
Noon lunch service—									
Scale A.....	20.0	10.00	1	1	11 4 - 0 - 20	-----	20.0	10.00	11 4 - 0 - 20
Scale B.....	39.6	9.50	1	1	4 - 4 - 24	-----	39.6	9.50	4 - 4 - 24
Scale C.....	12 36.5	8.77	1	1	12 4 - 4 - 24	-----	36.5	8.77	4 - 4 - 24
New York, N. Y.:									
Countermen.....	25.0	15.00	(18)	1	10 -10 -60	-----	25.0	15.00	10 -10 -60
Hotels and restaurants.....	16.7	10.00	(18)	1	10 -10 -60	-----	16.7	10.00	10 -10 -60
Hotels and restaurants (nontipping places).....	41.7	25.00	(18)	1	10 -10 -60	-----	41.7	25.00	10 -10 -60
Philadelphia, Pa.:									
Cafés and grillrooms.....	14 13.3	8.00	(15)	(15)	10 -10 -60	-----	(16)	(16)	(16)
Oyster and chop houses.....	17 20.0	12.00	(15)	(15)	10 -10 -60	-----	(16)	(16)	(16)
Clubs.....	18 25.0	15.00	(15)	(15)	10 -10 -60	-----	(16)	(16)	(16)
Hotels.....	14 13.5	8.08	(15)	(15)	10 -10 -60	-----	(16)	(16)	(16)
Restaurants.....	17 16.7	10.00	(15)	(15)	10 -10 -60	-----	(16)	(16)	(16)

¹ Scale became \$30, \$35, and \$40 per week on Aug. 1, 1918.

² Rate in cents per hour.

³ Scale became 71.4 cents on Aug. 1, 1918.

⁴ Scale became 83.3 cents on July 8, 1918.

⁵ And 3 meals per day.

⁶ For Sundays; for holidays \$5 for 8 hours' work or less.

⁷ Scale became 20 cents on Sept. 1, 1918.

⁸ And 2 meals per day.

⁹ Scale became 26.7 cents and 30 hours on Sept. 1, 1918.

¹⁰ And 1 meal per day.

¹¹ Do not work on Saturdays.

¹² Scale became 33.3 cents and 18 hours on Sept. 1, 1918.

¹³ Work prohibited.

¹⁴ Scale became 16.7 cents on June 15, 1918.

¹⁵ Substitutes are employed.

¹⁶ No scale in effect on May 15, 1917.

¹⁷ Scale became 25 cents on June 15, 1918.

¹⁸ Scale became 30.8 cents on June 15, 1918.

UNION SCALE OF WAGES AND HOURS OF LABOR IN SPECIFIED TRADES, BY GEOGRAPHICAL DIVISIONS AND CITIES, MAY 15, 1918, AND MAY 15, 1917—Continued.

WAITERS—Continued.

Geographical division and city.	May 15, 1918.					May 15, 1917.			
	Rate of wages—				Hours: Full days; Saturdays; full week.	Mos. with Saturday half holidays.	Rate of wages—		Hours: Full days; Saturdays; full week.
	Per hour.	Per week, full pay.	For over-time.	For Sundays and holidays.			Per hour.	Per week, full time.	
NORTH ATLANTIC.—conclud'd.									
Pittsburgh, Pa.:									
Cafés, hotels, and restaurants.....	14.3	¹ 9.00	² 35c.	1	10½-10½-63	.....	Cts. (3)	Dolls. (3)	(3)
Clubs, day work.....	15.7	⁴ 11.54	² 100c.	1	⁵ 10½-10½-73½	.....	15.7	⁴ 11.54	⁵ 10½-10½-73½
Clubs, night work.....	14.1	⁶ 6.92	.....	.....	⁶ 7-7-49	.....	14.1	⁶ 6.92	⁵ 7-7-49
Clubs (nontipping places, and no commissions).....	23.8	¹¹ 15.00	.....	.....	⁷ 10½-10½-63	.....	22.0	¹¹ 13.85	⁷ 10½-10½-63
Countermen.....	22.2	¹ 14.00	² 35c.	1	10½-10½-63	.....	(3)	(3)	(3)
Hotels.....	14.7	¹ 9.23	² 35c.	1	10½-10½-63	.....	12.8	¹ 8.08	10½-10½-63
Hotels and restaurants (women).....	14.8	¹ 8.00	.....	.....	9-9-54	.....	14.8	¹ 8.00	9-9-54
Rochester, N. Y.:									
Full-day service.....	14.7	¹ 9.23	² 35c.	.....	10-10-60	.....	13.5	⁸ 8.08	10-10-60
Full-day service (women).....	16.7	¹ 9.00	² 50c.	(8)	9-9-54	.....	(3)	(3)	(3)
Two meals per day service.....	15.4	¹ 6.46	² 35c.	.....	7-7-42	.....	13.5	¹ 5.65	7-7-42
Springfield, Mass.:									
Countermen.....	22.5	13.50	.....	1	10-10-60	.....	20.0	12.00	10-10-60
Hotels.....	15.0	9.00	.....	1	10-10-60	.....	10.0	6.00	10-10-60
Lunch rooms.....	20.8	15.00	² 50c.	1	12-12-72	.....	13.9	10.00	12-12-72
SOUTH ATLANTIC.									
Washington, D. C.:									
Hotels, class A.....	23.1	¹ 13.85	² 50c.	1	⁹ 10-10-60	.....	(10)	(10)	(10)
Hotels, class B.....	15.4	¹ 9.23	² 50c.	1	⁹ 10-10-60	.....	(10)	(10)	(10)
NORTH CENTRAL.									
Chicago, Ill.:									
Dogwatch (women).....	25.0	¹ 12.00	² 35c.	1	8-8-48	.....	20.4	¹¹ 11.00	9-9-54
Night work (women).....	25.0	¹ 12.00	² 35c.	1	8-8-48	.....	20.4	¹¹ 11.00	9-9-54
Noon service or evening supper service (women).....	33.3	¹ 6.00	² 35c.	1	3-3-18	.....	30.0	¹ 5.40	3-3-18
Noon lunch service.....	50.0	9.00	² 50c.	1	3-3-18	.....	41.7	7.50	3-3-18
Noon lunch and evening supper service (women).....	19.0	¹ 8.00	² 35c.	1	6-6-42	.....	17.9	¹ 7.50	6-6-42
Restaurants and lunch rooms—									
Day work.....	23.3	¹ 14.00	² 50c.	1	10-10-60	.....	21.7	¹ 13.00	10-10-60
Night work.....	22.2	¹ 6.00	² 50c.	1	12-12-72	.....	20.8	¹ 15.00	12-12-72
Women.....	23.3	¹ 10.00	² 35c.	1	8-8-48	.....	18.5	¹ 10.00	9-9-54
Two meals per day service.....	27.8	¹ 10.00	² 50c.	1	6-6-36	.....	27.8	¹ 10.00	6-6-36
Cincinnati, Ohio:									
Cafés and restaurants.....	20.0	12.00	² 50c.	1	10-10-60	.....	(10)	(10)	(10)
Clubs.....	27.7	16.62	² 50c.	1	10-10-60	.....	(10)	(10)	(10)
Countermen.....	25.0	15.00	² 50c.	1	10-10-60	.....	(10)	(10)	(10)
Detroit, Mich.:									
Bar cafés.....	18.8	¹¹ 9.00	² 50c.	² 50c.	8-8-48	.....	12.5	¹¹ 6.00	8-8-48
Clubs.....	35.6	¹ 22.50	² 50c.	² 50c.	10½-10½-63	.....	29.2	¹ 18.40	10½-10½-63
Hotels (European), cafés, and grillrooms.....	19.2	12.12	² 50c.	² 50c.	10½-10½-63	.....	12.8	8.08	10½-10½-63
Hotels and restaurants (women).....	20.8	10.00	1	1	8-8-48	.....	(10)	(10)	(10)
Restaurants.....	23.8	15.00	² 50c.	² 50c.	10½-10½-63	.....	12.8	8.08	10½-10½-63

¹ And 3 meals per day.

² Rate in cents per hour.

³ No scale in effect on May 15, 1917.

⁴ And 3 meals per day, and 8 per cent commission on all sales except cigars.

⁵ Every tenth day off with pay.

⁶ And 1 meal per day.

⁷ Two days off each month with pay.

⁸ \$3 for 8 hours' work or less.

⁹ Hours vary, but average 60 per week.

¹⁰ Not organized on May 15, 1917.

¹¹ And 1 meal per day.

UNION SCALE OF WAGES AND HOURS OF LABOR IN SPECIFIED TRADES, BY GEOGRAPHICAL DIVISIONS AND CITIES, MAY 15, 1918, AND MAY 15, 1917—Continued.

WAITERS—Continued.

Geographical division and city.	May 15, 1918.					May 15, 1917.			
	Rate of wages—				Hours: Full days; Saturdays; full week.	Mos. with Saturday half holidays.	Rate of wages—		Hours: Full days; Saturdays; full week.
	Per hour.	Per week, full pay.	For over-time.	For Sundays and holidays.			Per hour.	Per week, full time.	
NORTH CENTRAL.—conclu'd.									
Kansas City, Mo.:				<i>Regular rate multiplied by—</i>					
Cabarets.....	1 9.1	7.00	2 35c.	1	1 11 -11 -77	.....	Cts. 9.1	Dolls. 7.00	11 -11 -77
Hotels.....	2 9.0	6.92	2 35c.	1	2 11 -11 -77	.....	9.0	6.92	11 -11 -77
Lunch rooms—									
Day work.....	4 15.6	12.00	2 35c.	1	4 11 -11 -77	.....	15.6	12.00	11 -11 -77
Night work.....	4 14.3	12.00	2 35c.	1	4 12 -12 -84	.....	14.3	12.00	12 -12 -84
Women.....	16.7	9.00	2 50c.	1	9 - 9 -54	.....	14.8	8.00	9 - 9 -54
St. Louis, Mo.:									
Cafés and restaurants, first class.....	18.5	10.00	2 50c.	1	9 - 9 -54	.....	14.8	8.00	9 - 9 -54
Hotels.....	16.7	10.00	2 50c.	1	10 -10 -60	.....	(7)	(7)	(7)
Five hours per day service (women).....	22.0	6.60	2 25c.	1	5 - 5 -30	.....	16.7	5.00	5 - 5 -30
Noon dinner service (women).....	25.0	4.50	2 25c.	1	3 - 3 -18	.....	22.2	4.00	3 - 3 -18
Two meals per day service (women).....	16.7	8.00	2 25c.	1	8 - 8 -48	.....	13.8	6.60	8 - 8 -48
SOUTH CENTRAL.									
Dallas, Tex.:									
Dinner and supper service.	3 30.0	5.40	.....	11 1	3 - 3 -18	.....	25.0	4.50	3 - 3 -18
Full-day service—									
Men.....	12 20.8	12.50	2 40c.	1	10 -10 -60	.....	18.2	11.00	10 -10 -60
Women.....	14 18.5	10.00	.....	1	9 - 9 -54	.....	16.7	9.00	9 - 9 -54
Noon lunch service (women).....	12 28.3	5.10	.....	1	3 - 3 -18	.....	25.0	4.50	3 - 3 -18
Short-watch service—									
Men.....	3 30.0	9.00	2 40c.	1	5 - 5 -30	.....	25.0	7.50	5 - 5 -30
Women.....	12 28.0	8.40	.....	1	5 - 5 -30	.....	24.0	7.20	5 - 5 -30
Steam table and stove men.	12 22.9	16.50	2 75c.	1	12 -12 -72	.....	20.8	15.00	12 -12 -72
12-hour men, day or night.	12 20.8	15.00	2 60c.	1	12 -12 -72	.....	17.4	12.50	12 -12 -72
WESTERN.									
Butte, Mont.:									
All classes—									
Men.....	3 37.5	21.00	2 50c.	1	8 - 8 -56	.....	37.5	21.00	8 - 8 -56
Women.....	12 25.0	14.00	(20)	1	8 - 8 -56	.....	25.0	14.00	8 - 8 -56
Denver, Colo.:									
Hotels and restaurants—									
Men.....	25.0	15.00	2 50c.	1	10 -10 -60	.....	20.0	12.00	10 -10 -60
Women.....	25.0	12.00	(20)	1	8 - 8 -56	.....	18.8	9.00	8 - 8 -48

1 Scale became 16.7 cents per hour and 10 hours per day on July 1, 1918.

2 Rate in cents per hour.

3 Scale became 13.2 cents per hour and 10 hours per day on July 1, 1918.

4 Scale became 25.7 cents per hour and 10 hours per day on July 1, 1918.

5 For holidays; for Sundays \$3 per day.

6 And 3 meals per day.

7 No scale in effect on May 15, 1917.

8 And 2 meals per day.

9 Scale became 36 cents on Aug. 23, 1918.

10 And 1 meal per day on waiter's time.

11 For Sundays; for holidays 50 cents per hour.

12 Scale became 25 cents on Aug. 23, 1918.

13 And 3 meals per day on employer's time.

14 Scale became 22.2 cents on Aug. 23, 1918.

15 Scale became 34 cents on Aug. 23, 1918.

16 And 2 meals per day on waiter's time.

17 Scale became 33.6 cents on Aug. 23, 1918.

18 Scale became 27.5 cents on Aug. 23, 1918.

19 Scale became 26.8 cents on Aug. 1, 1918.

20 Overtime work for women prohibited by State law.

UNION SCALE OF WAGES AND HOURS OF LABOR IN SPECIFIED TRADES, BY GEOGRAPHICAL DIVISIONS AND CITIES, MAY 15, 1918, AND MAY 15, 1917—Concluded.

WAITERS—Concluded.

Geographical division and city.	May 15, 1918.						May 15, 1917.		
	Rate of wages—				Hours: Full days; Saturdays; full week.	Mos. with Saturday half holidays.	Rate of wages—		Hours: Full days; Saturdays; full week.
	Per hour.	Per week, full pay.	For over-time.	For Sundays and holidays.			Per hour.	Per week, full time.	
WESTERN—concluded.									
Los Angeles, Cal.:									
Cash houses, 10 hours in 13, day work.....	Cts. 16.7	Dolls. 10.00		Regular rate multiplied by— (1) (2)	10 -10 -60		Cts. 16.7	Dolls. 10.00	10 -10 -60
Noncash houses, 10 hours in 13, day work.....	22.5	13.50	3 50c.	(2)	10 -10 -60		22.5	13.50	10 -10 -60
11 hours straight time, night work.....	22.7	15.00	3 50c.	4 350c.	11 -11 -66		22.7	15.00	11 -11 -66
8 hours straight time (women).....	18.8	9.00	3 50c.	4 200c.	8 - 8 -48		18.8	9.00	8 - 8 -48
8 hours in 12 (women).....	20.8	10.00	3 50c.	4 200c.	8 - 8 -48		20.8	10.00	8 - 8 -48
Portland, Oreg.:									
Restaurants—									
Men.....	21.7	13.00	3 35c.	1	5 10 -10 -60		21.7	13.00	10 -10 -60
Women.....	18.5	10.00	3 35c.	1	6 9 - 9 -54		18.5	10.00	9 - 9 -54
Salt Lake City, Utah:									
Restaurants—									
Men.....	33.3	18.00	3 45c.	1	9 - 9 -54		25.0	15.00	10 -10 -60
Women.....	25.0	12.00	3 35c.	1	8 - 8 -48		20.8	10.00	8 - 8 -48
San Francisco, Cal.:									
9 hours in 12 (men).....	33.3	18.00	3 50c.	1	9 - 9 -54		27.8	15.00	9 - 9 -54
7½ hours in 8 (women).....	22.2	10.00	3 50c.	1	7½ - 7½ -45		(7)	(7)	(7)
8 hours in 12 (women).....	22.9	11.00	3 50c.	1	8 - 8 -48		(7)	(7)	(7)
Seattle, Wash.:									
Hotels and restaurants—									
Men.....	37.5	18.00	3 75c.	1	8 - 8 -48		31.3	15.00	8 - 8 -48
Women.....	25.0	12.00	3 50c.	1	8 - 8 -48		19.8	9.50	8 - 8 -48
Spokane, Wash.:									
Restaurants—									
Men.....	25.0	17.50	3 50c.	1	9 10 -10 -70		25.0	17.50	10 -10 -70
Women.....	21.9	12.25	(10)	1	8 - 8 -56		21.9	12.25	8 - 8 -56

1 Overtime work prohibited.

2 For Sundays, \$3.50 per day; for holidays, \$4.

3 Rates in cents per hour.

4 Rate in cents per day.

5 Scale became 37.5 cents per hour and 8 hours per day on June 1, 1918.

6 Scale became 29.2 cents per hour and 8 hours per day on June 1, 1918.

7 Data not available.

8 And 2 meals per day.

9 Scale became 31.3 cents per hour and 8 hours per day on June 4, 1918.

10 Overtime work for women prohibited by State law.

**OFFICIAL REVIEW OF EMPLOYMENT, WAGES, HOURS, PRICES, AND
DISPUTES IN GREAT BRITAIN IN 1918.**

The British Labor Gazette (London) for January, 1919 (pp. 2-6), presents a review of employment, wages, prices, and disputes in 1918. As might be expected, employment in all the principal industries was good during the first 11 months of the year, a shortage of labor becoming intensified toward the close of the period, and on the whole was more marked than in any preceding year of the war. Following November 11, however, and especially in December, the cessation of much Government work resulted in a slackening in the engineering and allied trades, and large numbers of female munition workers were thrown out of work. The building trades and some woodworking trades were also considerably affected, it is stated, but up to the end of December employment in other trades was not greatly affected by the armistice. In one branch of industry, the cotton trade, "employment was generally only moderate or fair during the greater part of 1918," owing to the shortage of raw cotton.

CHANGES IN RATES OF WAGES.

The review states that the upward movement of wages which began in 1915 continued throughout 1918 as the result partly of the shortage of labor and partly of the continued rise in the prices of food and other commodities. All classes of workpeople received substantial additions to the war wages or war bonuses previously granted, and in most cases two or more separate increases were obtained. The changes in wage rates in the trades for which statistics of the numbers of workpeople affected by such changes are compiled, resulted in an aggregate increase of £2,783,000 (\$13,543,469.50) in the weekly wages of 5,654,000 workers, according to a table which shows for 1917 and 1918 the numbers of workpeople affected by the changes reported and the total amount of increase in weekly wages in each of the principal trade groups. This increase is even greater than recorded for 1917, when the total advance was £2,307,000 (\$11,227,015.50), and the number of workpeople affected was 5,029,000, which it is stated far exceeded the total for any previous year. As an indication of the magnitude of the increases in many wages in the years 1917 and 1918, attention is called to the fact that whereas the total weekly advance reported in 1917-18 reached over £5,000,000 (\$24,332,500) in the preceding two years (1915-16) it was about £1,300,000 (\$6,326,450), and in the previous five years (1910-1914) of rising wages it amounted to less than £400,000 (\$1,946,600). The extent of the general increase in wages and the

amounts involved in particular instances are noted in the following excerpts:

The most noteworthy feature of the wage movements of 1918 was probably the widely extended application of the bonus of $12\frac{1}{2}$ per cent on earnings which, toward the end of 1917, had been granted to men engaged at plain time rates on munitions work in engineering and shipbuilding establishments. In January, 1918, it was arranged that this bonus, or its equivalent, should be granted to men employed at time rates on munitions work in the iron and steel, brass, hollow-ware, tube, railway wagon, wire rope, nut and bolt, sheet metal, chemical, electrical, and various other trades, and that a bonus of $7\frac{1}{2}$ per cent on earnings should be paid to men employed at piece rates or on other systems of payment by results, in the trades and occupations in which the bonus of $12\frac{1}{2}$ per cent had been granted to time-workers. At later dates during 1918 the bonuses were extended to men on munitions work in various other industries, including the building trade, aircraft manufacture, the furniture trade, gas undertakings, and leather manufacture. In a large number of cases all the men employed, whether engaged on munitions work or private work, eventually received the bonuses.

Apart from these bonuses, the principal general increases were two war wage advances in the engineering, foundry, and shipbuilding trades, one, in August, of 3s. 6d. [85.2 cents] a week to men and 1s. 9d. [42.6 cents] a week to boys, and the other, at the beginning of December, of 5s. [\$1.22] a week to men and 2s. 6d. [60.8 cents] a week to boys, granted under awards of the Committee on Production. As those for men were subject to the bonuses of $12\frac{1}{2}$ and $7\frac{1}{2}$ per cent, the total resulting increase on time wages was over 9s. 6d. [\$2.31] a week. Following upon these awards, similar increases were given, in some cases under separate awards, and in other cases by agreement between the employers and workpeople, to men and boys in many other industries, including the light castings, brass, tube, railway carriage and wagon building, sheet metal, gas meter, nut and bolt, and various other metal trades, chemical manufacture and soap and candle trade, and at electricity undertakings. Certain sections of workpeople in the engineering and foundry trade in a number of districts, and platers, angle-iron smiths, riveters, calkers, blacksmiths, and some other classes of iron workers employed at piece rates in shipyards, also received further increases of varying amounts, under special arbitration awards. As regards women and girls employed on munitions work in the engineering and other industries, wages orders, issued by the ministry of munitions in January and September, granted increases amounting to 8s. 6d. [\$2.07] a week for those of 18 years and over, and 4s. 3d. [\$1.03] a week for those under 18.

Another leading increase was a further war wage advance of 1s. 6d. [36.5 cents] a day to colliery workers, 16 years of age and over, and 9d. [18.3 cents] a day to those under that age, granted from 30th June under a decision of the coal controller, in addition to the war wage, of similar amount, which had been granted in 1917. * * *

In the principal other trades, cotton operatives were among the groups of workpeople who received the largest amount of increase, obtaining an advance of 25 per cent on standard list prices in June and a further 50 per cent in December. From the beginning of the war up to the end of 1917 the total increase obtained by these workers had been only 35 per cent on list prices. In the woollen and worsted industry in Yorkshire, the advances granted over prewar rates, which ranged for the principal classes of workers from 48 to 60 per cent, at the beginning of 1918, were raised in April, August, and November; and at the end of the year they ranged from $83\frac{3}{4}$ to $104\frac{1}{4}$ per cent. * * *

In the boot and shoe manufacturing industry the war bonuses of 8s. to 10s. [\$1.95 to \$2.43] a week for men and 5s. 6d. [\$1.34] a week for women were increased early in

the year to a flat rate of 15s. [\$3.65] per week for men and to 8s. [\$1.95] per week for women. In addition, varying amounts (usually of 5s. to 8s. [\$1.22 to \$1.95] a week for men, and 12½ or 15 per cent on prewar rates for women) were conceded later in the year in different districts. In the transport trades, drivers of horsed and mechanical commercial vehicles in Great Britain had their existing war increases raised to 20s. [\$4.87] per week in January, and at later dates further increases to 30s. [\$7.30] per week were given. Similar increases, though at different dates, were conceded to workmen employed by tramway and omnibus undertakings. Dock laborers at the important ports received in most cases a total increase of 3½d. [7.1 cents] per hour. In the printing and allied trades there were increases in all the important centers, the amounts for men ranging usually from 15s. to 20s. [\$3.65 to \$4.87] per week. The rates for cabinetmakers were advanced generally by 1d. [2 cents] to 3½d. [7.1 cents] per hour, in addition to the bonus of 12½ or 7½ per cent on earnings on munitions work. Brick and tile workers generally received war wage increases of 13s. [\$3.16] per week, subject to a total war advance of 25s. [\$6.08] in the case of men, and smaller amounts in the case of women and young persons. Workpeople in the general earthenware and pottery trades in North Staffordshire had their bonus raised from 29½ per cent to 60 per cent on prewar rates. In the food trades, flour millers received increases of 15s. 6d. [\$3.77] per week, subject to a total war increase of 28s. [\$6.81] for men, and of 8s. 6d. [\$2.07] per week for women, with smaller amounts for young persons. Bakers and confectioners in England and Wales had various increases during the year, and toward the end their wages generally were raised to a minimum of 60s. [\$14.60] per week in industrial areas and of 55s. [\$13.38] per week in rural areas. In Scotland increases to make a total war wage advance of 32s. [\$7.79] per week were granted. * * *

Agricultural laborers generally in the United Kingdom had their wages raised, during 1918, owing to the fixing of minimum rates by the Agricultural Wages Boards. These minimum rates ranged, for ordinary laborers, from 30s. to 36s. 6d. [\$7.30 to \$8.88] per week in England and Wales, from 30s. to 38s. [\$7.30 to \$9.25] in Scotland and from 18s. to 25s. [\$4.38 to \$6.08] per week in Ireland. * * *

For railway servants engaged in the manipulation of traffic the war wages were increased in April by 4s. [97.3 cents] per week in the case of men and by 2s. [48.7 cents] per week for boys under 18 years of age. At the same time the war wage of females of 18 and over was fixed at 12s. 6d. [\$3.04] per week, with a minimum increase of 2s. [48.7 cents] per week, those under 18 years to receive half the amount given to adults. At later dates further increases were granted amounting to 8s. [\$1.95] per week for men and women and to 4s. [97.3 cents] per week for youths and girls, making the total war wage for men 33s. [\$8.03] per week. The uniform rates for able seamen and firemen, which were agreed to by the National Maritime Board in 1917, continued to be paid throughout 1918, but from October 7, a war risk bonus of £3 [\$14.60] per month was sanctioned by the shipping controller for seamen on vessels subject to war risks. The war bonus of permanent Government employees (including postmen) whose wages did not exceed 60s. [\$14.60] per week, was raised during the year by two steps to 23s. [\$5.60] per week for men, to 15s. [\$3.65] per week for women, to 17s. [\$4.14] per week for youths of 18 to 21, and to 11s. 6d. [\$2.80] per week for youths and girls under 18 years of age. Those whose wages or salary exceeded 60s. [\$14.60] per week received different amounts. Increases in minimum rates were also arranged during the year in nearly all the trades covered by the trade boards.

CHANGES IN HOURS OF LABOR.

The report states that during 1918 the changes in hours of labor affected over 120,000 workers whose normal working time was reduced by an aggregate of over 450,000 hours per week. Toward the

end of the year arrangements were made for the adoption, early in 1919, of a 47-hour week in the engineering and shipbuilding trades; of a 49-hour week for colliery workers; and of an 8-hour day for railroad employees.

RETAIL PRICES.

A table is given showing that on January 1, 1919, retail prices had increased 130 per cent over those of July, 1914. On January 1, 1918, the general level of the prices was about 106 per cent above that of July, 1914. The net increase between January 1, 1918, and January 1, 1919 was, therefore, 24 per cent on the prices of July, 1914. The following table shows the average percentage of increase compared with July, 1914, in the retail prices of each of the principal articles of food at January 1, 1918 and 1919:

AVERAGE PERCENTAGE INCREASE IN RETAIL PRICES AT JAN. 1, 1918 AND 1919, AS COMPARED WITH JULY, 1914.¹

Article.	Per cent of increase over July, 1914, at Jan. 1—	
	1918	1919
Beef, British:		
Ribs	81	102
Thin flank	101	126
Beef, chilled or frozen:		
Ribs	116	175
Thin flank	137	206
Mutton, British:		
Legs	77	102
Breast	92	106
Mutton, frozen:		
Legs	134	206
Breast	162	217
Bacon (streaky)	139	141
Fish	196	166
Flour	52	52
Bread	54	55
Tea	98	73
Sugar (granulated)	189	241
Milk	99	154
Butter:		
Fresh	103	107
Salt	105	113
Cheese	91	130
Margarine	66	69
Eggs (fresh)	242	347
Potatoes	37	57
All articles (weighted percentage increase)	106	130

¹ The report explains that in calculating the above general percentage increases the relative importance of the various articles included has been taken as the same in January, 1918 and 1919 as in 1914. This statistical assumption is regarded as necessary for the purpose of a continuous record of price movements, because otherwise changes in prices would be obscured by fluctuations in the quantities of the various articles purchased at different dates.

With reference to prices of items other than food, the review notes that there have been large increases, except as regards rents, and the general increase in the prices of all the items ordinarily entering into the working class family budget (including food, rent, clothing, fuel, and light, etc.) between July, 1914, and January 1, 1919, is estimated at about 120 per cent, as compared with between 85 and 90 per cent

a year ago, taking for this calculation the same quantities and, as far as possible, the same qualities of the various items at all three dates.

A considerable rise of wholesale prices is indicated by a table showing the index numbers of 47 articles classified in four groups for the years 1900 to 1918, taking 1900 as the base. In coal and metals this index number for 1918 stands at 206.8; for textiles (raw materials) at 354.6; for food, drink, and tobacco at 262.4; for miscellaneous articles at 270.8; and for all articles combined at 269.9.

TRADE DISPUTES.

The number of trade disputes recorded as occurring in 1918 was 1,252, an increase of 82 per cent over the number occurring in 1917. The number of workpeople affected, directly and indirectly, is given as 1,096,828, while the aggregate duration in work days of all disputes was 6,237,100. The largest number of disputes (168, or 13.4 per cent) was in shipbuilding. The largest number of people affected (380,238, or 34.7 per cent) was in mining and quarrying, and the largest number of days lost on account of disputes (1,700,900, or 27.3 per cent) was by textile workers. The majority of disputes, the report states, arose on demands for advances in wages. Thirty-one disputes, involving about 6,700 workers, were in progress at the close of the year.

WAGES IN DENMARK.

Time rates of wages in the principal industries of Denmark are set forth in a recent study by the statistical office of that country.¹ The data show the average rates of wages for 1914 and for the second quarter of 1917 and 1918, respectively. The material was gathered from trade organizations and employers' associations. The inquiry covered 38,101 wage earners in 1914, 44,349 in 1917, and 39,036 in 1918. Compared with 1914, average rates of wages had increased 31 per cent by April, 1917, 59 per cent by April, 1918, and 85 per cent by July, 1918.²

NUMBER OF WAGE EARNERS IN EACH SPECIFIED INDUSTRY, IN COPENHAGEN AND IN OTHER CITIES, IN 1914, AND IN CERTAIN MONTHS IN 1917 AND 1918.

Industry.	Copenhagen.			Cities in Provinces.		
	1914	1917 ²	1918 ²	1914	1917 ²	1918 ²
Textile.....	2,004	1,690	1,031	6,268	5,333	1,784
Boot and shoe.....	1,443	1,783	2,760			
Building.....	3,615	5,330	5,024			
Excavation and cement.....	1,175	1,685	1,855	1,882	664	613
Woodworking.....	244	352	541	508	1,087	1,578
Iron and steel.....	10,118	12,642	11,116	9,205	11,735	10,273
Printing and publishing.....	1,570	1,922	2,366	79	126	95
Total.....	20,159	25,404	24,693	17,942	18,945	14,343

¹ Statistiske Efterretninger udgivet av Det Statistiske Departementet. Copenhagen, 1918. No. 19.

² Idem, January, 1919. No. 1.

³ April, May, and June.

RATES OF WAGES PER HOUR IN CERTAIN OCCUPATIONS IN THE PRINCIPAL INDUSTRIES OF DENMARK, IN 1914, AND IN CERTAIN MONTHS OF 1917 AND 1918.

Occupation.	Copenhagen.			Cities in provinces.				
	Wage earners included, 1918.	Average rates per hour in—			Wage earners included, 1918.	Average rates per hour in—		
		1914	1917 ¹	1918 ¹		1914	1917 ¹	1918 ¹
		<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>		<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>
Textile industry:								
Weavers.....	184	11.7	17.5	20.4	597	11.0	16.1	20.1
Laborers.....	281	10.8	15.5	18.4	438	9.7	14.2	17.4
Women workers.....	566	8.2	12.1	13.3	749	7.2	10.7	12.6
Boot and shoe industry:								
Males.....	1,523	15.1	20.7	27.0				
Females.....	1,237	8.8	11.6	15.2				
Building industry:								
Carpenters (outside).....	737	20.2	26.1	34.2				
Painters.....	1,066	19.3	20.7	26.2				
Masons.....	1,244	23.0	30.0	34.7				
Carpenters (inside).....	1,000	22.4	30.9	36.3				
Masons' laborers.....	977	16.5	23.2	27.4				
Foundation and cement industry:								
Foundation and cement workers.....	1,699	15.7	22.4	28.5				
Laborers.....	156	16.9	22.1	31.2				
Woodworking industry:								
Skilled workers.....	370	16.1	22.0	27.2	1,000	12.3	16.2	20.5
Laborers.....	171		15.2	18.1	578		13.0	17.0
Iron and steel industry:								
Forge men and machinists.....	4,725	16.5	24.4	27.4	3,927	14.8	19.8	23.5
Tinsmiths.....	157	18.0	22.4	27.1	86	14.6	19.2	21.7
Electricians.....	587	17.8	21.1	26.2	424	16.4	18.2	23.1
Molders.....	325	18.6	24.7	29.0	709	17.3	22.5	26.7
Founders.....	154	15.2	20.6	24.5	31	14.6	18.1	22.6
Painters.....	167	24.1	26.2	28.8	117	17.4	18.9	23.8
Polishers.....	85		21.9	28.8	14		18.8	22.7
Shipwrights.....	99	21.0	28.9	32.8	340	15.3	20.2	23.5
Woodworkers.....	342	19.0	23.5	27.5	765	14.4	17.8	22.5
Laborers.....	3,200	13.0	16.3	20.2	3,581	12.2	15.1	18.9
Women workers.....	1,275	8.2	10.6	12.6	279	7.2	9.5	11.1
		Average rates per week.				Average rates per week.		
Printing and publishing:								
Books and newspapers—								
Skilled workers.....	1,531	\$9.69	\$10.98	\$13.40				
Unskilled workers.....	128	7.11	8.64	10.79				
Women workers.....	401	4.38	5.51	7.12				
Lithographic works—								
Skilled workers.....	176	8.91	10.93	13.28	53	\$7.99	\$9.19	\$11.15
Unskilled workers.....	55	5.50	7.09	9.17	16	4.91	6.43	8.91
Women workers.....	75	4.10	5.09	7.03	26	3.49	3.62	4.42

¹ April, May, and June.

WORKINGMEN'S WAGES IN SWEDEN.¹

Not long ago, a deputation from the laborers in the Province of Ostergotland delivered to the Government a statement with reference to the high cost of living and the financial policy connected

¹ The information contained in this article is furnished by the American consul at Gottenborg, Sweden, under date of Dec. 18, 1918, who states that the data are taken from articles appearing in the Gottenborg Morgenpost of Nov. 12 and 13, 1918. In commenting upon the facts noted, the consul writes:

According to the above, which is quoted from a conservative newspaper, the increases of wages granted to laborers seem to be very fair in certain cases, but it is evident that still the largest groups of the workmen suffer losses through the conditions caused by the war. According to the official statistics for September, 1918, the expenses in Gottenborg for food, lighting and fuel (the chief expenses for families of limited means), had increased by 195 per cent since July, 1914. The calculated average increase in the total living expenses—mean figure for 44 places, thus including also small country towns—was up to Oct. 1, 1918, 142 per cent. And this figure is acknowledged to be the minimum figure based on the official "maximum" prices, not taking into consideration the higher prices that have to be paid "under the hand" in order to obtain sufficient supplies in cases where the rations allowed by the victualing commission fall far short of the normal requirement.

The official statistics also show that up to Oct. 1, 1918, the expenses for shoes and clothing of medium quality have increased by about 250 per cent since May, 1914, and still the clothing obtainable is in fact of much poorer quality.

therewith, which statement purported to show that industrial workmen or factory hands as a class were less favored than other classes. In a leading article in the Svenska Dagbladet, Prof. Cassel stated that this statement, in its general form, is entirely wrong, and then he added:

The conditions within this class are quite varying. In cases where limited trade opportunities have not allowed any considerable increases in wages, or where shortage of raw materials or capital has made it impossible to give full employment to the workmen, there the workmen's families are undoubtedly experiencing serious difficulties with reference to subsistence, and there effective steps and measures are needed to ward off real distress. But it is wrong to make this a general rule and apply this idea to the working classes in general. The farm hands, for instance, are undoubtedly an exception, and were evidently not taken into consideration in the statement. And within the ranks of industrial workers there are large groups who have reaped profits from conditions caused by the war and have been able to raise their wages at the same rate of progress as the increase of the living expenses, or even a little more. Lumbermen, men employed in the building industry, and skilled workmen in several manufacturing industries have at present a considerable purchasing power.

HOURLY WAGES IN THE BUILDING INDUSTRY BEFORE THE WAR AND NOW.

Then, if we first examine the conditions within the building industry, we can make a comparison between the hourly wages in force according to the agreement that ended on April 1, 1914, and the present wages. (The comparisons refer to conditions in Gottenborg.)

COMPARISON OF HOURLY WAGES IN THE BUILDING INDUSTRY BEFORE AND AFTER THE WAR.¹

Occupation.	Hourly wages down to Apr. 1, 1914.	Hourly wages in November, 1918.	Per cent of increase.
Bricklayers and plasterers	<i>Cents.</i> 14.74	<i>Cents.</i> ² 28.14	90.9
Woodworkers or carpenters.....	{ 12.60 to 13.94 }	{ ³ 28.14	{ 123.3 to 101.9
Unskilled laborers:			
Granite workers	13.40	27.34	104.0
Pile drivers.....	12.33	26.53	115.1
Plaster mixers.....	13.67	27.87	103.9
Bricklayer's assistant.....	10.72	25.46	137.5
Other unskilled workers.....	10.72	25.46	137.5
Cement workers, concrete mixers, and tampers.....	10.99	25.46	131.7
Skilled cement workers.....	12.33	26.53	115.2

¹ This table is arranged from the text; it does not appear in the translation furnished by the American consul.

² The article states that there is also an additional "war allowance" of 25 ore (6.7 cents) per hour.

³ The article states that "the present compensation is the same as for bricklayers," which presumably includes the "war allowance" mentioned in note 2, although it is not so stated.

Further, in the latest agreement, two other groups have been added: Cement workers capable on their own accord to undertake any kind of cement work (a fairly large group), 1.05 crowns (28.14 cents), and house calkers, 1.05 crowns.

Also for the unskilled laborers there is a "war allowance" (*dyrtidstillägg*) of 25 ore (6.7 cents) per hour.

Even from the above it can be seen that the laborers employed in the building industry have had their wages raised considerably, but the wage per hour does not show the full extent of the increase. Nowadays, all work in the building industry, suitable for contract or piece work, is performed according to contract or agreement for a fixed quantity, and the rates for such work have been raised considerably. It is difficult to state as yet, however, what the actual increase in compensation for such work amounts to, for the new price lists for contract work have not been in force very long. So much can be said, however, that by these price lists these three groups of workmen have reached incomes which appear utopian for many a Government or city employee. There are workmen in the building industry who have incomes ranging up to 25 to 30 crowns (\$6.70 to \$8.04) per day, or even more.

WORKING HOURS, LABOR MARKET, AND PROSPECTS.

For all of the groups mentioned, the working time has been reduced from 57 hours to 51 hours per week.

The labor market in the building industry has been good lately, and the climate is mild enough to allow the work to be carried on during the greater portion of the year, with the exception of the very coldest and rainiest days. The high wages and the high prices of building materials have, however, a retarding effect, and it is possible that the demand for workmen in this line will be less in the future than at present, and, if so, the workmen will naturally be in a less advantageous position.

WAGES OF WORKMEN IN DIFFERENT GROUPS IN SWEDEN.

In addition to the figures published regarding the wages of workmen in the building industry, the following is furnished regarding the wages of certain other groups of laborers in the city of Gottenborg. For the sake of simplicity, the different industries are indicated by letters.

Industry A.—The wages of this group of laborers (unskilled) amounted to 37 ore (9.92 cents) per hour before the war. The agreement then in force is still valid, but the laborers have received a considerable war-time allowance. These laborers now demand 1.20 crowns (32.16 cents) per hour. The surplus earned on piecework or on contract is considerable.

Industry B.—This industry has been established during the war, and the agreement regarding wages was made in March, 1918. In this agreement, still in force, a compensation of 75 ore (20.1 cents) per hour was fixed, plus a war-time allowance of 25 crowns (\$6.70) per

month. This war-time allowance has, however, been gradually increased and is now 40 crowns (\$10.72) per month. The laborers have asked for an increased war-time allowance, namely, 80 crowns (\$21.44) per month. There is hardly any piecework or contract work in this industry.

A group of skilled workmen in this industry receive according to agreement 80 ore (21.44 cents) per hour and 25 crowns (\$6.70) additional per month in war-time allowance. The latter has been gradually raised, but the workmen now want it increased to 80 crowns (\$21.44) per month.

Industry C.—Before the war unskilled laborers were paid 43 ore (11.52 cents) per hour. Their wages are now 1 crown (26.8 cents) per hour, and in addition thereto a war-time allowance of 1.50 crowns (40.2 cents) per day to single, and 2 crowns (53.6 cents) per day to married men. There is a considerable amount of piece or contract work, for which the compensation has been increased by 100 to 120 per cent.

Industry D.—Before the war skilled workmen received 37 ore (9.92 cents) per hour. According to a new agreement, the wages were raised to 70 ore (18.76 cents) per hour, and in addition thereto 30 per cent in war-time allowance, and 1 crown (26.8 cents) per week for each minor child.

Another group in the same industry received before the war from 33 to 45 ore (8.84 to 12.06 cents) per hour, according to skill. Now they receive from 45 to 70 ore (12.06 to 18.76 cents) per hour, and in addition thereto 30 per cent war-time allowance, and 1 crown (26.8 cents) per week for each minor child. This is chiefly contract or piecework, for which the compensation considerably exceeds the wages fixed per hour.

STATISTICS OF THE LABOR OFFICE A GUIDE FOR THE INCREASES.

Before proceeding further, it may be well to mention that in the agreements made regarding wages in these industries, the figures published by the Socialstyrelsen have been used as a basis, and the employers have agreed to cover 80 per cent of the increase of the cost of living indicated by its statistics. In this way an increase of 100 per cent has been reached, so that a workman who previously received 40 ore (10.72 cents) per hour now receives 80 ore (21.44 cents).

With reference to the form of the war-time allowance, three different methods have been used. The allowance is paid per hour, both for wages per hour and for piece or contract work; with a certain per cent on the wages per hour, when the compensation for piece or contract work has also been raised by a certain per cent; or the allowance is paid in a certain fixed amount per day, week, or month. The different conditions at the respective places of work have been the deciding factor in the adoption of one system or the other.

WHICH LABORERS HAVE THE HIGHEST WAGES?

Unskilled laborers (heavy workers) in Gottenborg have in general 80 ore to 1 crown (21.44 to 26.8 cents) per hour, plus war-time allowance. Then the surplus earned on piece or contract work must be taken into consideration. For instance, one group of laborers earns 59 crowns (\$15.81) per week, another makes from 300 to 325 crowns (\$80.40 to \$87.10) per month; another was offered 275 crowns (\$73.70), plus 15 crowns (\$4.02) war-time allowance, per month, demanded 350 crowns (\$93.80), but later declared themselves satisfied with 315 crowns (\$84.42). (These workmen are now on strike.) The highest incomes are found in certain industries especially favored by existing conditions. One such group of laborers receives 1.95 crowns (52.2 cents) per hour in all (57 working hours per week). Another group, probably the best paid, has for the last 10 pay periods reached an income of 2.45 crowns (65.66 cents) per hour.

The difference in wages paid to skilled and to unskilled workmen has to a great extent been lessened during war time, this undoubtedly being due to the fact that laborers with the lowest wages could not subsist on their income and therefore had to be granted increases. This state of affairs, which can not promote ability or skill, will no doubt be changed after the war, so that the former proportions can be maintained.

It is a question whether these high wages can be maintained after the war. This can hardly be possible. As an example it is mentioned that the Germans export to Sweden good pianos for 1,150 to 1,200 crowns (\$308.20 to \$321.60) each. It is stated that it is not possible for the piano industry in Sweden, with the wages paid here, to compete with the German industry. It is believed that if the present wages were retained Swedish industries would be placed in a difficult position.

WAGES OF ONE GROUP INCREASED BY 130 PER CENT.

Finally it is reported that in one of the most important industries in Gottenborg, wages for skilled as well as for unskilled workmen have been increased by about 130 per cent. Besides this, the workmen have other advantages, inasmuch as their employers have given them opportunity to purchase foodstuffs at lower prices than those prevailing in the open market. Their wages per hour have been raised and they have been granted war-time allowances and good compensation for piece or contract work. Workmen in this industry make as high as 70 or 80 crowns (\$18.76 or \$21.44) per week.

WAGES IN NORWAY DURING THE WAR.¹

The managers of several district sick benefit funds have kindly transmitted to this office copies of lists of all members as of April, 1918, and of 1914, with information about the occupation, age, and wages of the members. On the basis of this information average wages have been calculated for the most important occupations, especially for the age groups of 17 to 19, 20 to 24 and 25 to 54 years. The statements of the average wages have then been sent to the managers of the sick benefit funds in the country and to the employment offices in the towns for revision and supplementation. In Christiania, besides conferring with the employment office, conference was had with associations of employers, trade-unions, establishments and workers, in order to ascertain whether the statements agree with the wages which were generally earned in April of 1918 and of 1914. Also in most of the other towns and rural districts the statements of the wages have been confirmed or corrected through first-hand information from different sources. In most cases the statements from the controllers of the sick benefit funds agreed with the reported facts as to wages. Some misleading average wages have been corrected.

The office applied to the district sick benefit funds in 29 different towns and 107 rural districts. From some of them answers have not been received; in some instances the number of the members was so small or the statements of so little value that they did not throw any light upon wages in general. The final statistics are based on the statements from sick benefit funds of 18 towns and 43 rural districts. The results are set forth in the tables. According to the information collected, the high-cost-of-living and other bonuses are included in the wages.

Inspectors of forests, local marine boards, the road director, the railway commission and several city and district councils have sent to the statistical office statements of the average wages, now and before the war, of lumber workers, seamen, common laborers, civil service employees and officials. The tables regarding teachers' wages are taken from the Norsk Lærerkalender of 1916 and 1918, supplemented with statements from the Ecclesiastical Department. The wages of State officials have been copied from the Statskalender and various Storting documents; in doubtful cases the special institutions of the State have been conferred with. Finally, directors of trade schools and others have, either in writing or verbally, given

¹ This article is a translation, transmitted by the American consulate general at Christiania, of the first chapter of a forthcoming report by the Norwegian Central Statistical Bureau on Wages and Living Conditions during the War. An advance copy of this report was made available through the courtesy of the Norwegian Central Statistical Bureau. The Bureau of Labor Statistics has revised and added to the translation.

the office much data which have been used in the text. Through assistance from many sides it has been possible to collect much valuable material to illustrate the trend of wages during the war.

We shall first consider the wages of workmen and domestic servants in the towns. These have increased 80 to 100 per cent; herring workers (men and women), longshoremen, freight handlers and movers, and construction workers have had the greatest increase of pay. The statements from the different towns are not so uniform as to permit any fine comparison of absolute wages. They are, however, certainly highest at Hatgesund, Notodden, Bergen, and Stavanger; lowest in the smaller towns in eastern Norway and in the north. Also the increase is least in the smaller towns of eastern Norway. The wages of men have increased most at Haugesund; those of women at Stavanger. The increases range as follows: 27 per cent increase for bakers at Sarpsborg, and 308 per cent for workmen at Haugesund; 24 per cent for housemaids at Fredrikstad, and 220 per cent for herring women at Stavanger.

The employees of shops and stores and, partly, office clerks are certainly the most unfortunate class of employees in the towns. The data worked out by the Labor Department—published as part of a Government bill and report on a minimum wage for clerks—indicate generally very low wages with a relatively slight improvement. As is well known, many of the better trained men clerks have secured good positions during the last years; these are not included in the statements from the district sick benefit funds, where the maximum limit of the members' income is 3,000 crowns (\$804), but there is reason to believe that these do not constitute any great percentage of the clerks.

The employment office at Christiania in a letter dated May 31, 1918, gives the following statement concerning the wages for commercial and office employees:

Men.—Office boys, formerly 30 to 40 crowns [\$8.04 to \$10.72] per month, now 60 to 80 crowns [\$16.08 to \$21.44] per month; younger clerks (common office work) formerly 75 to 125 crowns [\$20.10 to \$33.50], now 150 to 200 crowns [\$40.20 to \$53.60]. Clerks with special education (stenographers, bookkeepers, correspondents) show a relatively considerable rise in wage level (for instance, correspondents are now paid 5,000 to 6,000 crowns [\$1,340 to \$1,608] per year, bookkeepers 4,000 crowns [\$1,072]). For employees at stores and shops the increase has not been so high, wages having increased from 130 to 140 crowns [\$34.84 to \$37.52] to 170 to 180 crowns [\$45.56 to \$48.24].

Women.—Office apprentices (shop and office), formerly 25 to 30 crowns [\$6.70 to \$8.04] per month, now 50 to 60 crowns [\$13.40 to \$16.08]; for woman clerks (especially stenographers), wages have been increased considerably, i. e., from 130 to 140 crowns [\$34.84 to \$37.52] to 200 to 225 crowns [\$53.60 to \$60.30]. But it remains low for some clerks, especially those doing common office work. The most unfortunate are the employees in shops and stores; the increase is here only from 80 to 90 crowns [\$21.44 to \$24.12] to 110 to 120 crowns [\$29.48 to \$32.16].

The director of the Christiania handelsgymnasium (business college) states that the entrance salary for men with diplomas from the school was 50 to 125 crowns (\$13.40 to \$33.50) per month in 1913 and 1914, and 100 to 225 crowns (\$26.80 to \$60.30) per month in 1916 and 1917; and for women 25 to 80 crowns (\$6.70 to \$21.44) per month in 1914, and 100 to 150 crowns (\$26.80 to \$40.20) per month in 1917.

School Director Otto Treider reports as follows:

Before the war the general entrance salary for persons with an elementary education and a shorter course at a commercial school was 40 to 80 crowns [\$10.72 to \$21.44] per month; for persons with intermediate diploma or matriculation degree and longer courses at a commercial school, 60 to 100 crowns [\$16.08 to \$26.80] per month. (The difference in the entrance salary is due in most cases to the age.) Lately these wages have increased about twofold. Advancement by reason of experience is also a cause of this, so that after 1 to 2 years of experience, they frequently, at present (June, 1918), get a salary of 3,000 to 4,000 crowns [\$804 to \$1,072].

The employment office at Bergen states that the "wages of office and commercial employees have increased approximately from 60 to 70 per cent."

Trondhjems handelsgymnasium gives the following information concerning the entrance salary for men with diplomas from that school in 1915 (when the first students were examined), and in 1917:

ENTRANCE SALARIES OF GRADUATES OF TRONDHJEMS HANDELSGYMNASIUM,
1915 AND 1917.

	1915	1917	Per cent of in- crease.
Agency and common business.....	1,300 crowns (\$348.40).....	2,400 crowns (\$643.20).....	85
Shipping.....	1,500 crowns (\$402.00).....	2,100 crowns (\$562.80).....	40
Mining.....	1,500 crowns (\$402.00).....	2,400 crowns (\$640.20).....	60
Brokerage.....	1,200 crowns (\$321.60).....	1,800 crowns (\$482.40).....	50
Women (all employments).....	.....	1,200 crowns (\$321.60).....	.....

The employment office at Stavanger states that "Within the group 'Commerce and business' conditions may be said to be good. Since 1914-15 wages have increased about 100 per cent, perhaps more."

The commercial school at Stavanger says:

A large number of the students who have passed their examinations are still without employment, as it is at present difficult to get positions since trade is depressed. The salary is about 100 to 150 crowns [\$26.80 to \$40.20] per month for those who have obtained employment; all have positions in offices. The corresponding wages before the war did not exceed 75 crowns [\$20.10].

Most of the information given above concerning the salary of clerks refers to the entrance salary. There is reason to believe that salary conditions are on the whole relatively less favorable for those who have held the same positions continuously.

In the country agricultural wages are the most important. Farm hands with experience are now generally paid 80 to 100 crowns (\$21.44 to \$26.80) per month with board and lodging, as against 40 to 45 crowns (\$10.72 to \$12.06) formerly; domestics 30 to 35 crowns (\$8.04 to \$9.38), formerly seldom above 20 crowns (\$5.36). Day workmen receive about 5 crowns (\$1.34) per day with board, formerly 2.40 crowns (64 cents); and woman workers by the day get 2.40 crowns (64 cents)—April, 1914, 1.10 crowns (29 cents). Before the war milkmaids received about 25 crowns (\$6.70) per month; they now receive 47 crowns (\$12.60). Agricultural wages are highest in the region around Drammen and around Christianiafjord, and lowest in the north of Norway and in western Norway; they have increased generally more than 100 per cent, although the wages of milkmaids and housemaids have increased somewhat less.

The Selskabet for Norges Vel has worked out extensive statistics regarding farm wages during the summer of 1917 and the winter of 1917-18. A preliminary general view by Food Administrator Five has been published in the *Tideskrift for Det Norske Landbruk*, July, 1918, also in a special pamphlet entitled "Farm Wages." During the winter term October, 1917, to April, 1918, farm hands received about 307 crowns (\$82.28); in 1915-16, about 159 crowns (\$42.61), an increase of 93 per cent. Domestics received, respectively, 153 (\$41) and 91 crowns (\$24.39) in money wages, an increase of 68 per cent. The highest annual wages in 1917-18 were received by farm hands in Bratsberg Amt and by those in Nedenes. The lowest are found in Nordre Bergenhus, Romsdalen being next in order. The increase is greatest in Lister and Mandal—98 per cent—smallest in Søndre Trondhjem—55 per cent. The annual wages of domestics are highest in Buskerud, and next highest in Akershus; lowest in Nordlands Amt, next to which comes Tromsø. The wages of housemaids in the country have increased most in Finmarken—91 per cent, and least in Nedenes, 46 per cent, followed by Smaalenene with an increase of 48 per cent in two years.

In the country carpenters and masons earned in April last (1917) about 10 crowns (\$2.68) per day without board, before the war about 5 crowns (\$1.34). The wages are about the same as in the towns, but the increase is higher. The increase in wages for excavators and stone workers is, however, highest in the towns; in the country districts these workers earned somewhat less than 10 crowns (\$2.68).

From all the forest inspectors of the country there were received detailed statements concerning rates of wages for cutting and driving, etc. It appears that the lumbermen, whose wages have always been considered very low, now get nearly three times as much as in 1914. Both the rates of the wages and the increases have been highest in

the forest districts of southern and eastern Norway. Raftsmen generally earn 10 to 12 and 15 crowns (\$2.68, \$3.22, and \$4.02) per day, formerly generally 5 to 6 crowns (\$1.34 to \$1.61).

The wages of seamen have naturally increased rapidly. The wages of the mates are four times as high as formerly; those of engineers' assistants nearly three times as high. Stewards now earn about 450 crowns (\$120.60) per month, formerly 120 crowns (\$32.16); cooks over 300 crowns (\$80.40), formerly, generally 60 crowns (\$16.08); in the coastwise trade the increase is not nearly so high; the wages on foreign-going vessels (all bonuses included) are about one-half higher than the wages in the Norwegian coastwise trade. Wages on steamers in the blockade zones have always been high. Only very few crews have left the sea on account of the dangers of the war.

From the State railroad administration the following statements have been received concerning the average hourly wages paid on several railroad construction projects during the second half of 1913 and the second half of 1917:

AVERAGE HOURLY WAGES PAID ON RAILROAD CONSTRUCTION WORK, 1913 AND 1917, BY EACH SPECIFIED RAILROAD.

Railroad.	Contract work.			Day work.		
	1913	1917	Per cent of increase.	1913	1917	Per cent of increase.
	<i>Crowns.</i>	<i>Crowns.</i>		<i>Crowns.</i>	<i>Crowns.</i>	
Reconstruction of Christiania-Drammen Railway.	0.62 (\$0.166)	1.23 (\$0.330)	98	0.43 (\$0.129)	1.00 (\$0.268)	108
Sørlands Railroad.	.65 (\$0.174)	1.24 (\$0.332)	91	.49 (\$0.131)	1.13 (\$0.303)	131
Noragutu-Skien.	.66 (\$0.177)	1.34 (\$0.359)	103	.48 (\$0.129)	1.08 (\$0.289)	125
Rauma Railroad.	.54 (\$0.145)	1.17 (\$0.314)	117	.36 (\$0.096)	.96 (\$0.257)	167
Dovre Railroad.	.68 (\$0.182)	1.23 (\$0.330)	81	.56 (\$0.150)	.94 (\$0.252)	68
Trondhjem Terminal.	.68 (\$0.182)	1.15 (\$0.308)	69	.56 (\$0.150)	1.01 (\$0.271)	80
Reconstruction of Støren Railroad.	.59 (\$0.158)	1.07 (\$0.287)	81	.42 (\$0.113)	1.02 (\$0.273)	143

Contract wages have increased most on the Rauma Railroad—117 per cent—least at the Trondhjem Terminal—69 per cent. Wages for this work are highest at the Noragutu-Skien Railroad, or 1.34 crowns (35.9 cents) per hour. For daywork wages on railroad construction projects are less uniform; local workmen are usually employed. Contract wages on railroad construction work have increased 82 per cent; but by localities the increase varies between 39 per cent (Hoplen-Stene in Northern Trondhjem Amt) and 159 per cent (Rodset-Sørholt in Romsdal). The average contract wage is 83 ore (22.2 cents) per hour. On a few roads under construction workmen earned over 1 crown (26.8 cents), while on one particular road (Blikrud-Heggedal in Akershus) the average wage reached 1.30 crowns (34.8 cents) per hour.

Municipal workmen have generally received substantial increases in wages, if bonuses are included. Both the actual wages and the increase are the highest in Christiania. At Tromsø and Lillestrøm wages have not increased over 54 and 84 per cent altogether; hourly wages for ordinary workmen are, respectively, 1 crown (26.8 cents) and 81 øre (21.7 cents), without bonuses; also in Fredrikstad, Arendal, Hamar, and Drammen municipal workmen receive relatively low wages. In most municipalities street cleaners receive the lowest pay per hour. The municipal workmen generally receiving the highest wages are the mechanics, but sometimes the sweepers or laborers in the health departments draw the highest pay. In the summary table we have chosen the pavers as average types, as these do not get extraordinarily high or low wages.

Municipal employees of the lower grades, receiving salaries below 2,500 crowns (\$670) per year before the war, have during the war obtained an increase of wages, including the family bonuses, of about 70 to 100 per cent in most towns, i. e., somewhat less than the average increase for workmen and servants. The wages of the higher municipal employees have increased somewhat unevenly, generally not more than 50 to 60 per cent, including the high-cost-of-living bonuses. In Christiania the increase has been relatively high and in Bergen fairly low.

Teachers' wages deserve special mention. As is known, the basic wage for teachers in the public schools has been increased considerably through the new provisions of law, which came into effect July last. The increase was very necessary, because the city councils have not often raised the teachers' wages; so that until 1917-18 the increase has been small, even if the family bonuses are taken into consideration. While only the increase from 1915-16 to the present is known with certainty, it is believed that the increase in wages would hardly be higher even if statements from 1914 had been available on which to make the calculation. The annual incomes of the teaching staff in both large and small towns to July 1, 1918, may be seen from the table below:

AVERAGE ANNUAL INCOME, INCLUDING HIGH COST OF LIVING BONUSES, OF TEACHERS IN NORWAY.

Locality.	Males.		Females.	
	Income 1917-18.	Per cent of increase over 1915.	Income 1917-18.	Per cent of increase over 1915.
	<i>Crowns.</i>		<i>Crowns.</i>	
Christiania.....	4,370 (\$1,171.16)...	82	2,980 (\$798.64).....	95
Bergen.....	4,420 (\$1,184.56)....	77	2,690 (\$720.92).....	68
Trondhjem.....	3,620 (\$970.16).....	42	2,278 (\$610.50).....	34
Stavanger.....	3,820 (\$1,023.76)....	70	2,490 (\$667.32).....	66
Drammen.....	3,820 (\$1,023.76)....	74	2,540 (\$680.72).....	81
Smaller towns.....	3,457 (\$926.48).....	68	2,266 (\$607.29).....	69
Notodden (highest wages).....	4,484 (\$1,201.71)....	104	3,110 (\$833.48).....	114
Sogndal (lowest wages).....	2,120 (\$568.16).....	41	1,240 (\$332.32).....	24

The position of teachers in the country schools was by far the worst. The average income for a teacher's family of four persons came to about 2,100 crowns (\$562.80) in 1917-18; in the dioceses of Christiania, Bergen, Trondhjem, and Hamar, only a trifle above 2,000 crowns (\$536). Three-fourths of the teachers had free lodgings and one-fourth also had the right to the use of some land; but notwithstanding this, conditions were bad.

The woman teachers in the country in the diocese of Christiania earned, with the high-cost-of-living bonuses, about 1,500 crowns (\$402); in the five other dioceses they earned about 1,360 crowns (\$364.48), although in the dioceses of Trondhjem and Søndmør the salary was 1,306 crowns (\$350.01). Three-fifths of the woman teachers must pay for their own lodging.

The salaries of State employees and officials have been subject to new regulations since July 1, 1917. Since that time the high-cost-of-living bonus has been increased from 240 to 500 crowns (\$64.32 to \$134) for a single person; for a family consisting of four persons the increase equals 500 crowns (\$134), so that with the former 620 crowns (\$166.16) it now equals 1,120 crowns (\$300.16). With the earlier high-cost-of-living bonus the increase does not amount to 100 per cent for any considerable group of employees of the State. For the grade of employees receiving salaries of less than 2,000 crowns (\$536) before the war the increase up to 1917-18, including the high-cost-of-living bonus, amounts to 80 per cent. During the year the entire income for each of these families has been about 2,500 to 3,000 crowns (\$670 to \$804). Most State employees who formerly earned between 2,000 and 3,000 crowns (\$536 and \$804) earned in 1917-18, including the high-cost-of-living bonuses, 3,500 to 4,500 crowns (\$938 to \$1,206)—the increase being about 60 per cent. For the group of employees who have an income of from 3,000 to 4,000 crowns (\$804 to \$1,072) the increase is 50 per cent, and for the next higher groups it is from 35 to 55 per cent. The increase is insignificant for the employees of the highest wage classes, especially because the high-cost-of-living bonuses have no essential effect on the increase.

Finally there are reported data secured concerning salaries for private (including a few public and partly official) employees with higher technical education. From Norges Landbrukshøiskole (the Agricultural College of Norway) statements have been received concerning the salary paid in its various departments.

The forestry department states: Generally the young men leaving this school very soon get positions as assistants, some in the service of the State, others with the county forestry associations, and some secure employment with local governments as district inspectors of forests, and others obtain private employment.

Civil service positions governed by State regulations of July 1, 1912, were in force till July 1, 1917. According to these regulations the entrance salary was 1,500 crowns [\$402] with three service bonuses of 400 crowns [\$107.20] after three, six and nine

years of service respectively. The later regulations provide for an entrance salary of 2,000 crowns [\$536] and thereafter the same supplements are received.

The wages of employees of the county forestry associations have varied and have not been regulated. The entrance salary has probably been between 1,000 [\$268] and 1,200 crowns [\$321.60] up to 2,000 crowns [\$536]. New regulations have now been proposed.

For both classes of employees the usual compensation for transportation and board is provided.

The wages of district inspectors of forests were probably from about 1,000 to 1,500 crowns [\$268 to \$402] until the time of scarcity; these positions are advertised now at from 2,400 to 2,500 crowns [\$643.20 to \$670]. At some of the larger fuel distributing centrals young people just out of school have obtained an annual salary of 5,000 to 6,000 crowns [\$1,340 to \$1,608].

It has been very difficult to find out how private employees are paid. Private forest societies with interests abroad pay their employees 6,000 to 8,000 crowns [\$1,608 to \$2,144] and more according to their skill.

The dairy department reports: All the young men who have finished the school, have gone into practical business. The salaries in the positions which they were accustomed to obtain before the war are supposed to have been from 1,800 to 2,000 crowns [\$482.40 to \$536]. Now they may probably receive 2,500 to 3,000 crowns [\$670 to \$804] as an entrance salary.

We are able to state that the Norske Meierifolks Landsforening [Association of Norwegian Dairy Employees] last year revised its schedule of minimum wages, and the bases of calculation increased by 600 to 1,000 crowns [\$160.80 to \$268]. During the last years many dairies have also given their employees high-cost-of-living bonuses.

The horticultural department states: During the years 1913 and 1914 young people leaving the school could get a salary of 1,200 to 1,500 crowns [\$321.60 to \$402] up to 1,800 crowns [\$482.40], in 1917 and 1918 they received 2,000 to 3,000 crowns [\$536 to \$804].

For horticulturists with some experience the salary before the war was about 2,000 to 2,500 crowns [\$536 to \$670]; it has now been increased to 3,000 crowns [\$804], with 6,000 crowns [\$1,608] as the highest salary for official positions; in certain private positions the salary is now above 7,000 crowns [\$1,876] besides free lodging, light, fuel and garden products for household use.

It may be added that at present there are more positions vacant than there are graduates.

The allotment department calls attention to the wage regulations of the public allotment service and of larger private land survey and appraisal firms. Foremen formerly received 2,400 crowns (\$643.20) with three service bonuses of 300 crowns (\$80.40) each, at present 3,400 crowns (\$911.20) with two service bonuses of 400 crowns (\$107.20) each; assistants of the first class, who formerly received 1,500 crowns (\$402), with three bonuses of 200 crowns (\$53.60), now are paid 2,000 crowns (\$536) with three service bonuses of 400 crowns (\$107.20), including the years of service in the second class; assistants of the second class have an entrance salary of 1,500 crowns (\$402), with three bonuses of 200 crowns (\$53.60). Bonuses were not paid in 1914. From a large land surveyor's and appraiser's office the following data are reported:

Before the war assistants in private service generally received 2,400 crowns [\$643.20] without allowances. Now they command 3,600 to 4,500 crowns [\$964.80 to \$1,206] plus allowances.

The Vinterlandbruksskolen (agricultural school) gives the following information concerning the wages of agriculturists:

Youthful holders of diplomas from a common agricultural school in 1913-14 generally received about 400 crowns [\$107.20] per year, besides board and lodging, as agriculturists or farm managers. In 1918 they generally received from 1,000 to 1,500 crowns [\$268 to \$402], averaging about 1,200 crowns [\$321.60]. Wages are about the same throughout the country; they vary greatly according to age, experience and other qualifications. The usual age is 21 years. Board and lodging in 1914 were generally valued at 35 crowns [\$9.38] per month, at present 100 crowns [\$26.80]. For older persons with the same education the conditions at present are especially favorable on food committees and other war-time institutions and on the larger farms.

Norges tekinske høiskole (the technical college at Trondhjem) writes about wages of engineers as follows:

The annual salary for engineers' assistants in the service of the State or municipalities was in 1913-14 about 2,000 crowns [\$536]. The schedule now offers from 2,800 to 4,000 crowns [\$750.40 to \$1,072]. The general opinion is that it is far more difficult to get qualified applicants for these positions now than formerly, even with an annual salary of 4,000 crowns [\$1,072].

This corresponds to the experiences with regard to the salaries which may be obtained in private positions.

The mining department states that the salaries which in 1913-14 were obtained by young, inexperienced mining engineers probably amounted to about 2,000 crowns [\$536], while they now amount to 4,000 crowns [\$1,072].

The chemistry department reports that the salaries for young chemical engineers before the war were from 2,400 to 3,000 crowns [\$643.20 to \$804]. Now they are 4,000 to 5,000 crowns [\$1,072 to \$1,340]. But they have also been higher, e. g., 8,000 crowns [\$2,144]. Generally the salaries of engineers seem to be on a rapid increase.

Kristiana tekinske mellemskole (intermediate technical school) states:

In 1914 about 1,200 to 1,500 crowns [\$321.60 to \$402] per year was an average salary, with the average somewhat higher for construction engineers and chemists and somewhat lower for mechanical engineers and electrical engineers, and about the same in public and private positions.

At present (1918) all graduates go into private service almost exclusively, as they have a better chance of advancing to very good positions besides obtaining a higher entrance salary. This is especially the case of engineers who take positions in industrial establishments and for commercial experts; meanwhile the wages in the draughting departments of mechanical works are still fairly low.

Based on the latest appointments reported, the entrance salary has been:

Road and hydraulic engineers.	3,000 to 3,600 crowns	[\$804 to \$964.80]
Chemists.	3,000 to 3,600 crowns	[\$804 to \$964.80]
Mechanical engineers.	2,000 to 3,000	[\$536 to \$804] ¹
Electrical engineers.	2,000 to 3,000 crowns	[\$536 to \$804]

¹ Mechanical engineers in private factories receive as high as 4,000 crowns (\$1,072) and over.

Bergens tekinske Mellemskole (intermediate technical school) states:

Salaries for young men who leave the school after having passed their examinations may be seen from the following table:

	1915 ¹	1918
Electrical engineering.....	1,800 crowns (\$482.40).....	3,000 to 3,600 crowns (\$804 to \$964.80).
Shipbuilding.....	1,500 crowns (\$402).....	3,000 to 3,600 crowns (\$804 to \$964.80).
Road and bridge construction.....	2,400 crowns (\$643.20).....	3,000 to 4,000 crowns (\$804 to \$1,072).
Mechanical engineering.....	1,500 crowns (\$402).....	3,000 to 3,600 crowns (\$804 to \$964.80).
Chemical engineering.....	1,500 crowns (\$402).....	3,000 crowns (\$804).

¹ Wages are approximate.

A corresponding table for 1914 can not be made up, but it may be roughly estimated that salaries in all these professions are at present about double what they were before the war.

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In order to have a combined view of the wage movement there have been brought together those occupations and professions in which earnings do not exceed 6,000 crowns (\$1,608) per annum. It has been considered proper to include the family bonuses for State and municipal employees and officials and workmen; hence, for unmarried employees the wages and the increase are naturally far less than shown in the table. All those who have secured an increase of earnings of at least 100 per cent may unquestionably be said to have improved their situation during the war, if consideration is given to the public high-cost-of-living bonuses. To this more fortunate group there belong seamen in foreign commerce, lumber workers, herring and fish workers (both men and women), municipal workers in Aker, Christiania, and Bergen, sawmill workers in Trondhjem, and girls under 20 years of age in office in Christiania. The two last-named groups were poorly paid before the war, namely, 35 ore (9 cents) per hour and 39 crowns (\$10.45) per month on the average.

For all too many the increase in wages does not amount to 70 per cent; that is, less than one-half of the increase in general living expenditures. To this class there belong, first and foremost, many teachers, both men and women, in the elementary schools of the cities, and the largest proportion of woman teachers in the country schools in southern Norway. Furthermore, a considerable proportion of the municipal employees and officials mentioned above, woman paper factory workers in Drammen, woman workers in breweries of Christiania, and municipal workers in Tromsø are also included in this class; also a considerable proportion of State employees and officials on the railroads and in the telegraph and telephone service or post office department and other governmental departments, the army, and the fire service, etc. It is of considerable

interest to observe the actual wages, particularly of the poorest paid adult workers and officials. Helpers and common laborers at machine shops and a considerable number of other workers and laborers earned less than 2,000 crowns (\$536) this year (1918); but no male officials earned as low as that. The majority of farm hands also earn less than 2,000 crowns (\$536), including board and lodging. No female workers, even those in stores and offices, obtained as much as 2,000 crowns (\$536). It is of interest to summarize the earnings of the most important group of woman wage earners.

ANNUAL INCOME OF THE MOST IMPORTANT GROUPS OF WOMAN WORKERS, APRIL, 1918, AND PER CENT OF INCREASE OVER 1914.

Occupation and age.	Annual income April, 1918.	Per cent of increase over 1914.
	<i>Crowns.</i>	
Store employees, Christiania, 17 to 19 years.....	816 (\$218.69)	94
Maid servants, country, 17 to 19 years.....	900 (\$241.20)	86
Maid servants, over 20 years.....	1,000 (\$268.00)	74-78
Maid servants, city, 17 to 19 years.....	1,000 (\$268.00)	87
Maid servants, 20 to 24 years.....	1,100 (\$294.80)	80
Paper factory employees, Drammen.....	1,100 (\$294.80)	47
Store employees, Christiania, 20 to 24 years.....	1,104 (\$295.87)	92
Maid servants, city, 25 to 54 years.....	1,150 (\$308.20)	79
Milkmaids.....	1,150 (\$308.20)	88
Office employees, Christiania, 17 to 19 years.....	1,152 (\$308.74)	146
Brewery workers, Christiania.....	1,188 (\$318.38)	69
Day workers, country.....	1,200 (\$321.60)	116
Teachers, Sogndal.....	1,240 (\$332.32)	124
Seamstresses, city.....	1,256 (\$336.61)	79
Store employees, Christiania, 25 to 54 years.....	1,272 (\$340.90)	74
Tobacco factory employees, Christiania.....	1,296 (\$347.33)	92
Teachers, country schools, Trondhjem Diocese.....	1,306 (\$350.01)	176
Laundry workers.....	1,352 (\$362.34)	95
Teachers, country schools, Bergen Diocese.....	1,364 (\$365.55)	171
Canning factory workers, Stavanger.....	1,377 (\$369.04)	122
Teachers, country schools, Hamar, Troms, Christianiasand dioceses.....	1,380 (\$369.84)	166
Teachers, country schools, Christiania Diocese.....	1,514 (\$405.75)	153
Boot and shoe workers, Christiania.....	1,647 (\$414.60)	97
Herring and fish workers.....	1,650 (\$442.20)	140
Office workers, Christiania, 20 to 24 years.....	1,752 (\$469.64)	139
Office workers, Christiania, 25 to 54 years.....	1,788 (\$479.18)	113
Telephone operators, Christiania, Drammen, Trondhjem.....	1,840 (\$493.12)	60
Charwomen.....	1,950 (\$522.60)	83
Clerks, second class, Government departments.....	2,140 (\$573.52)	53
Teachers, smaller cities.....	2,266 (\$607.29)	169
Conductors, Christiania.....	2,268 (\$607.82)	100
Teachers, elementary schools, Trondhjem.....	2,278 (\$610.50)	34
Teachers, elementary schools, Stavanger.....	2,490 (\$667.32)	166
Teachers, elementary schools, Drammen.....	2,540 (\$680.72)	181
Telegraphers.....	2,540 (\$680.72)	69
Teachers, elementary schools, Bergen.....	2,690 (\$720.92)	158
Teachers, elementary schools, Christiania.....	2,980 (\$798.64)	195
Clerks, first class, Government departments.....	2,990 (\$801.32)	.....
Teachers, elementary schools, Notodden.....	3,110 (\$833.48)	114
Teachers, higher elementary schools (average).....	3,140 (\$841.52)	79

¹ Increase over 1915-16.

The wages offered to the great majority of the working women are indeed a matter of anxiety.

Country school-teachers and teachers in the smaller cities, departmental clerks of the second class, etc., workers in paper factories in Drammen, workers in yards and storage houses, contract workers in road making, skilled workers in machine shops, conductors in Bergen, Trondhjem and Christiania, teamsters in cities, office clerks in

Christiania over 25 years of age, tobacco workers in Christiania, canning-factory workers in Stavanger, workers in the sawmills of Trondhjem, municipal workers in some of the smaller cities and others receive from 2,000 to 2,500 crowns (\$536 to \$670) per annum. Numerous unskilled workers and a large proportion of State employees and officials receive between 2,500 to 3,000 crowns (\$670 to \$804) per annum; pavers and workers in water and sewer departments in Aker earn approximately 3,600 crowns (\$964.80) per annum; carpenters and joiners in the city and municipal workers in Christiania receive for the most part annual earnings of 3,250 crowns (\$871) which corresponds to the purchasing power of about 1,350 crowns (\$361.80) in 1914. * * * The gap between the highest and the lowest income groups is considerably larger now than it was before the war, and the social discontent has increased.

WOMEN IN INDUSTRY.

WORK OF WOMAN'S SERVICE SECTION, UNITED STATES RAILROAD ADMINISTRATION.

A woman's service section was established by the United States Railroad Administration on August 28, 1918, to insure fair treatment and wages and suitable working conditions for the women employees. A report of its activities is contained in that portion of the recent annual report of the Director General of Railroads devoted to labor results of the federalized railroads.¹

The number and occupations of women employees at specified dates were as follows:

NUMBER OF WOMEN EMPLOYED BY THE RAILROADS OF EASTERN, SOUTHERN, AND WESTERN TERRITORY, ACCORDING TO CHARACTER OF OCCUPATION, 1918.

Class of employees.	Jan. 1.	Apr. 1.	July 1.	Oct. 1.
1. Attendants.....	807	934	1,443	2,390
2. Bridge tenders.....	2	6	11	12
3. Car department.....	381	421	928	684
4. Clerical or semiclerical.....	47,192	51,468	61,320	73,285
5. Cleaning.....	3,492	3,666	4,632	5,555
6. Elevator operators.....	16	15	34	97
7. Messenger service.....	359	430	557	736
8. Personal service.....	2,187	2,300	2,480	2,796
9. Roundhouse work.....	354	397	923	1,365
10. Shopwork.....	1,392	1,443	3,178	5,091
11. Signal service.....	36	40	186	220
12. Station agents, assistants, agent-operators.....	379	426	300	377
13. Supervisors of women employees.....	52	52	78	113
14. Switch tenders and other yard work.....	10	18	17	50
15. Telegraph operators.....	1,538	1,693	2,158	2,396
16. Telephone operators (train orders, blocking, etc.).....	1,385	1,322	1,729	2,613
17. Track work.....	60	133	817	872
18. Train service.....	24	30	71	100
19. Warehouse and docks (includes trucking).....	324	420	792	1,461
20. Watch women.....	204	232	293	518
21. Other service.....	361	408	423	565
Total.....	60,555	65,854	82,370	101,296

It will be observed that on October 1, by far the largest group, 73,285 or 72 per cent, were employed in clerical or semiclerical duties, while the next largest, 5,555 or 5.4 per cent, were cleaning stations, offices, and coaches. Well over three-fourths of the total number, therefore, are employed upon occupations in which women are customarily found in other industries, the only novelty being that they are carrying on these occupations in connection with railroading.

In October four field agents were appointed for the purpose of getting first-hand information as to the conditions under which

¹ Annual report of W. G. McAdoo, Director General of Railroads, 1918. Labor. Washington, 1919. 27 pp. See also article on pp. 292 to 294 of this issue of the MONTHLY LABOR REVIEW.

women were working. The report contains data, gathered by these agents, as to the working conditions of 3,590 women. Although this group is relatively small, it includes practically all the occupations in which women are found, so that the figures are considered representative of general conditions. The following tables show conditions as to the length of the hours of work, and the working week:

EMPLOYMENT OF 3,590 WOMEN ACCORDING TO CLASS AND HOURS OF WORK.

Class.	Total number women.	Hours of work per week.			
		48 or less.	49 to 54.	55 to 60.	61 or more.
Attendants.....	118	58	48	8	4
Car department.....	60	3	32	9	16
Clerical workers.....	2,140	2,023	76	30	11
Cleaners.....	411	207	57	20	127
Personal service.....	130	120	3	3	4
Roundhouse.....	141	68	6	0	67
Shopwork.....	335	18	148	161	8
Block operators.....	123	0	7	47	69
Track work.....	18	0	0	18	0
Warehouse and docks.....	84	2	30	50	2
Watch women.....	5	4	0	0	1
Other service.....	25	20	3	1	1
Total.....	3,590	2,523	410	347	310
Per cent.....	100	70.3	11.4	9.7	8.6

NUMBER OF FEMALE EMPLOYEES WORKING SEVEN DAYS A WEEK, ACCORDING TO HOURS PER WEEK AND HOURS ON SUNDAY.

Number of employees.	Hours of work.	
	Per week.	On Sunday.
81	54 hours and under.	5½ to 6½
83	56	8
11	60	6
80	63	9
1	66½	9½
1	68	10½
153	70	10
2	77	11
1	80½	11½
15	84	12

The worst conditions in both respects shown here are endured by the block operators, of whom 56 per cent work over 61 hours a week and all work 7 days in the week. Of the group in roundhouse work, 48 per cent work over 60 hours, and 40 per cent have a 7-day week. The largest single group affected by either of these conditions is found among the cleaners, 127 or 31 per cent of these women working over 60 hours a week, and 128 having no day of rest.¹ Of the 433

¹ The railroad hours for women cleaners compare unfavorably with those of women engaged in such work elsewhere. In Massachusetts, for instance, in a group of 717 women engaged in cleaning offices and other buildings, only 10 per cent worked more than 46 hours a week, and only 6 per cent 54 hours or over. See Massachusetts Minimum Wage Commission Bulletin No. 16: Wages of women employed as office and other building cleaners, p. 15.

woman employees who have a 7-day week, 176, or 41 per cent, work 70 hours or over, and 15 work 84 hours—12 hours a day, week in, week out, with no intermission. The report states that the "excessive length of hours has been brought to the attention of the officials and steps are being taken to reduce them." Night work was not general, yet 323 women, or 9 per cent of the group studied, were on night shifts. "Block signal operators, coach cleaners, and scrub women, as well as clerks in roundhouses are predominately represented among these night workers."

Work as section laborers and truckers was not approved for women, and in September, 1918, the railroads were asked to discontinue their employment in these capacities. Calling train and engine crews, which involves hunting up the men in their homes, hotels, or boarding houses and waking them, was also disapproved as an occupation for women, and the railroads were requested to dismiss them from such work, "for obvious reasons."

Much has been done in providing suitable conveniences for women employed in railroad work, very little attention apparently having been paid to their needs before the establishment of the woman's service section. Where it has not been found immediately possible to abolish night work for women, it has been insisted that the conditions under which they work must be made safe. Young women were found working at night "in lonely towers and stations at a distance from towns or houses."

No details are given as to wages, but apparently the vexed question of equal pay for equal work has been summarily solved. Ignoring all arguments as to whether in a given position a woman's work is equal to a man's, the Director General issued a sweeping order that women's pay, "when they do the same class of work as men, shall be the same as that of men." In other words, the holder of a given position receives a specified payment, regardless of sex.

Considerable space is given to a discussion of the quality of work done by the women, and the opinions of officials are quoted regarding their abilities in various lines of service:

It appears that whenever women have been given proper instructions they have proved their value in practically all the clerical and semiclerical occupations. Old prejudices are rapidly disappearing, and they are being recognized by many officials as a permanent addition to the labor force. Many superintendents and chief clerks report that they are careful and conscientious, as well as capable of obtaining a good grasp of the scope of the work.

In the shops, too, there is evidence that women have been equal to the new jobs, not only in processes requiring little skill but in some of the trades calling for a high degree of intelligence and training. They are, for instance, doing electric welding, having advanced from flat work to welding of all kinds. They are also doing oxy-acetylene burning and welding. In one shop 20 welders are employed. The fact that some are earning the full mechanic's rate is a proof of their efficiency.

They are also cleaning and repairing and testing air-brake equipment. In one shop three young women have full charge of all the triple-valve work in emergency repairs. They are giving satisfaction without the help of any man operator.

Box packing and turntable operating are also noted as occupations in which women have given very satisfactory service. With respect to common laborers, there is much diversity of opinion, depending on the kind of women employed. For some of the lighter kinds of track cleaning, elderly women were employed as a war-time expedient, but the results were unsatisfactory. In some localities foreign women of the peasant type and colored women were employed in heavy lifting and carrying. No complaint is made of their work, but it is felt that such occupations are too heavy for them, and as soon as men become available the women will be shifted from such work.

WOMEN'S WAGES IN NEW YORK.

The State Industrial Commission of New York has just released some figures relating to wages in some of the leading women-employing industries of the State, secured through an investigation made by its bureau of statistics and information. The scope of the investigation is thus described:

The investigation covered reports of actual earnings for one week in November or December from over 600 establishments with over 60,000 women employees in four factory industries—paper boxes, shirts and collars, confectionery, and cigars and tobacco—and in mercantile establishments. Two tabulations were made, one including all women on the pay rolls except women working in mercantile establishments less than half time (less than half-time workers being omitted for stores to eliminate occasional workers), the other including only women who worked full time in the week, girls under 16 being excluded from both. Tabulations for factories included only shop workers (excluding office employees) but for mercantile establishments all occupations were included. Commissions and bonuses were included in earnings and all reports used were for weeks with six working days.

The study covered 417 factories with 32,881 women on their pay rolls. The following table shows by cumulative percentages the proportion of these women whose earnings fell below specified amounts:

PERCENTAGE OF WOMEN IN FOUR INDUSTRIES WHO RECEIVED SPECIFIED EARNINGS.

Earnings for given week.	Paper boxes.	Shirts, collars.	Confectionery.	Cigars, etc.	Four industries.
Less than \$6.....	8	11	17	5	10
Less than \$8.....	18	23	28	9	20
Less than \$10.....	36	38	51	17	35
Less than \$12.....	59	58	72	32	53
Less than \$14.....	77	72	85	46	68
\$14 and over.....	23	28	15	54	32
\$20 and over.....	2	5	2	21	8

These figures do not suggest that wages in New York factory industries have risen to unreasonable heights. In 1914, before the war rise in prices had begun, a New York commission endeavored to determine on what minimum a woman could support herself and maintain physical efficiency without attempting to make any provision for illness, accident, or times of unemployment, and decided that from \$8 to \$9 was the least on which it could be done:¹

It is therefore safe to say that the very least upon which a working woman can decently maintain herself in that city of the State where rents and food prices seem about the lowest, in Buffalo, is \$8.20 per week the year around, and in New York City, \$9.

Judged even by that prewar standard, it appears that one-fifth of the entire group of factory worker covered by the present investigation were not earning enough to support themselves decently in an up-State city, while in the confectionery factories the proportion rises almost to three-tenths. If \$10 be taken as a minimum living wage at the present cost of necessities, over one-third of the group fall below the standard. Nevertheless the earnings, unsatisfactory as they may be, show an increase over those prevailing four years earlier, at the date of the factory commission's investigation. The fourth report of the commission presents the following data as to the cumulative percentages of women workers earning less than specified sums in a given week for three of the industries covered by the above table:²

PERCENTAGE OF WOMEN WORKERS EARNING LESS THAN SPECIFIED SUMS IN A GIVEN WEEK, IN EACH OF THREE INDUSTRIES.

Earnings for given week.	Paper boxes.	Shirt industry.	Confectionery.
Less than \$6.....	39.6	40.2	54.8
Less than \$8.....	66.7	66.3	80.8
Less than \$10.....	87.0	83.6	92.7
Less than \$12.....	96.0	92.3	97.7
Less than \$14.....	99.2	96.9	99.1
\$14 and over.....	.8	3.1	.9

This shows from two-thirds to four-fifths of the women earning less than \$8, instead of the one-fifth of the later investigation. Whether the rise in the wage level equals the rise in the cost of living is not certain, but at least wages even in these usually overcrowded trades have been affected by the general upward movement.

The method of tabulation adopted by the industrial commission makes it possible to see the effect of lost time upon earnings. As stated above, two tabulations were made, one giving the actual earnings of all the women, the other giving the earnings of those who had worked a full week—in other words, who had received their

¹ New York State Factory Investigating Commission, Fourth Report, Vol. IV, p. 1609.

² *Ibid.*, Vol. II, pp. 195, 247, 317. Number of women included in investigation: Paper boxes, 7,456; shirt industry, 9,028; confectionery, 5,443.

full nominal rate of wages. The following table shows the difference between these two groups, both for workers in factories and for workers in mercantile establishments:

PERCENTAGE OF WORKERS IN SPECIFIED EARNINGS GROUPS.

Earnings.	Factory workers.		Store workers.	
	Total group considered.	Full-time workers.	Total group considered.	Full-time workers.
Less than \$6.....	10	1	3	1
\$6 but less than \$8.....	10	6	9	6
\$8 but less than \$10.....	15	14	17	16
\$10 but less than \$12.....	18	21	21	21
\$12 but less than \$14.....	15	17	18	20
\$14 and over.....	32	41	32	36

In the absence of fuller details than are supplied with these advance figures, it is not safe to assume that the whole difference shown above is due to lost time; yet on its face, the table seems to show that 13 per cent of the factory workers and 5 per cent of the store workers are pushed back into the group earning less than \$8 a week by broken time. Throughout, the difference is more marked for the factory than for the store workers, which agrees with what is known as to the greater steadiness of work in stores.

Earnings in New York City, the investigation showed, were considerably higher than those up State.

For all women tabulated, the median earnings for 16,215 women in the 237 factories in New York City was between \$12 and \$12.50, while that for 16,666 women in the 180 up State factories was between \$10.50 and \$11. Similarly, for 20,736 women in 88 mercantile establishments in New York City the median was between \$12 and \$12.50, while that for 7,543 women in 118 establishments up State was between \$9 and \$9.50.

The distribution by earnings groups of the women studied in New York City was as follows:

PERCENTAGE OF WOMEN IN SPECIFIED EARNINGS GROUPS, NEW YORK CITY.

Earnings.	Factory workers.		Store workers.	
	Total group considered.	Full-time workers.	Total group considered.	Full-time workers.
Under \$6.....	1	.....	2	.....
\$6 but under \$8.....	14	2	5	2
\$8 but under \$10.....	13	12	14	12
\$10 but under \$12.....	17	21	21	21
\$12 but under \$14.....	15	17	19	21
\$14 and over.....	40	48	39	44
\$20 and over.....	13	16	9	11

EMPLOYMENT OF WOMEN ON KANSAS CITY STREET RAILWAYS.

In a recent article¹ the general manager of the Kansas City Railways Co. gives his experience in the employment of women on work formerly done by men. The woman conductor is the most conspicuous of these new employees, but in Kansas City, at least, she is not the only one; women's work in connection with the street railways has been extended to cover additional clerical duties, car cleaning, and shop work. In all these capacities they seem to have done good work, but the main emphasis is placed upon their services as conductors.

Every official on the system is well satisfied with the work performed by the women conductors * * * They have shown themselves quick, bright, industrious, courteous, and universally enthusiastic over their work. Such disadvantages as we have found are not the fault of the women themselves, but rather due to mistakes which we naturally made in entering an untried field, and which are being rectified by actual experience.

The company had desired to hire women as conductors in 1917, but owing to the opposition of the unions and the attitude taken by representatives of the Department of Labor had deferred doing so. By May, 1918, the impossibility of securing men for the work had become so apparent that the unions tacitly withdrew their opposition, and 10 women were placed on the cars. By August the number had been increased to 125, and the company, and the public alike were pleased with their service. Their success seems due largely to the care with which the company selected its applicants and fitted the work to their needs, as well as to the ability of the women.

As a first step, before putting any women on the cars, the company provided proper facilities in the way of separate quarters at the barns, with rest rooms, etc., and with matrons in attendance; they also engaged a woman physician to examine the applicants and to look after the welfare of woman employees. The writer considers it absolutely essential that such provision should be made before women are engaged.

Preference was given to woman applicants in the following order: First, wives of former employees who had entered the Government service; second, wives of others in Government service; third, wives and relatives of men in the company's employ. Most of those engaged, the manager remarks, were wearing service pins. Applicants for positions as conductors must be between 21 and 40 years of age, over five feet in height, and weigh at least 120 pounds. If accepted, they are given two days' instruction in a school, and then for seven days are given instruction on the cars. They are paid the same hourly rate that men receive, and are guaranteed a mini-

¹ Aera, New York City, vol. 7, No. 2, September, 1918, pp. 93-102.

mum of six hours' pay per day. To a considerable extent the women have been employed on swing runs, coming on duty for the rush hours of the morning and evening but not working throughout the day. This arrangement is directly opposed to the attitude of the Wisconsin Industrial Commission,¹ which prohibited the employment of women as conductors during the rush periods, but it seems to have worked well.

Most of our women employees like the long relief between swings, as it gives them time to attend to household and other duties. In fact, this division of the working period was the attraction which brought many to the employment offices.

The possibility of trouble with the men over the employment of women is always present, but so far in Kansas City there has been no serious manifestation of this. Some of the women have entered the men's union, the others have formed a union of their own, and up to date, no serious opposition to the women seems to have been shown.

The physical effect of the work upon women has been carefully borne in mind. A reexamination made by the woman physician showed that after several month's work as conductors the women had generally gained in weight and in chest measure, found the work well within their powers, and were pleased with it. "All like the work, none want to quit and all are being benefited from the standpoint of health."

The writer considers it probable that women will remain in street-car work for some time to come, perhaps permanently, but nevertheless, he admits that there are drawbacks about their employment.

Women will not prove an economy. They will get out service, but we have found that they actually cost more per hour than do men. This is due in part to the overhead entailed by their use. Separate quarters and facilities, matrons, physician and proper supervision run up the hourly rate. With a guaranteed minimum large enough to attract the class of applicants desired it will be found impossible at times to procure enough work to make up the guaranty.

¹ See article on Restrictions on the employment of women on street railways in Wisconsin, in MONTHLY REVIEW, June, 1918, p. 160.

CHILD LABOR.

FEDERAL CHILD LABOR LAW.

In the issue of the MONTHLY LABOR REVIEW for July, 1918 (pp. 171-177) an account was given of the action of the Supreme Court of the United States declaring unconstitutional the Federal child labor law of September 1, 1916 (39 Stat. 675). As there stated, immediate steps were taken to accomplish the end in view in a manner not in conflict with the limitations imposed by the Constitution as interpreted by a majority of the court. Of the various plans considered, the one laying a tax on the products of child labor offered for shipment in interstate commerce was adopted, such a provision being incorporated in the act to provide revenue, approved February 24, 1919. This measure was incorporated in the act after it reached the Senate, was accepted without change by the conferees of the House and Senate, and was agreed to by the House, with other recommendations of the conferees, on February 8, and by the Senate on February 13.

The substantive features of the law correspond to those of the act of September 1, 1916, and are summarized by the conferees as follows:

This amendment imposes a tax of 10 per cent on the net profits from the operation of (a) any mine or quarry situated in the United States in which children under the age of 16 years have been employed or permitted to work during any portion of the taxable year; or (b) any mill, cannery, workshop, factory, or manufacturing establishment situated in the United States in which children under the age of 14 years have been employed or permitted to work, or children between the ages of 14 and 16 years have been employed or permitted to work more than eight hours in any day or more than six days in any week, or after the hour of 7 o'clock p. m., or before the hour of 6 o'clock a. m., during any portion of the taxable year. Such tax is not to apply in the case of an employer relying in good faith upon an employment certificate issued under regulations prescribed by a board composed of the Secretary of the Treasury, the Secretary of Labor, and the Commissioner of Internal Revenue; nor in the case of an employer who satisfies the Secretary of the Treasury that his employment of a child under the prescribed ages was due to an honest mistake of fact as to the age of such child.

Being a tax measure, its administration naturally rests with the Secretary of the Treasury, and specifically with the Commissioner of Internal Revenue. However, the Secretary of Labor is made a member of a board to formulate regulations as to certificates, etc.; and the Secretary of Labor, or any person duly authorized by him, has authority to make inspections of any mine, quarry, mill, cannery, factory, etc., on request of the Commissioner of Internal Revenue.

It thus becomes possible for the administrators of this part of the revenue act to avail themselves of the experience and equipment of the Children's Bureau of the Department of Labor to which the enforcement of the earlier act was practically intrusted.

EFFECT OF WAR-TIME EMPLOYMENT UPON ENGLISH BOYS.

In the winter of 1917-18, at the request of the Minister of Reconstruction, a study was made of juvenile employment in England, dealing especially with the question of what had been the effect upon the young workers of their war-time industrial experience, and how they could best be fitted into the changed conditions which follow the coming of peace. About 3,000 reports were received, either from investigators who visited firms employing young people, or from employers themselves, and these were used as the basis for a report recently issued.¹ The investigation covered both sexes, but the report deals chiefly with boys.

The first effect of the war was widespread unemployment among women and juveniles. The number of young people applying for positions at the employment exchanges increased immensely, while applications for young people as employees almost ceased. It was supposed that this unemployment would be a permanent feature of the war, and the situation was considered grave.

So serious did the growth of unemployment among young people appear, that special steps were taken in London to cope with it. Children who had left school were advised to return to it. Recreation clubs, workrooms and classes for young people were established.

In the case of juveniles, however, the situation righted itself speedily. By December, 1914, the number of boys registering at employment exchanges was lower than before the outbreak of the war, and for the first six months of 1915 the vacancies notified were actually in excess of the number of applicants. In connection with this boom in employment, wages in war industries took a sharp upward turn, and many boys gave up their prewar jobs to seek more profitable employment on war-contract work. In 1916 a reaction set in, and the demand for boys slackened. This movement was intensified by the practice of substituting women for men, which by October, 1916, was well established. "This policy, though not originally intended to displace boys below military age, has undoubtedly been responsible for the discharge of thousands of boys from munitions and other war work." During 1917 unemployment among juveniles increased, and for the six months' period ending November, 1917, the employment

¹ Great Britain. Ministry of Reconstruction. *Juvenile employment during the war and after*. London, 1918. 114 pp.

exchanges showed a larger number of boys unplaced than for the corresponding period in 1914, although in the latter year unemployment had been a grave national problem. In January, 1918, the number of boys under 18 years in the principal industries was estimated at 1,354,000, an increase of 94,000 over the number employed July, 1914.

The increased demand for juvenile workers in the early days of the war was met in part by the employment outside of school hours of children still attending school, and in part by the exemption of children under 14 years from school attendance. The number in the latter group is believed to have been large.

According to the report of the industrial (war inquiries) branch of the Board of Trade for October, 1917, the boys entering employment earlier than usual, which means in most cases leaving school before 14, amounted at that time to 90,000. It has been estimated that 36 per cent of the children leaving school in Sheffield are under 14, the majority having only just passed their thirteenth birthday, and that in Leeds about 50 per cent of the boys between 13 and 14 are employed in industry.

The distribution of employed juveniles has changed considerably during the war.

The movement of boys has been away from the occupations described as "Finance and commerce," "Agriculture," and the "Post office," into the occupations described as "Industries," "Transport," and "Government employment." The first three occupations lost between them 30,000 boys; the last three occupations gained between them 100,500. * * * Speaking broadly, therefore, there has been a redistribution of boys' employments as between industrial occupations and commercial or clerical occupations, and as between industrial occupations and agriculture. The boy who before the war would have become a clerk, or remained upon the land, or entered the post office, has in the last three years entered some branch of industry or transport.

In general the industrial experience of these boys has not been such as to make them desirable employees in the post-war period. Many of them have suffered physically from the strain of long hours and exhausting work. In some cases they were given work usually done by men, with serious results to their health from the overstrain; in others the work was not in itself too heavy, but hours were almost incredibly long, and night work was not unusual. Apart from its direct physical effect, overtime was observed to produce mental slowness and almost dullness. An extract is given from a report submitted by the juvenile advisory committee in Huddersfield in 1916:

The effects of overtime on boys are greatly noticed in their laxity of grasping the ideas of the tasks submitted to them, and their languid and slow way in proceeding with them. When working ordinary time, they are bright and work with a great deal more diligence. A local club leader writes: "I meet fifteen to twenty lads two or three times a week, and there is a marked difference in appearance and deportment generally in those who are working overtime. The latter are dull, heavy-eyed, and listless, desiring only to loaf about."

A second and very serious effect of war conditions was the diminution of opportunities for training. The necessity for rapid output led to extreme subdivision of processes, and the reduction of an operation to its simplest elements. Apprenticeship fell almost into disuse, or was employed mainly as an excuse for paying a lower wage while not giving real training. The boy who would normally have learned a trade now learned one operation, or at most gained dexterity in the performance of a narrow routine of processes. The situation itself made training difficult.

Many of the skilled men who would naturally train learners are absent. The boys themselves may be called up for military service when they reach the age of 18, and it does not seem worth while to teach them a trade which they will abandon in the course of a year or two. Most important of all, firms have been under a constant pressure to increase their output. If output is to be increased with a depleted staff of trained workers, work must be subdivided and specialized.

Even when employers were able and willing to give educative work and training, boys were unwilling to take such positions on account of the low earnings involved. Reports soon spread abroad of the amounts earned by boys on repetition work, and thereafter the boy's great aim was to find a place where he, too, might earn these dazzling amounts, regardless of whether or not the work was a blind-alley occupation. "Indentures were thrown to the winds; places where useful trades could be learned were left behind; entreaties of employers were rejected; parents were often treated with indifference." The monotony of repetition work did not seem to constitute any objection to it in the minds of the boys, provided it paid good wages. In fact, they opposed any plan for changing them from one occupation to another, which might give them a knowledge of the trade as a whole, but would certainly cut down their earnings. One instance is mentioned of a boy who for 11 months had done nothing but stamp the denomination of the shell on the shell itself, and who "resented very much the suggestion that he should have a change."

But at the same time that the boys were thus, in a sense, being unfitted for the demands of normal industry, they were earning more than they had ever dreamed of, and were acquiring a sense of their value as workers which would inevitably be a handicap when war conditions should end. The report does not find any justification for the extreme tales of boys' earnings, but gives figures showing earnings running up to as much, in exceptional cases, as £3 (\$14.60) a week for boys of 15 years, and £5 (\$24.33) a week for boys of 17. In considering these earnings, the decreased purchasing power of money must be kept in mind, and also the fact that they were not typical. Still, ordinarily bright boys could earn from 25s. (\$6.08) to 40s. (\$9.73) a week at repetition work. Naturally, once having earned

such wages they were reluctant to take less, and the juvenile employment committees complain bitterly of the difficulty of placing boys out of work, on account of the high wages they ask.

Boys are asking exorbitantly high wages. One boy of 15 has given up a place at because he considered 15s. [\$3.65] not enough; he has been out of work for three weeks. A lad of 14 has given up a place on a farm because he wanted more than 12s. [\$2.92] a week. A lad of 13 refused to go to the post office as a messenger because he thinks 6s. [\$1.46] too small a wage.¹

Other juvenile employment committees make the same complaint, and say, moreover, that the boys have a tendency to become drifters, moving from place to place in search of higher wages, apparently without any sense of responsibility to their employers or any idea of the need of keeping a job if they have it. "They shift from place to place in search of higher and yet higher wages, their engagements being interspersed with periods of odd jobs in the streets."

Employers who were covered by the investigation expected that at the end of the war there would be a marked falling off in the demand for young workers, and some frankly admitted that the boys were not being fitted for peace-time employment. They pointed out that repetition and the splitting of major operations into the great number of small operations now used is possible only on war work, and that if juveniles are to be employed after the war in many of the trades in which they are now engaged, as, for example, engineering, someone, either the State or the employer, must give them the training which they are now not receiving. Of course they can not expect men's wages while receiving boys' training, and the author of the report considers the question of their attitude toward such an offer a serious one.

The truth is that the nation, having insisted that during the war boys shall do the work in industry of men, will find it difficult, when the war is over, to induce them to accept the payment of boys. In arduousness of labor, in earnings, in character, and outlook upon life a generation of young persons has been forced into precocious maturity. Their morale, as much as their physique and industrial training, has undergone, if not deterioration—and often it has deteriorated—at least an unnatural and premature development. When the artificial conditions of war are removed habits will require to be changed, standards to be revised, expectations to be written down. The change from a high to a low economic temperature, from a world in which they are important to one in which they may temporarily be superfluous, will in any case be immense. Only measures carefully designed to break the shock of transition can prevent it from being disastrous.

A tentative draft of a scheme embodying such measures is presented in the report. Its salient features are a temporary raising of the school attendance age to 16 years in order to diminish competition among the juvenile seekers for work; close and careful work on

¹ Brighton Juvenile Employment Committee, Report, 1917.

the part of the juvenile care committees, juvenile employment committees and labor exchanges to secure positions for as many as possible under good conditions; and the maintenance of centers in which boys and girls can receive training and out-of-work pay sufficient for their support until suitable positions can be secured for them. Unfortunately these plans had not been worked out and adopted before the signing of the armistice, so that, like their elders, the juvenile workers had to take their chances in the hastily devised reconstruction schemes which were put forth within the week following the cessation of hostilities. As yet no news has been received from England of how the young people are faring in the crisis of unemployment which has come upon the land, or what part they are playing in the outbreak of strikes now prevailing.

INDUSTRIAL ACCIDENTS AND DISEASES.

INDUSTRIAL ACCIDENTS IN MASSACHUSETTS IN 1916-17.

From an administrative point of view the work of the Massachusetts Industrial Accident Board increased materially during the year ending June 30, 1917, as compared with the preceding years, according to the board's report for the year 1916-17.¹ In that year a total of 174,372 accident reports, both trivial and serious cases, were filed with the board, an increase of 26.6 per cent over the preceding year. In this connection the Industrial Accident Board has issued a statement showing the total number of accidents and the average per month for the period, July 1, 1912, when the Compensation Act became effective, to January 1, 1919, with an accompanying chart reviewing the course of industrial accident frequency in that period. A brief analysis of this curve indicates that in the first three years of the act the movement was fairly level; in the fourth year there was practically a continuous increase to a higher level of accident frequency which has continued in general throughout the fifth, sixth, and first half of the seventh year. In this later period, however, there has been greater fluctuation than there was during the preceding period. In addition to the longer term changes there are the shorter fluctuations due to regular seasonal changes, or in some instances for certain factors disturbing to industrial activity. These conditions, when indicated, are mentioned in the ensuing survey by years.

In 1912-13 the total reports received numbered 90,631, with an average per month of 7,553. After the increase in the reports received in August over July, when the act went into effect, the balance of the experience was fairly level.

In 1913-14 the total number of injuries was higher than in the preceding year, a total of 98,729, and a monthly average of 8,227, being received. Here again the general level was fairly uniform.

In 1914-15 total reports were 95,769, a decrease over the preceding period. This decrease in the total number of reports was due primarily to the distinctly downward movement from July to February, following the slowing down of business and industry incident to the outbreak of the war in Europe.

In 1915-16 there were 137,695 reports. This was the beginning of the upward climb of accident frequency, leading to still greater

¹ Massachusetts. Fifth annual report of Industrial Accident Board, July 1, 1916, to June 30, 1917. Public Document No. 105. Boston, 1918. 254 pp.

magnitude in the following periods, in consequence of the great industrial expansion.

In 1916-17 total accidents were 174,372, with a monthly average of 14,531. On this level of injuries the monthly fluctuations were more pronounced than in the preceding periods.

In 1917-18, with the expectation of increases in the months of August, October, and November, the general movement through February was downward. The number of reports decreased from 14,887 in November to 11,591 in February. Part of this decrease was due to the regulations and shortage on fuel and the consequent retardation of industry. From February the movement was again upward. The total for the year was 170,718, approximately 4,000 less than in the preceding year.

In 1918-19, at the outset the indication was that the experience would be extremely heavy. In August of 1918 the high point of the frequency for the six months' period, as well as for the entire experience since 1912, was reached with a total of 18,336 reports. In September and October there were large decreases in the number of accidents, due in part to the prevalence of the influenza epidemic. In November and December the curve again turned upward but only slightly as compared with the previous high level. A more rapid increase perhaps was interrupted by the signing of the armistice and subsequent industrial factors resulting therefrom.

The following table shows payments and estimated outstanding payments representing the combined experience reported by insurance companies for the period July 1, 1912, to June 30, 1918:¹

PAYMENTS AND ESTIMATED OUTSTANDING PAYMENTS, MASSACHUSETTS WORKMEN'S COMPENSATION ACT, FOR EACH YEAR ENDING JUNE 30, 1913 TO 1918.

Type of benefit.	1913	1914	1915	1916	1917	1918
Medical payments.	\$414,195.42	\$556,250.45	\$587,769.99	\$834,804.52	\$1,053,303.72	\$1,019,518.84
Fatal.....	395,541.89	578,705.75	748,493.57	885,040.48	880,656.10	870,182.00
Nonfatal.....	867,643.51	1,486,796.71	1,502,185.43	2,367,106.49	2,446,906.37	2,757,814.57
Total.....	1,677,880.82	2,621,752.91	2,838,448.99	4,086,951.49	4,380,866.19	4,647,515.41

Referring again to the fifth annual report, it should be noted that of the 174,372 accidents reported, 78,789, or 45.2 per cent, are tabulatable, that is, accidents in which the incapacity extended beyond the day on which the injury occurred. Approximately 90 per cent of the tabulatable cases were insured under the workmen's compensation act. There were 481 fatal cases, of which 78.4 per cent were insured; 21 permanent disabilities; 1,684 permanent partial disabilities; and 76,603 temporary disabilities. Of the nonfatal

¹ This table appears in the fifth annual report, except the last column, which was furnished the Bureau by the Industrial Accident Board under date of Jan. 9, 1919.

tabulatable accidents the incapacity lasted for 14 days or less in 45,344 (57.9 per cent) cases. Approximately 56 per cent of the nonfatal injuries were in the \$8.01 to \$15 wage group. The average cost per benefit case is given as follows: Medical, \$10.09; fatal, \$2,630.74; and nonfatal, \$69.60; with a total average cost of \$38.98.

INDUSTRIAL ACCIDENTS AMONG BRIDGE AND STRUCTURAL-IRON WORKERS, CHICAGO.

The second or supplementary industrial accident report to the Bridge and Structural Iron Workers' Union, No. 1, of Chicago, covering the period April 1 to December 31, 1917, has just been received by this bureau.¹ It is of particular interest because it presents a real effort on the part of a very hazardous trade to diagnose scientifically the accident problem as affecting its own workers and offers a strong argument for legislation to prevent the occurrence of industrial accidents. The report notes that during the nine months ending December 31, 1917, there were 129 accidents reported, an average of 14.3 per month, as against an average of 19.7 per month during the 12 months ending March 31, 1917. Attention is called to the fact that more than half of the accidents occurred during the first half of the year, the first half of the week, and the first half of the day, which fact is also noted in connection with the accidents occurring during the twelve months preceding April 1, 1917. "It may or may not have any significance, * * *" declares the report, "nevertheless there is the possibility that the physical energy created during the preceding period of rest may be driven to an extreme where mental alertness and vigilance may be unequal to the demand. On the other hand, where bodily fatigue is slowing down the speed of the worker, he is less liable to accident as long as his mental alertness has not suffered a decline corresponding or equaling the fatigue of the body."

In the preceding report, to which reference has been made, it was noted that the Monday accidents during the open Sunday saloon period amounted to nearly 24.4 per cent of the total, but that immediately after the Sunday closing, a considerable decrease was evident. The present report further confirms this fact by presenting a statement showing that during the 13 months after the closed Sunday saloon, 11.8 per cent of the accidents occurred on Monday as compared with 24.4 per cent which occurred on Monday during eight preceding months when saloons were open on Sunday.

¹ Bridge and Structural Iron Workers' Union, No. 1, Chicago. Second or supplementary industrial accident report, for the period Apr. 1, 1917, to Dec. 31, 1917. Chicago, December, 1918. 14 pp. The first report was noted in the MONTHLY REVIEW for February, 1918 (pp. 186-189).

That such a great decrease has only occurred during Mondays is no doubt due to the period of rest and healthful recreation enjoyed by the workers during Sunday. Not only is the worker who spends Sunday as a frequenter of the saloon a danger to himself, but still more so to his fellow workers upon resuming his day's labor. The general nervous condition, with lowered mental faculties, as well as the trembling hand and unsteady gait so significant in the man who indulges in intoxicating liquors, may account for many of the accidents that have befallen our brothers in the past.

A table is presented to show that most of the accidents (49.6 per cent) occurred to riveters and workers employed in the raising gang, but this is partly explained by the fact that the largest number of men are employed in these positions. The classification of accidents by causes reveals 22 per cent due to workers being caught in machinery or material, and 21.3 per cent due to workers being struck by machinery or falling objects.

That the hazards of the industry have been materially reduced is indicated by the following statement:

With 239 members reported injured during the time covered in our previous report, April, 1916 to March, 1917, amounting to nearly 24 per cent on an average membership of 1,000, we have for the nine months, April to December, 1917, a total of 129 accidents, which on an estimated average membership of 850 amounts to nearly 15 per cent, making a yearly rate of over 18 per cent. This decrease is considerable—nearly 24 per cent—and seems to indicate that with lots of work and the prospect of steady employment the men have not permitted themselves to be unduly rushed in order to hold jobs, and consequently they have been able to exercise more care in the execution of their day's work.

It is felt, however, that many of the accidents could have been prevented, especially those due to defective supports and those where workers were strained by lifting. Proper supervision in the erection of scaffolding or other support would eliminate accidents under this head; a sufficient number of men to assist in the work would reduce the cases of strain caused by lifting heavy pieces of material; and the safe covering of machinery and proper overhead protection would materially decrease the number of accidents caused by machinery or by falling objects.

CLINICAL STUDY OF FREQUENCY OF LEAD, TURPENTINE, AND BENZINE POISONING IN 402 PAINTERS.

In order to obtain a more concise idea of the extent to which actively employed painters, most of whom thought themselves in excellent health, gave evidence of damage inflicted by lead paints, a clinical study of the frequency of lead, turpentine, and benzine poisoning in 402 painters was recently made under the direction of Louis I. Harris, director, bureau of preventable disease, New York City department of health. The results of this study are published in the Archives of Internal Medicine for August, 1918 (pp. 129-156),

and reprinted in pamphlet form by the American Medical Association, Chicago. The report states that those examined were typical of the entire craft, no effort being made to select special groups according to age or other special distinction. All were employed in interior painting and decorating, some of them doing wall paper hanging from time to time. There were no sign painters, carriage, or structural iron painters among them. The cases are classified in the report in four general groups: (1) Active or positive cases; (2) latent inactive, or laboratory positive cases; (3) doubtful or borderline cases; and (4) negative or normal cases.

It should be stated at the outset that "while there has been much dispute as to the relative toxic effects of the various forms of lead, it may be accepted as a general rule that lead pigments in whatever form employed tend to induce lead poisoning with slightly varying degrees of rapidity. The colic, constipation, headache, joint and muscular pains, anemia, lead line on the gums, mental and nervous symptoms, especially paralysis or diminished strength of the extremities produced by lead, are too familiar to require more than passing mention. Most lead pigments are now sold mixed with oil, so that the effects of dry lead pigment inhaled or swallowed as dust when mixing paints are, nowadays and in this country in particular, comparatively negligible." However, there is the well-recognized danger of dust that comes from smoothing paint before applying an additional coat, or from removing old paint, and the danger from hands, mustache, or beard that may be soiled with lead dust and which are not properly cleaned before meals.

It should be further stated that turpentine is used to reduce lead and oil mixture to the desired thinness or consistency, and to assist in the drying of paint, and that benzine, which is highly volatile, is mixed with the paints, especially the cheaper ones, when quick drying is desired.

As to the concrete results of the study, the report states first that 163, a rate of prevalence of 40 per cent, of the active cases of lead poisoning were found among the 402 painters examined; that all of these showed definite clinical signs of plumbism; that 72, or 44.2 per cent, of the active cases of lead poisoning among these painters were found to have lead in the urine in addition to clinical evidence, while 35 were found to have lead in the urine without manifesting clinical signs. Thus nearly one-half of all the painters examined, 48.7 per cent, gave evidence of active or latent lead poisoning. Attention is called to the fact that it is very rare for a painter suffering from the effects of turpentine, benzine, or other volatile chemicals used as thinners or driers to consult a physician, which fact makes it virtually impossible to make any reliable estimate founded on medical

observation and study as to the frequency of intoxication produced by these poisonous substances or to attempt to differentiate from the clinical histories given by these men precisely which one of these volatile chemicals—turpentine, benzine, wood alcohol, acetone, benzol, etc.—was responsible in any given case for the symptoms described.

The report presents a table showing that a comparatively small number survive as active members of the trade after having attained the age of 50 years; that 64 per cent of the active cases of lead poisoning occurred between the ages of 30 and 49 years, whereas 71, or 44.9 per cent of all those who apparently were free from symptoms of plumbism, were less than 30 years of age.

Taken in connection with the fact that most painters enter the trade before their twentieth year, and being skilled workers follow it the rest of their lives, and that of the 109 [shown in the table] who were more than 40 years of age, 59 per cent were found to be suffering from active or latent plumbism, it seems fair to conclude that the action of lead is slow in asserting itself, but that less than half who have passed the age of 40 escape the disease.

Another table is given showing that 63 negative cases were engaged at the painter's trade for a period of from 10 to 19 years, and that 34 per cent of all those examined who had been painters for 10 years or more were active cases of lead poisoning, while if latent cases are included the percentage is increased to 42. This table "seems to emphasize the fact that the heaviest incidence of saturnism is to be found among those who have been painters for 10 years or more." The history of 304 cases with reference to the use of alcohol was obtained, the information seeming to indicate that alcoholic indulgence does not appear to be a marked predisposing factor toward lead poisoning "as it so frequently has been found." Of 134 active cases only 29.9 per cent were excessive users of alcohol.

An investigation of the precautions taken by painters against lead poisoning showed that while 45 (11.2 per cent) were in the habit of regularly drinking one glass of milk per day and 81 (20.1 per cent) drank from a pint to a quart daily, the remaining 276 (68.7 per cent) were extremely lax in this particular.

As a class they seemed unfamiliar with the fact that a moderate-sized breakfast and albuminous food (milk in particular) left little free acid in the stomach to act as a solvent of lead dust that might be swallowed during work.

The report devotes considerable space to a review of the symptoms of lead poisoning, including colic, constipation, headache and other nervous symptoms, lead in the urine, digestive disturbances, loss of weight and muscular strength, anemia, heart affections, nephritis, and other symptoms, noting the number of cases experiencing each symptom. Some pathological conditions of general interest are also noted.

The remedies mentioned for the prevention of occupational diseases among painters are grouped under two heads: (1) Public health measures and (2) personal hygiene. For effective public health measures full information is necessary as to the extent and prevalence of a given disease and of all circumstances which predispose to its occurrence, but, declares the report, "it is essential, above all things else, not only that physicians shall be held legally responsible for the reporting of all cases of lead poisoning that come to their professional notice, but employers, large and small, should be required by law to keep a register of all cases of occupational diseases and of accidents resulting from work which occur among their employees. If, by a system of factory inspection and adequate penalties, such a law were enforced, the frequency of such diseases would become fully known to the public health authorities." Specific provisions that should be enacted are the following:

1. The mixing of dry lead pigments with oil or paints, while not a frequent source of danger, should not be permitted except when proper provision for the efficient removal of lead dust that may be generated in the process has been made.

2. Dry sandpapering should be prohibited, the use of pumice stone and water, or sandpaper moistened with one of the cheap mineral oils having a low flash point, should be made mandatory.

3. When chipping of paint, or the removal of paint by the use of acetone, wood alcohol, benzine, benzol, or other volatile poisonous agent is employed, protective clothes and gloves of suitable character, kept in good repair, should be provided by the employer. If this work is done in confined or inclosed spaces, adequate means for ventilation should be provided. The enforced use of gloves in painting, and also in removing paint, would be an ideal measure of prevention, because it is through soiled fingers more largely than through any other source that poison is introduced into the body.

The report concludes its statement of public health measures by emphasizing the need for compulsory compensation for occupational diseases and for occupational lead poisoning in particular, which, it is stated, "will do more to safeguard the health and lives of workers than any other single legal or hygienic measure. It should not be delayed."

As to personal hygiene, the report states that the foremost precaution to be taken is to wash the face, mouth, hands, and mustache, particularly before eating. It is also advised that eating be done before going to work, as lead seems to be absorbed more readily from an empty stomach than from one containing milk or other food. The use of alcohol should be avoided, and smoking "constitutes a grave danger" to painters because lead dust gets into the mouth through handling cigars, etc.

WORKMEN'S COMPENSATION AND SOCIAL INSURANCE.

COMPARISON OF EXPERIENCE UNDER WORKMEN'S COMPENSATION AND EMPLOYERS' LIABILITY SYSTEMS.

BY CARL HOOKSTADT.

There are at present in the United States approximately 12,000,000 industrial employees and 1,300,000 railroad employees not covered by workmen's compensation laws. Interstate railroad employees are excluded by virtue of the Federal Employers' Liability Act; about 30 per cent of the employees in the compensation States are excluded from compensation benefits by virtue of the limitations in the scope of the acts; and 10 States have not yet enacted compensation laws.

In the present article an attempt has been made to summarize and collate existing data relative to the operation of workmen's compensation and employers' liability systems. Special consideration has been given to railroad employees, inasmuch as a Federal compensation act for interstate railroad employees has recently been urgently advocated in many quarters.

The present article does not pretend to be an exhaustive study of the subject. However, the data presented cover most of the important investigations and seem to prove quite conclusively the superior advantages of a workmen's compensation as opposed to an employers' liability system. For more detailed data contained in the several investigations quoted, see Appendixes A to W, pp. 237 to 248.

NUMBER OF RAILROAD EMPLOYEES AND ACCIDENTS.

Some of the railroad brotherhoods have been somewhat apathetic towards a Federal workmen's compensation law, preferring an employers' liability act under which the employees could obtain heavy damages for those accidents in which the railroad company was negligent, while other cases could be taken care of through benefit and insurance funds. However, railroad "trainmen"—those covered by the four railroad brotherhoods—constitute but 24 per cent of the total railroad employees in the United States, exclusive of shopmen (see Appendix A). The thousands of trackmen, section hands, and other employees have no strong organizations to look after their interests in case of accident. Moreover, of the total number of steam railroad accidents (excluding shop accidents) in the United States

in 1916 sustained by railroad employees, "trainmen" sustained only 50 per cent of the fatal accidents and 42 per cent of the nonfatal accidents (see Appendix B). Of the total number of steam railroad accidents (excluding shop accidents) in Illinois for the four-year period 1905-1908 sustained by railroad employees, "trainmen" sustained only 50 per cent of the fatal accidents and 52 per cent of the nonfatal accidents (see Appendix C). Thus it will be seen that less than one-fourth of the railroad employees and only one-half of the railroad accidents are covered by the four brotherhood organizations.

PER CENT OF INJURED EMPLOYEES RECOVERING NO DAMAGES UNDER EMPLOYERS' LIABILITY SYSTEM.

One of the many criticisms brought against the employers' liability system is that but relatively few injured employees recover any damages. The percentage of accident cases in which practically no damages were recovered is shown in the following summary table. For more detailed information reference may be had to the various appendixes designated.

TABLE 1.—PER CENT OF ACCIDENT CASES IN WHICH NO DAMAGES WERE RECOVERED.

Number and kind of accident cases.	No recovery, or only small amount.	Data shown in Appendix—
47 fatal railroad cases (married men) in Erie County, N. Y.	53 per cent received only funeral expenses or less.	D.
68 fatal industrial cases (married men) in Erie County, N. Y.	38 per cent received only funeral expenses or less.	D.
279 fatal cases in Erie County and New York City.	45 per cent received only funeral expenses or less.	E.
279 fatal railroad cases in Illinois.....	13 per cent received nothing.....	F.
614 fatal cases (railroad and industrial) in Illinois.	33 per cent received nothing.....	F.
175 fatal cases in Cuyahoga County, Ohio.....	64 per cent received nothing.....	G.
370 fatal cases in Ohio (taken from court records).	37 per cent received less than \$300.....	G.
355 fatal cases involving dependents in Allegheny County, Pa.	57 per cent received \$100 or less.....	H.
51 fatal cases in Wisconsin.....	31 per cent received under \$100.....	I.
306 nonfatal cases in Wisconsin.....	24 per cent received nothing, while 37 per cent received all or part of doctor bill only.	I.
131 nonfatal cases in Wisconsin.....	21 per cent received nothing, while 43 per cent received amount of doctor bill only.	I.
181 fatal cases (married men) in Erie County and Manhattan Borough, N. Y.	31 per cent received nothing.....	J.
57 fatal cases in New York.....	18 per cent received nothing.....	K.
10 permanent total disability cases in New York.	30 per cent received nothing.....	K.
71 permanent partial disability cases in New York.	25 per cent received nothing.....	K.
223 cases.....	80 per cent received nothing.....	L.

It will be seen from Table 1 that the percentage of those recovering no damages for injuries sustained ranged from 13 to 80 per cent. The following summary conclusion of the New York Employers' Liability Commission probably epitomizes the general experience under employers' liability systems:

From our detailed investigation, borne out as it is by the results of similar studies in States where the same general law prevails, and strengthened by testimony given

before us, we are brought to the conclusion that, under our employers' liability laws, a large proportion (over 50 per cent) of the workmen injured by accidents of employment and the dependents of those killed get nothing or next to nothing, and that only a very small proportion recover an amount that is in any way commensurate with their loss.¹

SETTLEMENTS UNDER EMPLOYERS' LIABILITY AND WORKMEN'S COMPENSATION SYSTEMS.

The absolute amounts received in settlements or awards under employers' liability and workmen's compensation systems, as disclosed by various investigations, are shown in the following table:

TABLE 2.—AVERAGE AMOUNT OF SETTLEMENT UNDER EMPLOYERS' LIABILITY AND WORKMEN'S COMPENSATION SYSTEMS FOR RAILROAD AND INDUSTRIAL ACCIDENTS.

DEATH.

Accident experience of—	Num-ber of cases.	Average amount paid under employers' liability.	Average amount receivable under workmen's compensation.	Data shown in Appen-dix—
United States, 1908-1910 (57 per cent of all railroad employees) ..	5, 672	\$1, 221	.....	M.
Atchison, Topeka & Santa Fe Ry. Co., 1908-1910	213	1, 228	\$2, 426	N.
Massachusetts, 1912-1916 (mostly railroad accidents)	135	¹ 1, 483	2, 344	Q.
New York, 1914-1915 (railroad accidents)	29	.....	² 3, 379	R.
New York Central Lines, 1908-1910 .....	.....	1, 020	.....	S.
Erie County, N. Y., 1907-1908 (railroad accidents)	45	1, 018	.....	D.
Erie County, N. Y., 1907-1908 (industrial accidents)	60	343	.....	D.
Erie County and New York City, 1907-1908 (railroad and industrial accidents)	236	551	.....	E.
Illinois, 1905-1908 (railroad accidents except railroad laborers) ..	202	1, 077	.....	F.
Illinois, 1905-1908 (all accidents)	614	577	.....	F.
Ohio, 1905-1910 (industrial accidents)	285	839	.....	G.
Ohio, 1905-1910 (industrial court cases)	370	949	.....	G.
Pennsylvania, 1915 (industrial accidents)	134	261	.....	T.
Connecticut, 1915 (industrial accidents)	53	.....	² 2, 055	T.
Ohio, 1915 (industrial accidents)	206	.....	² 3, 008	T.

PERMANENT PARTIAL DISABILITIES.

United States, 1908-1910 (57 per cent of all railroad employees) ..	1, 374	³ \$1, 595	.....	O.
Atchison, Topeka & Santa Fe Ry. Co., 1908-1910	136	910	\$2, 035	P.
Massachusetts, 1913-1916 (industrial accidents)	118	.....	⁴ 1, 614	U.

¹ Average of only those cases in which settlement was made; in all other cases the average given is the average of all accidents.

² Average amount actually awarded.

³ Average award for loss of limb only.

⁴ Average amount actually awarded for loss of limb only.

An analysis of the foregoing table shows that (1) for fatal accidents sustained by railroad employees the average amount of damages recovered under employers' liability is about one-half of the average amount received under reasonably liberal compensation laws; (2) a larger amount of damages is recovered for railroad accidents than for industrial accidents; (3) under employers' liability, the average amount of damages paid for fatal accidents is less than the average amount of damages paid for permanent partial disabilities; (4) for

¹ First report of New York Employers' Liability Commission, p. 26.

permanent partial disabilities the average amount paid under liberal compensation laws is somewhat higher than the average amount of damages for such accidents paid by railroads.

COMPENSATION PAYABLE UNDER STATE COMPENSATION LAWS FOR DEATH AND FOR LOSS OF HAND.¹

The following table shows the amount of compensation which would be received under the several State compensation laws as of January 1, 1919, in case of death and of loss of major hand at the wrist sustained by a married man, 35 years of age, receiving \$15 a week, and having a dependent wife, 30 years of age, and three normal dependent children, 3, 6, and 9 years of age. It has been assumed that the loss of the hand results in a total disability of 15 weeks and a subsequent partial disability of 50 per cent for life. The amounts in this table should be compared with the amounts in the preceding table showing average damages paid under employers' liability laws.

TABLE 3.—COMPENSATION PAYABLE UNDER STATE LAWS FOR DEATH AND FOR LOSS OF HAND.

State.	Compensation payable under State laws for—		State.	Compensation payable under State laws for—	
	Death.	Loss of hand.		Death.	Loss of hand.
Alaska.....	\$4,800.00	\$2,640.00	Nevada.....	\$11,230.22	\$1,412.50
Arizona.....	3,000.00	112.00	New Hampshire.....	2,250.00	97.50
California.....	2,340.00	14,000.00	New Jersey.....	2,350.00	1,173.75
Colorado.....	2,347.50	2,232.75	New Mexico.....	2,525.00	1,222.50
Connecticut.....	2,440.00	780.00	New York.....	11,205.22	825.00
Delaware.....	2,125.00	1,170.00	Ohio.....	4,320.00	2,440.00
Hawaii.....	2,908.00	1,185.00	Oklahoma.....	13,480.92	1,640.00
Idaho.....	3,400.00	1,830.00	Oregon.....	2,575.00	1,500.00
Illinois.....	3,135.00	1,237.50	Pennsylvania.....	(²)	1,787.89
Indiana.....	2,350.00	1,599.00	Porto Rico.....	(³)	1,312.50
Iowa.....	2,350.00	1,237.50	Rhode Island.....	2,250.00	472.50
Kansas.....	2,340.00	1,125.00	South Dakota.....	3,000.00	1,612.50
Kentucky.....	3,341.25	1,125.00	Texas.....	3,240.00	1,237.50
Louisiana.....	2,575.00	1,462.50	Utah.....	2,732.25	1,350.00
Maine.....	2,250.00	937.50	Vermont.....	1,855.00	1,137.50
Maryland.....	3,202.50	11,593.75	Virginia.....	2,350.00	1,125.00
Massachusetts.....	4,000.00	635.71	Washington.....	10,354.20	1,385.00
Michigan.....	2,250.00	13,135.71	West Virginia.....	9,156.78	1,012.50
Minnesota.....	2,575.00	1,125.00	Wisconsin.....	3,235.00	2,340.00
Montana.....	3,075.00	1,350.00	Wyoming.....	3,000.00	935.20
Nebraska.....	3,600.00	1,125.00	United States.....	12,486.84	8,433.51
		1,500.00			

¹ Includes compensation for partial disability.

² Maximum \$3,000 to \$4,000, graded according to earning capacity of employee and number of dependents.

³ Maximum \$2,500, minimum \$1,300; graded in proportion to rate of wages earned at time of injury.

PER CENT OF ACTIONABLE CLAIMS UNDER EMPLOYERS' LIABILITY.

It is impossible to determine accurately the number or percentage of actionable claims, i. e., the percentage of accidents for which the employer will be liable under the various employers' liability laws. The

¹ Taken from United States Bureau of Labor Statistics Bulletin No. 240, pp. 95-99, which see for more detailed information.

percentage of settlements does not tell the story, since some railroads and other employers, especially those having organized benefit funds, make settlements without regard to liability.

The statement was repeatedly made before the United States Employers' Liability Commission that in only 30 per cent of the railroad accidents was the employer liable. (See Appendix V.)

The following statement was made before the United States Employers' Liability Commission by Mr. E. C. Terry, representing the four railroad brotherhoods in Connecticut.¹

While I was in Hartford I took the trouble to go into the railroad commissioner's office and search for 10 years back the records there of railroad accidents resulting in injuries and death. I found that there had occurred in the State of Connecticut, from 1900 to 1910, a total of 426 deaths and about 8,750 personal injuries; of this number I found * * * there was 15 per cent due to causes beyond the control of the master, 7 per cent due to causes within the control of the master, 65 per cent due to the three defenses, and the remaining 13 per cent were cases where the cause might have been any of those enumerated, so difficult of decision were they.

Mr. F. N. Judson, representing the four railroad brotherhoods, stated before the United States Employers' Liability Commission that relatively few of the railroad accidents can be traced to a definite responsibility of the railroad company. Hence, he said, comes the enormous beneficial work that is done by the railroad beneficial organizations. (See Appendix V.)

"As nearly as I can ascertain," writes Mr. Frederic M. Williams, compensation commissioner of Connecticut, "it is the custom of the railroad to send an injured employee to a competent surgeon for treatment, and then at some time in the future some claim agent visits him and effects the best settlement which he can and takes a general release. There is no one in behalf of the State to supervise this arrangement, and in fact in the large majority of cases there is no legal liability on the part of the railroad company. My experience satisfies me that a very great majority of these cases are industrial accidents pure and simple and afford no basis for a suit under the (Federal) Employers' Liability Act."

Most of the present data purporting to show what percentage of industrial accidents is due to the negligence of the employer, what percentage to the negligence of the employee, and what percentage to the hazard of the industry, is worthless because it is based upon incompetent or biased opinions. The following table² showing the negligence in industrial accidents for the three years 1887, 1897, and 1907, under the German law, is representative of

¹ Report of the hearings before the United States Employers' Liability and Workmen's Compensation Commission, p. 1256.

² Statement of J. Harrington Boyd, chairman of Ohio Employers' Liability Commission before the United States Employers' Liability and Workmen's Compensation Commission: Report of the hearings before the United States Employers' Liability and Workmen's Compensation Commission, p. 732.

similar data published by State factory inspection departments. Too much credence, however, should not be placed in these or similar figures purporting to classify industrial accidents on the basis of negligence.

TABLE 4.—INDUSTRIAL ACCIDENTS IN GERMANY 1887, 1897, AND 1907, CLASSIFIED ACCORDING TO NEGLIGENCE.

Accidents caused by—	1887	1897	1907 (46,000 accidents).
	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
Negligence of employer.....	20.47	17.30	16.81
Negligence of employee.....	26.56	29.74	28.89
Negligence of both parties.....	8.01	10.14	9.94
Total.....	55.04	57.18	55.64
Inevitable risks of industry and other causes.....	44.96	42.82	44.36
Total.....	100.00	100.00	100.00

ATTORNEY FEES AND COURT COSTS.

Attorney fees in damage suits for personal injuries generally range from 10 to 50 per cent of the amount of the settlement, depending upon the liability in the case and the amount of court procedure involved.

The average attorney fee in 154 fatal and nonfatal cases investigated by the Ohio Employers' Liability Commission was 24 per cent of the settlement amount. The commission found that there existed a tariff rate, pretty generally adopted among personal injury lawyers, of 25 per cent for a settlement out of court and 33 per cent for a court award necessitating only one trial.¹

In 151 accident cases investigated by the New York Department of Labor the total amount of plaintiffs' fees and costs amounted to 23 per cent of the total gross receipts from employers. Ninety-seven cases settled directly between the parties are included in this number. The department found the average contingent fee to be much higher, averaging 26 per cent in 46 fatal cases. (See Appendix W.)

In 51 contingent fee cases investigated by the New York Employers' Liability Commission the fee, in 28 per cent of the cases, was less than 25 per cent of the settlement; in 45 per cent of the cases it was between 25 and 50 per cent of the settlement; and in 28 per cent of the cases it was 50 per cent or over. (See Appendix W.)

"It is probable," said the Illinois Employers' Liability Commission,² "that out of every dollar at present (1910) paid by the employer for liability insurance only about 25 cents ever reaches the person injured or his dependents."

¹ Report of Ohio Employers' Liability Commission, Part I, p. xii.

² Report of the Illinois Employers' Liability Commission, p. 11.

Mr. Frank V. Whiting, general claims counsel for the New York Central Lines, stated before the United States Employers' Liability Commission¹ that attorney fees in personal injury cases vary somewhat with the liability in the case. The fees are usually on the basis of a third for settlement before trial and 50 per cent after trial. He had known lawyers, however, to offer to take cases at 10 per cent where the liability was absolutely clear.

The following statement was made by Senator Sutherland, chairman of the United States Employers' Liability Commission, and agreed to by Mr. Warren S. Stone, president of the Brotherhood of Locomotive Engineers:

The railroad companies of the country to-day (1911) are paying out approximately \$12,000,000 per annum for personal injuries and deaths, but not to exceed \$5,000,000 of that ever reaches the pockets of the employees. At least \$7,000,000 is wasted between the employer and employee in paying personal injury lawyers and in other expenses. Now, under this bill, unless my estimate is entirely wrong, the railroad companies of the country will be paying about \$15,000,000 a year. Their expenses would be increased about 25 per cent, and it will cost not to exceed \$1,000,000 to distribute that sum of money, so that instead of the railroad employees receiving, as they do now, \$5,000,000 a year, they would be receiving under this law about \$14,000,000 a year, which would be nearly \$3 for every \$1 they receive now.²

Mr. R. J. Cary, of the New York Central Lines, stated before the United States Employers' Liability Commission³ that 70 per cent of the liability insurance fund was wasted and only 30 per cent reached the employee. Mr. A. P. Thom, general counsel for the Southern Railway Co., thought that at least 50 per cent was wasted.⁴

DELAY IN MAKING SETTLEMENTS.

The Ohio Employers' Liability Commission⁵ found that the average delay in making settlements through the courts in fatal industrial accident cases in Ohio was one year and one and one-half months.

According to the Illinois Employers' Liability Commission,⁶ the returns of all liability companies doing business in Illinois, covering a period of 10 years, tabulated by the State department of insurance, showed that: Of the total indemnity paid on behalf of accidents occurring during the first year of the series, 16 per cent was paid during that year; 37 per cent the second year; 20 per cent the third year; 14 per cent the fourth year; and the remaining 13 per cent during the six succeeding years.

¹ Report of the hearings before the United States Employers' Liability and Workmen's Compensation Commission, p. 1056.

² *Idem*, pp. 1320, 1321.

³ *Idem*, p. 1137.

⁴ *Idem*, p. 1287.

⁵ Report of the Ohio Employers' Liability Commission, p. xxxvi.

⁶ Report of the Illinois Employers' Liability Commission, pp. 11-14.

APPENDIXES.

APPENDIX A.—NUMBER OF RAILROAD EMPLOYEES IN THE UNITED STATES IN 1916,
BY CLASSES.¹

Class of employees.	Number.
Trainmen:	
Engineers.....	65,054
Firemen and hostlers.....	74,968
Brakemen and other employees.....	131,147
Conductors.....	53,255
Total.....	326,424
Officers.....	20,728
Clerks and messengers.....	183,576
Skilled employees (machinists, carpenters, etc.).....	380,172
Section hands.....	316,697
Other unskilled employees.....	106,804
Construction gangs and work trains.....	43,350
Telegraphers, dispatchers, etc.....	47,995
Station agents and masters.....	37,823
Station service employees.....	115,462
All other employees.....	164,718
Total employees.....	1,743,749
Total employees, exclusive of shopmen (estimated at 375,000).....	1,368,749
Per cent all trainmen are of all employees.....	18.7
Per cent all trainmen are of all employees, exclusive of shopmen.....	23.8

¹ Compiled from Statistics of Railways in the United States for the year ending Dec. 31, 1916, pp. 24-28.

APPENDIX B.—NUMBER OF STEAM RAILWAY ACCIDENTS IN THE UNITED STATES SUS-
TAINED BY RAILROAD EMPLOYEES WHILE ON DUTY DURING THE YEAR 1916.¹

Class.	Number of acci- dents.	
	Fatal.	Nonfatal.
Train and train-service accidents:		
Trainmen (road and yard).....	1,244	44,154
Switch tenders, crossing flagmen, gatemen, etc.....	88	384
Trackmen.....	474	1,044
Other employees.....	404	2,728
Total.....	2,210	48,310
Industrial nontrain accidents:		
Shopmen.....	135	69,790
Station men.....	28	16,958
Trackmen.....	115	25,407
Bridge and building men.....	67	5,795
Other employees.....	66	8,758
Total.....	411	126,708
Grand total.....	2,621	175,018
Total number of accidents, exclusive of shop accidents.....	2,486	105,228
Per cent number of accidents to trainmen is of total number.....	47.5	25.2
Per cent number of accidents to trainmen is of total number, exclusive of shop acci- dents.....	50.0	42.0

¹ Compiled from Accident Bulletin No. 62 of the Interstate Commerce Commission, pp. 29-34.

APPENDIX C.—NUMBER OF STEAM RAILROAD ACCIDENTS IN ILLINOIS FOR FOUR-YEAR PERIOD, 1905-1908, CLASSIFIED BY CLASSES OF EMPLOYEES.¹

Class of employees.	Number of accidents.	
	Fatal.	Nonfatal.
Trainmen.....	617	7,615
Switch tenders, crossing tenders, watchmen.....	110	439
Station men.....	23	1,411
Shopmen.....	54	2,234
Trackmen.....	249	2,517
Telegraph employees.....	7	33
Other employees.....	216	2,523
Total.....	1,276	16,772
Total number of accidents, excluding shop accidents.....	1,222	14,538
Per cent number of accidents is of total number.....	48.4	45.4
Per cent number of accidents is of total number, exclusive of shop accidents.....	50.0	52.4

¹ Report of Illinois Employers' Liability Commission, pp. 148-151.APPENDIX D.—AVERAGE AMOUNT OF COMPENSATION PAID TO DEPENDENTS OF MARRIED MEN KILLED IN RAILROADING AND IN OTHER EMPLOYMENTS IN ERIE COUNTY, NEW YORK, 1907 AND 1908.¹

Item.	Railroading.			Other employments.		
	Fatal cases.		Average amount of compensation.	Fatal cases.		Average amount of compensation.
	Number.	Per cent.		Number.	Per cent.	
No compensation.....	17	36.2	.....	21	30.9	.....
Funeral expenses only.....	8	17.0	\$193.57	5	7.4	\$91.00
Settlement without suit.....	12	25.5	581.25	26	38.2	483.70
Settlement out of court after suit.....	6	12.8	2,991.66	6	8.8	579.17
Damages recovered by judgments.....	2	4.3	9,675.50	2	2.9	2,050.00
Suits pending.....	2	4.3	.....	8	11.8	.....
Total.....	47	100.0	.....	68	100.0	.....
Cases settled.....	45	.....	1,018.32	60	.....	343.44

¹ First report of New York Employers' Liability Commission, p. 21.APPENDIX E.—AVERAGE AMOUNT OF COMPENSATION PAID IN 279 FATAL CASES (MARRIED AND SINGLE MEN) IN ERIE COUNTY AND NEW YORK CITY, 1907 AND 1908.¹

Item.	Fatal cases.		Average amount of compensation.
	Number.	Per cent.	
No compensation.....	95	34.0	.....
Funeral expenses only.....	30	10.8	\$133.72
Settlement without suit.....	81	29.0	702.94
Settlement out of court after suit.....	23	8.3	1,476.96
Damages recovered by judgments.....	7	2.5	5,028.70
Suits pending.....	43	15.4	.....
Total.....	279	100.0	.....
Cases settled.....	236	.....	551.36

¹ First report of New York Employers' Liability Commission, p. 97.

APPENDIX F.—AVERAGE AMOUNT OF COMPENSATION PAID TO DEPENDENTS ON ACCOUNT OF FATAL ACCIDENTS INVESTIGATED BY ILLINOIS EMPLOYERS' LIABILITY COMMISSION, CLASSIFIED BY EMPLOYMENT.¹

Employment.	Number of cases.	Number of suits pending.	"No recovery" cases.		Cases settled out of court.		Cases settled in court.		Average amount of compensation in total cases.
			Number.	Per cent.	Number.	Average amount of compensation.	Number.	Average amount of compensation.	
Railroads, trades.....	² 202	34	25	12.4	² 135	\$1,457.18	² 10	\$2,078.30	\$1,076.74
Railroad laborers.....	³ 77	13	12	15.6	³ 50	936.13	³ 3	245.67	617.45
Electric railways, trades.....	33	8	11	33.3	14	732.14	.....	.....	310.60
Electric railway laborers.....	8	3	3	37.5	2	300.00	.....	.....	75.00
Building trades.....	38	7	16	42.1	14	932.14	1	200.00	348.68
Building trades, laborers.....	16	8	8	50.0	.....	.....	.....	.....	.....
Miners.....	120	9	75	62.5	26	294.18	10	1,102.15	155.59
Steel workers.....	33	6	4	12.1	23	1,254.23	.....	.....	874.16
Miscellaneous trades.....	28	7	15	53.6	6	1,366.67	.....	.....	292.86
Teamsters.....	19	7	12	63.2	.....	.....	.....	.....	.....
Packing-house employees.....	16	2	12	75.0	2	1,875.00	.....	.....	234.37
Laborers.....	18	4	10	55.6	4	693.75	.....	.....	154.17
Unclassified.....	9	3	1	11.1	5	561.00	.....	.....	311.66
Total.....	⁴ 614	111	204	33.2	281	1,143.96	24	1,364.23	576.86

¹ Report of Illinois Employers' Liability Commission 1910, pp. 12, 13.

² Two men received compensation both "in" and "out" of court.

³ One man received compensation both "in" and "out" of court.

⁴ Adds to 617, but 614 is given in the report.

APPENDIX G.—NUMBER OF FATAL ACCIDENTS IN OHIO AND AVERAGE AMOUNT OF COMPENSATION, 1905 TO 1910.

175 fatal accidents in Cuyahoga County (taken from coroners' records and investigated by Ohio Employers' Liability Commission).¹

Conjugal condition of decedent.	Number of cases.	Per cent securing settlement.	Per cent not securing settlement.
Married.....	115	41.7	58.3
Single.....	60	25.0	75.0
Total.....	175	36.0	64.0

285 fatal accidents in the State.²

Conjugal condition of decedent.	Number of cases.	Average amount received.
Married.....	176	\$1,056.51
Single.....	109	485.87
Total.....	285	838.61

¹ Report of Ohio Employers' Liability Commission, Pt. I, p. xxxvii.

² Idem, p. xxxviii.

APPENDIX G.—NUMBER OF FATAL ACCIDENTS IN OHIO AND AVERAGE AMOUNT OF COMPENSATION, 1905 TO 1910—Concluded.

370 fatal cases in the State (taken from court records).¹

Amount of compensation.	Number of cases.	Per cent of total cases.	Average amount of settlement.
Up to \$300.....	135	36.5	\$163.83
\$300 to \$1,000.....	107	28.9	519.81
\$1,000 to \$2,000.....	71	19.2	1,289.98
\$2,000 to \$4,000.....	42	11.4	2,581.13
\$4,000 and over.....	15	4.0	4,991.66
Total.....	370	100.0	949.19

¹ Report of Ohio Employers' Liability Commission, Pt. I, p. xl.

Eighty-eight per cent of the above cases received only 48 per cent of the amounts, whereas 12 per cent received 52 per cent of the amounts.

APPENDIX H.—COMPENSATION PAID BY EMPLOYERS TO DEPENDENTS OF EMPLOYEES KILLED IN WORK ACCIDENTS IN ALLEGHENY COUNTY, PA., JULY, 1906, TO JULY, 1907.¹

Amount of compensation.	Married employees.		Single employees.		Total.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
None.....	59	25	30	25	89	25
\$100 or less.....	65	27	48	40	113	32
\$101 to \$500.....	40	17	21	18	61	17
\$501 to \$1,000.....	30	13	11	9	41	12
\$1,001 to \$2,000.....	10	4	1	1	11	3
\$2,001 to \$3,000.....	4	2	.....	.....	4	1
Over \$3,000.....	4	2	.....	.....	4	1
Suits pending.....	13	6	4	3	17	5
Amount unknown.....	10	4	5	4	15	4
Total.....	235	100	120	100	355	100

¹ Russell Sage Foundation (The Pittsburgh Survey): Work Accidents and the Law, by Crystal Eastman, pp. 121, 122.

The above table shows that out of 355 cases of men killed in industrial accidents, all of whom were contributing to the support of others and two-thirds of whom were married, 89 of the families, or 25 per cent, received nothing, while 113, or 32 per cent, received \$100 or less. In other words, 57 per cent were left by their employers to bear the entire burden of income loss; and granting that all unknown amounts would be decided for the plaintiffs, only 26 per cent of the families received more than \$500, a sum which would approximate one year's income of the lowest paid of the workers killed.

The proportion of the loss borne by employers in injury cases does not differ greatly from that in death cases. Thus, out of 288 injury cases, of the married men 56 per cent received no compensation; of single men contributing to the support of others, 69 per cent received no compensation; single men without dependents, 80 per cent received no compensation.¹

¹ In Work Accidents and their Costs, by Crystal Eastman. Charities and the Commons, March, 1909, (Quoted in First Report of New York Employers' Liability Commission, p. 24.)

APPENDIX I.—COMPENSATION FOR INJURIES RECEIVED BY EMPLOYEES IN WISCONSIN, 1907 AND 1908.

The financial losses borne by the workmen are set forth by the Wisconsin Bureau of Labor and Industrial Statistics in the following report of 306 nonfatal injuries:¹

Amount of compensation.	Number of cases.	Per cent.
Nothing from employer.....	72	23.5
Amount of doctor bill only.....	99	32.4
Amount of part of doctor bill only.....	15	4.9
Something in addition to doctor bills.....	91	29.7
Something, but not doctor bills.....	29	9.5
Total.....	306	100.0

¹ Thirteenth biennial report of the Wisconsin Bureau of Labor and Industrial Statistics, p. 54.

In other words, in two-thirds of the cases part or all of the doctor bills were paid, but in less than one-third was anything more paid, and in about one-fourth of the cases nothing whatever was paid.

Of 131 nonfatal cases in Wisconsin, concerning which reports were secured by factory inspectors, the following disposition was made:

Amount of compensation.	Number of cases.	Per cent.
Nothing from employer.....	28	21.4
Doctor bills only.....	56	42.7
Something in addition to doctor bills.....	10	7.6
Something, but not doctor bills.....	34	26.0
Not settled.....	3	2.3
Total.....	131	100.0

In 51 fatal cases the settlement was reported by factory inspectors as follows:

Amount of compensation.	Number of cases.	Per cent.
Under \$100.....	16	31.4
\$100 to \$500.....	18	35.3
\$500 to \$1,000.....	9	17.6
\$1,000 to \$3,000.....	8	15.7
Total.....	51	100.0

APPENDIX J.—AMOUNT OF COMPENSATION PAID TO DEPENDENTS OF 181 MARRIED MEN KILLED IN ERIE COUNTY IN 1907 AND 1908, AND IN MANHATTAN BOROUGH, N. Y., IN 1908.¹

Amount of compensation.	Number of cases.	Per cent.
Nothing.....	56	30.9
\$100 or less.....	12	6.6
\$101 to \$500.....	52	28.7
\$501 to \$2,000.....	19	10.5
Over \$2,000.....	12	6.6
Suits pending.....	30	16.6
Total.....	181	100.0

¹ First report of New York Employers' Liability Commission, p. 20.

In the cases of single men killed, the proportion, where not even funeral expenses were paid by the employer, is considerably higher—38.1 per cent in New York and 43 per cent in Erie County.

APPENDIX K.—AMOUNT OF COMPENSATION PAID FOR SEVERAL KINDS OF INJURIES AS SHOWN BY NEW YORK DEPARTMENT OF LABOR INVESTIGATION, 1907 AND 1908.¹

Amount of compensation.	Death.		Permanent total disability.		Permanent partial disability.	
	Number of cases.	Per cent.	Number of cases.	Per cent.	Number of cases.	Per cent.
Nothing.....	10	17.5	3	30.0	18	25.4
\$100 or less.....	10	17.5	1	10.0	22	31.0
\$101 to \$500.....	15	26.3	5	50.0	14	19.7
\$501 to \$2,000.....	12	21.1	.....	.....	5	7.0
Over \$2,000.....	2	3.5	.....	.....	1	1.4
Suits pending.....	8	14.0	1	10.0	11	15.5
Total.....	57	100.0	10	100.0	71	100.0

¹ First report of New York Employers' Liability Commission, pp. 21, 22.

APPENDIX L.—STATEMENT OF DR. E. T. DEVINE, NEW YORK CHARITY ORGANIZATION SOCIETY, RELATING TO PERCENTAGE OF ACCIDENT CASES IN WHICH NO RECOVERY WAS OBTAINED.

About two years ago Mr. F. H. McLean, who was for some years in the Brooklyn bureau of charities, presented a paper to the State conference of charities and corrections in which there were some suggestions to which I might refer. I have before me some original records that were used on that occasion. There were collected from some six different societies, facts about 386 cases of this kind.

One of the things that Mr. McLean was to find out about those cases was what compensation had been received. It was possible to find out anything about that in only 223 cases, and of those 223 cases some kind of a settlement or donation was made in just 47 cases; that is, 20 per cent of the whole. In 80 per cent of the 223 cases about which we could get the facts, there was no compensation whatever, and no expectation of any, and among the 47, in which there was a settlement, there is an extraordinary crazy-quilt of absurdity as to what those settlements were. They are typical, and we can not get any line from any source that will show precisely what those figures are, and I gave them for this reason, because I believe them to be thoroughly representative of the settlements made in the cases of this kind.¹

Experience of Liability Insurance Companies in New York State.

Reports made to the New York Employers' Liability Commission by insurance companies writing employers' liability insurance in New York State and keeping separate record of such experience show that 414,681 accidents were reported to these companies during the periods covered, and payments had been made in only 52,427, or 12.6 per cent, of these cases. These figures include every notice of accident and doubtless many are trivial, but they serve to check up the results of the detailed studies.²

¹ First report of New York Employers' Liability Commission, p. 25.

² *Idem*, p. 25.

APPENDIX M.—TOTAL AND AVERAGE AMOUNT PAID BY RAILWAY COMPANIES IN THE UNITED STATES ON ACCOUNT OF ALL ACCIDENTS, 1908 TO 1910.¹

[The figures here shown represent the experience of railway companies operating approximately one-half of the total railway mileage of the United States, employing nearly 57 per cent of all railway employees, excluding officers, and paying 59.3 per cent of the wages of all railway employees, excluding officers. The average compensation shown is the average of all cases and not merely those in which settlements were received.]

Nature of injury.	Settlements.			Judgments.			Settlements and judgments.		
	Number of cases.	Total amount, paid and estimated.	Average amount, paid and estimated.	Number of cases.	Total amount, paid and estimated.	Average amount, paid and estimated.	Number of cases.	Total amount, paid and estimated.	Average amount, paid and estimated.
Death.....	5,672	\$6,564,978	\$1,157	276	\$699,800	\$2,536	5,948	\$7,264,778	\$1,221
Permanent total disability.	264	1,013,203	3,838	15	169,075	11,272	279	1,182,278	4,238
Permanent partial disability.....	2,515	3,259,547	1,296	127	446,456	3,515	2,642	3,706,003	1,403
Temporary disability (over 2 weeks).....	79,362	5,553,523	70	251	234,049	932	79,613	5,787,572	73

¹ Report of United States Employers' Liability and Workmen's Compensation Commission, pp. 129-139.

APPENDIX N.—TOTAL AND AVERAGE AMOUNT PAID BY RAILWAY COMPANIES IN THE UNITED STATES ON ACCOUNT OF ALL FATAL ACCIDENTS, 1908 TO 1910.¹

[The figures here shown represent the experience of railway companies operating approximately one-half of the total railway mileage of the United States, employing nearly 57 per cent of all railway employees, excluding officers, and paying 59.3 per cent of the wages of all railway employees, excluding officers. The average compensation shown is the average of all cases and not merely those in which settlements were received.]

Wage class.	Settlements.			Judgments.			Settlements and judgments.		
	Number of cases.	Total amount, paid and estimated.	Average amount, paid and estimated.	Number of cases.	Total amount, paid and estimated.	Average amount, paid and estimated.	Number of cases.	Total amount, paid and estimated.	Average amount, paid and estimated.
CASES IN WHICH THERE WERE RESIDENT DEPENDENTS.									
Over \$125 per month.....	372	\$1,045,265	\$2,810	29	\$136,952	\$4,722	401	\$1,182,217	\$2,948
\$100 to \$124 per month.....	572	1,048,954	1,834	45	112,594	2,502	617	1,161,548	1,833
\$75 to \$99 per month.....	1,242	1,640,085	1,321	55	189,078	3,438	1,297	1,829,163	1,410
\$50 to \$74 per month.....	1,230	1,430,646	1,163	36	109,968	3,054	1,266	1,540,614	1,217
Under \$50 per month.....	1,021	743,466	728	74	85,695	1,158	1,095	829,161	757
Total.....	4,437	5,908,416	1,332	239	634,287	2,654	4,676	6,542,703	1,399
CASES IN WHICH THERE WERE NONRESIDENT DEPENDENTS.									
Over \$125 per month.....	3	1,500	500	.....	.....	.....	3	1,500	500
\$100 to \$124 per month.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
\$75 to \$99 per month.....	5	3,500	750	.....	.....	.....	5	3,500	750
\$50 to \$74 per month.....	61	41,680	683	1	2,500	2,500	62	44,180	713
Under \$50 per month.....	493	237,595	482	7	3,400	486	500	240,995	482
Total.....	562	284,275	506	8	5,900	738	570	290,175	509
CASES IN WHICH THERE WERE NO DEPENDENTS.									
Over \$125 per month.....	13	16,897	1,300	.....	.....	.....	13	16,897	1,300
\$100 to \$124 per month.....	101	88,279	874	3	11,267	3,756	104	99,546	957
\$75 to \$99 per month.....	107	73,861	690	5	17,000	3,400	112	90,861	811
\$50 to \$74 per month.....	174	105,077	604	8	20,761	2,595	182	125,838	691
Under \$50 per month.....	278	88,173	317	13	10,585	814	291	98,758	339
Total.....	673	372,287	553	29	59,613	2,056	702	431,900	615
TOTAL.									
Over \$125 per month.....	388	1,063,662	2,741	29	136,952	4,722	417	1,200,614	2,879
\$100 to \$124 per month.....	673	1,137,233	1,690	48	123,861	2,580	721	1,261,094	1,749
\$75 to \$99 per month.....	1,354	1,717,446	1,268	60	206,078	3,435	1,414	1,923,524	1,360
\$50 to \$74 per month.....	1,465	1,577,403	1,077	45	133,229	2,961	1,510	1,710,632	1,133
Under \$50 per month.....	1,792	1,069,234	597	94	99,680	1,060	1,886	1,168,914	620
Total.....	5,672	6,564,978	1,157	276	699,800	2,536	5,948	7,264,778	1,221

¹ Report of United States Employers' Liability and Workmen's Compensation Commission, pp. 129-139.

APPENDIX O.—TOTAL AND AVERAGE AMOUNT PAID BY RAILWAY COMPANIES IN THE UNITED STATES ON ACCOUNT OF ALL PERMANENT PARTIAL DISABILITIES, 1908 TO 1910.¹

[The figures here shown represent the experience of railway companies operating approximately one-half of the total railway mileage of the United States, employing nearly 57 per cent of all railway employees, excluding officers, and paying 59.3 per cent of the wages of all railway employees, excluding officers. The average compensation shown is the average of all cases and not merely those in which settlements were received.]

Wage class.	Settlements.			Judgments.			Settlements and judgments.		
	Number of cases.	Total amount paid and estimated.	Average amount paid and estimated.	Number of cases.	Total amount paid and estimated.	Average amount paid and estimated.	Number of cases.	Total amount paid and estimated.	Average amount paid and estimated.
ALL PERMANENT PARTIAL DISABILITIES.									
Over \$125 per month.....	106	\$258,132	\$2,435	9	\$72,425	\$8,047	115	\$330,557	\$2,874
\$100 to \$124 per month.....	321	567,871	1,769	23	64,178	2,790	344	632,049	1,837
\$75 to \$99 per month.....	728	1,118,430	1,536	36	145,457	4,040	764	1,263,887	1,654
\$50 to \$74 per month.....	703	777,474	1,106	27	97,221	3,601	730	874,695	1,198
Under \$50 per month.....	657	537,640	818	32	67,175	2,099	689	604,815	878
Total.....	2,515	3,259,547	1,296	127	446,456	3,515	2,642	3,706,003	1,403
LOSS OF ONE HAND.									
Over \$125 per month.....	17	45,302	2,665	2	19,500	9,750	19	64,802	3,411
\$100 to \$124 per month.....	59	113,859	1,930	3	12,500	4,167	62	126,359	2,038
\$75 to \$99 per month.....	163	283,388	1,739	6	9,662	1,610	169	293,050	1,734
\$50 to \$74 per month.....	114	143,664	1,260	7	29,125	4,161	121	172,789	1,428
Under \$50 per month.....	106	125,733	1,186	4	10,515	2,629	110	136,248	1,239
Total.....	459	711,946	1,551	22	81,302	3,696	481	793,248	1,649
LOSS OF ONE FOOT.									
Over \$125 per month.....	34	95,115	2,798	.....	.....	.....	34	95,115	2,798
\$100 to \$124 per month.....	129	261,808	2,030	8	19,145	2,393	137	280,953	2,051
\$75 to \$99 per month.....	280	436,113	1,558	10	44,950	4,495	290	481,063	1,659
\$50 to \$74 per month.....	227	325,752	1,435	3	17,955	5,985	230	343,707	1,494
Under \$50 per month.....	192	171,411	893	10	26,210	2,621	202	197,621	978
Total.....	862	1,290,199	1,497	31	108,260	3,492	893	1,398,459	1,566
LOSS OF ONE EYE.									
Over \$125 per month.....	13	14,562	1,120	2	15,425	7,213	15	29,987	1,999
\$100 to \$124 per month.....	33	40,978	1,242	1	750	750	34	41,728	1,227
\$75 to \$99 per month.....	61	38,515	631	.....	.....	.....	61	38,515	631
\$50 to \$74 per month.....	137	74,526	544	3	650	217	140	75,176	537
Under \$50 per month.....	136	51,860	381	4	7,550	1,888	140	59,410	424
Total.....	380	220,441	580	10	24,375	2,438	390	244,816	628

¹ Report of United States Employers' Liability and Workmen's Compensation Commission, pp. 129-139.

APPENDIX P.—AVERAGE AMOUNT PAID ON ACCOUNT OF ALL INJURIES BY ATCHISON, TOPEKA & SANTA FE RAILWAY CO., 1908 TO 1910, AND ESTIMATED COMPENSATION FOR SAME INJURIES UNDER PROPOSED FEDERAL ACT.¹

Nature of injury.	Number of cases.	Average amount paid in settlement of cases.	Average estimated compensation under proposed Federal act.
Death.....	213	\$1,228.15	\$2,425.77
Permanent total disability.....	7	2,835.71	18,368.74
Permanent partial disability.....	136	909.55	2,034.65
Temporary disability.....	1,463	88.96	53.49
Total amount paid in settlement for all injuries.....			\$535,295.22
Total estimated compensation for same injuries.....			1,000,237.47
Increased cost of compensation.....			464,942.25

¹ Statement of A. B. Browne, counsel for Atchison, Topeka & Santa Fe Railway Co., before the United States Employers' Liability and Workmen's Compensation Commission. Report of the hearings before the United States Employers' Liability and Workmen's Compensation Commission, pp. 1308, 1309.

APPENDIX Q.—AMOUNT OF DAMAGES PAID IN FATAL-INJURY CASES NOT UNDER THE MASSACHUSETTS WORKMEN'S COMPENSATION ACT, AND AMOUNT OF COMPENSATION WHICH WOULD HAVE BEEN RECEIVED UNDER THE ACT.¹

[About three-fourths of the decedents were steam-railroad employees.]

Year.	Number of cases settled.	Average amount of settlement.	Average amount of compensation which would have been received under compensation act.
1912-13.....	39	\$1,555.70	\$1,656.17
1913-14.....	30	1,109.50	1,692.16
1914-15.....	25	1,234.29	2,935.30
1915-16.....	24	1,590.63	2,915.21
1916-17.....	17	2,185.59	3,394.12
Total.....	135	1,482.55	2,343.72

¹ Compiled from the annual reports of Massachusetts Industrial Accident Board.

These average settlements are based only on those cases in which information is available, but as a very large number of the cases in which no replies were received are those of foreigners whose dependents are not in this country, it would seem safe to assume that at least the same average, if not a much lower one, would hold true as regards settlements effected if all the fatal noninsured accidents were considered.

APPENDIX R.—NUMBER OF ACCIDENTS AND AMOUNT OF COMPENSATION OF STEAM RAILROAD EMPLOYEES IN NEW YORK, FOR YEAR ENDING JUNE 30, 1915.¹

Nature of injury.	Number of cases.	Amount of compensation.	
		Total.	Average.
Death.....	29	\$97,982.32	\$3,378.70
Permanent partial disability.....	36	33,566.39	932.40
Temporary disability.....	329	16,930.64	51.46
Total.....	394	148,479.35	376.85

¹ Statement in letter received from New York Industrial Commission.

APPENDIX S.—TESTIMONY OF FRANK V. WHITING, GENERAL CLAIMS ATTORNEY, NEW YORK CENTRAL LINES, BEFORE UNITED STATES EMPLOYERS' LIABILITY COMMISSION.¹

"Mr. WHITING. The average cost of all death cases on the New York Central system, exclusive of the Pittsburgh & Lake Erie, and, I think, the Rutland, one of our small lines, was \$1,020."

"Mr. WHITING. In fact, there are several roads included in these records [submitted to the commission]. I mean of the larger roads—that show an average cost for deaths of considerably less than \$1,000.

"Mr. MOON (member of commission). Have we anyone that shows it \$400?"

"Mr. WHITING. There is one less than that."

¹ Report of the hearings before the United States Employers' Liability and Workmen's Compensation Commission, pp. 1068, 1069.

APPENDIX T.—AVERAGE COMPENSATION OR PAYMENT TO FAMILIES OF MARRIED DECEDENTS IN CONNECTICUT, OHIO, AND PENNSYLVANIA IN 1915.¹

State.	Number of families.	Average amount received.
Connecticut (workmen's compensation).....	53	\$2,055.00
Ohio (workmen's compensation).....	206	3,008.00
Pennsylvania (employers' liability).....	² 134	261.00

¹ Effect of Workmen's Compensation Laws, by Mary K. Conyngton, U. S. Bureau of Labor Statistics Bulletin No. 217, p. 13.

² Not including 3 receiving monthly payments for indefinite periods.

"The average in Pennsylvania would be lower still but for the fact that some large employers had voluntarily established insurance systems and in case of a fatality paid the victim's dependents as much or even more than they would have received under any of the compensation systems in operation in other States. The families of men working for these employers were as well protected as if they were in a compensation State, but the low average received in Pennsylvania shows how far a voluntary system falls short of the need."¹

APPENDIX U.—COMPENSATION PAID FOR 118 PERMANENT PARTIAL DISABILITIES UNDER MASSACHUSETTS COMPENSATION ACT, 1913-1916.¹

Nature of injury.	Number of cases.	Total amount of compensation.	Average amount of compensation.
Loss of arm (including loss of use).....	29	\$48,753.05	\$1,681.14
Loss of hand (including loss of use).....	63	88,598.13	1,406.32
Loss of leg (including loss of use).....	10	23,970.36	2,397.04
Loss of foot (including loss of use).....	16	29,112.76	1,819.55
Total.....	118	190,434.30	1,613.85

¹ Investigation made by United States Bureau of Labor Statistics in 1918.

APPENDIX V.—STATEMENTS REGARDING PERCENTAGE OF ACTIONABLE CLAIMS, MADE BEFORE UNITED STATES EMPLOYERS' LIABILITY AND WORKMEN'S COMPENSATION COMMISSION.

"Mr. FRANK V. WHITING, of the New York Central Lines.² There has been quite a little said about the number of cases and the percentage of cases that are settled, and this morning the secretary (of the commission) asked me where the 70 per cent of our unsettled cases were in the statement that we submitted for the New York Central. Now, it is a mistaken notion that but 30 per cent of the accidents are settled.

"Mr. MOON (member of the commission). The statement has been made that not 30 per cent was settled, but there was liability on 30 per cent.

"Mr. WHITING. I think it has been both ways, judge. What I was going to say was this: That in my experience we settle about 95 to 97 per cent of the claims that are presented by our employees, and that it is a very rare instance when we decline a claim as such. We very frequently decline to pay the amount that is asked, but it is very rare that we out and out decline a claim."

"Mr. R. J. CARY, of the New York Central Lines.³ It has been urged here that in the past only about 25 or 30 per cent of the employees got compensation and the remainder

¹ Effect of Workmen's Compensation Laws, by Mary K. Conyngton, U. S. Bureau of Labor Statistics Bulletin No. 217, p. 13.

² Report of the hearings before the United States Employers' Liability and Workmen's Compensation Commission, p. 1055.

³ *Idem*, p. 1137.

got nothing. I do not quite agree with that proposition. I believe, from my experience, that a great deal larger percentage is used in protecting and paying employees to-day. I have not the slightest doubt of it; but assuming that the statement is true, admitting the proposition that a comparatively small percentage of the employees under the present sum are protected, nevertheless you have confronting you this 70 per cent waste."

"Mr. MILES M. DAWSON, consulting actuary, New York.¹ It is reliably estimated that on the average but 12 accidental injuries or deaths among employees out of 100 are compensated for in the United States. This includes all successful suits."

"Mr. F. N. JUDSON, representing the four railroad brotherhoods.² I saw recently a statement by a gentleman who had been for many years general counsel of one of the railroad systems of the country, in discussing damage suits for personal injuries by railroad employees, that his experience led him to make the assertion that in railroad accidents about 80 per cent of them were those in which there could be no possible recovery by the employee who was killed or injured or in his behalf against the company, for the reason that it could not be shown that the railroad was in any fault. The evidence very often is destroyed with the disaster.

"Mr. MOON (member of the commission). Not only under the common law, but often the statute.

"Mr. JUDSON. Often under the statutory law, and in about 10 per cent of the cases there could be possibly a claim, but they can not make out a satisfactory case to go to the jury with hope of success; and in about 10 per cent more out of the hundred it is estimated that there could be a possibility of recovery.

"The CHAIRMAN (of the commission). Do you mean by that that only 10 per cent could recover?

"Mr. JUDSON. Ten per cent of the casualties. I was astounded when I read the statement; and I have endeavored to verify it since from the experience of others. You come to realize in a number of these railroad casualties how few of them can be traceable to a definite responsibility of the railroad company. Hence comes the enormous beneficial work that is done by railroad beneficial organizations."

APPENDIX W.—ATTORNEYS' FEES IN ACCIDENT CASES IN NEW YORK.

In 151 cases investigated by the New York Labor Department the total amount of plaintiffs' fees and costs amounted to 22.7 per cent of the total gross receipts from employers. Ninety-seven cases settled directly between the parties are included here. Of course, the average contingent fee is much higher. It averaged 26.3 per cent in 46 fatal cases investigated for the commission, tabulated as follows: ³

How compensation was paid.	Number killed.	Total compensation from employer.	Total lawyers' fees.	Net compensation to family.	Per cent total lawyers' fees are to total compensation.
Settlement without suit	26	\$28, 008	\$4, 802	\$23, 206	17.1
Settlement out of court after suit	17	22, 858	6, 858	16, 000	30.0
Damages recovered	3	21, 951	7, 514	14, 437	34.2
Total	46	72, 817	19, 174	53, 643	26.3

¹ Report of the hearings before the United States Employers' Liability and Workmen's Compensation Commission, p. 273.

² *Idem*, p. 221.

³ First report of New York Employers' Liability Commission, pp. 30, 31.

The waste on the plaintiffs' side is also well illustrated by the following table of contingent fees in 51 cases investigated by the commission: ¹

Size of fee.	Cases investigated.	
	Number.	Per cent.
Less than 25 per cent.....	14	27.5
25 to 34.9 per cent.....	16	31.4
35 to 49.9 per cent.....	7	13.7
50 per cent and over.....	14	27.5
Total.....	51	100.0

SCHEDULE FOR HAND INJURIES UNDER THE NEW YORK LAW.

The compensation law of New York, in common with most laws on the subject in this country, contains a schedule of awards for designated injuries, mostly maimings, which fixes the number of weeks during which benefits are to be paid for the injuries specified. Thus for the loss of a hand 66 $\frac{2}{3}$ per cent of the injured man's wages are to be paid for 244 weeks, for a thumb payments continue for 60 weeks, for a first or index finger 46 weeks, etc. It is obvious that the loss of two fingers causes a cumulative loss greater than the sum of the losses of either of them separately, and a proper award is therefore not represented by the mere addition of the awards for each member. To meet this situation, the legislature of 1917 amended the act (subsec. 3 of sec. 15) by incorporating a provision to the effect that where there is a loss of more than one finger, compensation may be awarded for the resultant proportionate loss of use of the hand.

In accordance with this authorization, the industrial commission took the matter under advisement, and fixed upon a schedule arrived at by taking the sum of the awards for the single injuries and increasing the same by such percentage as in their judgment would bring the award up to the proper proportionate benefit. This was adopted November 20, 1918, and promulgated under the seal of the commission on December 10. It is stated that "this schedule is not intended to be a fixed determinant in all cases, but each case is to be considered in view of all its attendant circumstances and adjusted by the exercise of a sound discretion."

The schedule is as follows:

¹ First report of New York Employers' Liability Commission, p. 31.

SUGGESTED ALLOWANCES FOR LOSS OF TWO OR MORE FINGERS, OR THUMB AND FINGERS, DESIGNED TO COVER PROPORTIONATE LOSS OF USE OF HAND.

Members lost.	Sum of weeks for each by law.	Estimated additional (per cent).	Total weeks.
Two fingers:			
First and second.....	76	25	95
First and third.....	71	25	88½
First and fourth.....	61	25	76½
Second and third.....	55	25	68½
Second and fourth.....	45	25	56½
Third and fourth.....	40	25	50
Three fingers:			
First, second, and third.....	101	33½	134½
First, second, and fourth.....	91	33½	121½
First, third, and fourth.....	86	33½	114½
Second, third, and fourth.....	70	33½	93½
Four fingers.....			
116	50	174	
Thumb and—			
First finger.....	106	33½	141½
Second finger.....	90	33½	120
Third finger.....	85	33½	113½
Fourth finger.....	75	33½	100
Thumb and—			
First and second fingers.....	136	25	170
First and third fingers.....	131	25	163½
First and fourth fingers.....	121	25	151½
Second and third fingers.....	115	25	143½
Second and fourth fingers.....	105	25	131½
Third and fourth fingers.....	100	25	125
Thumb and—			
First, second, and third fingers.....	161	33½	214½
First, second, and fourth fingers.....	151	33½	201½
First, third, and fourth fingers.....	146	33½	194½
Second, third, and fourth fingers.....	130	33½	173½
Four fingers.....	176	33½	234½

IS HERNIA A COMPENSABLE INJURY OR A DISEASE?

The question of whether hernia should be classed as a compensable injury or as a disease was dealt with by Dr. A. W. Colcord, company surgeon of the Carnegie Steel Co., in an address at the Sixth Conference of Industrial Physicians and Surgeons, held at Harrisburg, April 9, 1918.¹ Dr. Colcord has made physical examinations of 9,000 men. It is his experience that in only about 5 per cent of the cases of hernia developed in the course of employment should compensation have been paid. He believes that nine-tenths of all "occurring" among industrial workers after the age of 30 are caused by acquired (presenile) weakness of the abdominal wall, occupation being negligible as a causative factor. It is his opinion that occupation does not cause hernia in the normal individual, though hard labor will hasten the formation of a hernia in one who has a congenital defect. The physician stated his belief "that a hernia, to be compensable, must have been caused by external, violent, and accidental means; that there must have been some definite relation between the accident and the hernia. The essence of traumatic hernia (excepting those cases of direct violence) is an enormous sudden increase in intra-abdominal pressure."

¹ "Hernia—should it be classed as a compensable injury or a disease?" In proceedings of the Sixth Conference of Industrial Physicians and Surgeons, held at Harrisburg, Pa., Apr. 9, 1918, pp. 14-18. Published by the Pennsylvania Department of Labor and Industry.

Distinction is made between traumatic and "sudden" hernias. "The force which produces traumatic hernia is tremendous, far beyond the ordinary strains of labor. The force causing sudden hernia, while still greater than that arising from the duties of the man's work, is only great enough to cause a moderate increase in intra-abdominal pressure. In traumatic hernia, congenital defect is not an important factor. The force is sufficient to cause a hernia in a man who did not have this defect. In sudden hernia the congenital defect is by far the most important factor. The more moderate cases of traumatic hernia become the more severe cases of sudden hernia. There is no hard and fast line between them. It is these border-line cases that are compensable, where compensation boards and courts must decide each case on its own merits."

In this address Dr. Colcord discussed also the "trauma" and "open ring" theories advanced to explain the occurrence of hernia.

REPORTS OF FEDERAL AND STATE WORKMEN'S COMPENSATION EXPERIENCE.

UNITED STATES.

The second annual report of the United States Employees' Compensation Commission,¹ just issued, reviews the operation of the Federal Employees' Compensation Act for the entire period since the date the act became effective down to June 30, 1918.² The tables, however, for the most part, cover the period September 7, 1916, to December 31, 1917. Attention is called at the outset to the greatly increased work of the commission as a result of the war activities which caused the various Government departments, particularly those superintending industrial work, such as navy yards, arsenals, shipbuilding, etc., to take on larger additional forces of workers. The death claims which were submitted to the commission from the enactment of the law to June 30, 1918, numbered 371, while 142 were received between June 30 and October 31, 1918. The number of death claims for which awards have been made, it is stated, now exceeds 300. These awards are a continuing obligation upon the funds of the commission, the awards continuing in the case of widows until death or remarriage; in the case of children under 18 until 18 years of age, and in the case of other dependents until a period of eight years, unless sooner terminated by death, marriage, or ceasing to be dependent. At the present time in only three cases has an award been terminated.

¹ Second annual report of the United States Employees' Compensation Commission, July 1, 1917, to June 30, 1918. Washington, 1918. 286 pp. The first report was noted in the MONTHLY REVIEW for January, 1918 (pp. 156-159).

² In some cases the report is carried to a later date.

The report notes that, during the year ending June 30, 1918, the disbursements of the commission were as follows: Salaries and expenses, \$74,464.13; compensation on account of injuries (less recoveries under secs. 26, 27, and 38), \$453,926.88; compensation on account of death (less recoveries under sec. 38), \$79,159.68; medical, surgical, and hospital services and supplies (less recoveries, miscellaneous), \$160,307.93; transportation (sec. 9), \$2,222.81; burial expense, \$10,541.57; embalming and transportation (sec. 11), \$99.05, total, \$780,722.05.

During the year ending June 30, 1918, there were 19,602 injuries reported to the commission and a total of 9,665 claims filed, of which 9,343 were for disability and 320 were for death. These injuries are not tabulated in the report, by extent of disability, but the injuries occurring in the six months' period ending December 31, 1917, are so tabulated. This tabulation shows that of 7,105 injuries, 115 resulted in death, 27 in permanent disability, and 6,963 in temporary disability, and that of the latter the disability extended over 1 to 3 days in 1,109 cases, over 3 to 7 days in 1,649 cases, over 7 to 14 days in 1,549 cases, over 14 to 28 days in 1,377 cases, and over 28 days in 1,279 cases.

The number of completed temporary disability cases, all departments, in which compensation and medical payments were made, and the amount of such payments, during the six months ending December 31, 1917, are indicated in the following table:

NUMBER OF CASES AND AMOUNT OF COMPENSATION AND MEDICAL PAYMENTS FOR COMPLETED TEMPORARY DISABILITIES, JULY 1, 1917, TO DEC. 31, 1917.

Duration of disability.	Total cases.	Cases compensated.		Cases with medical expenditures.		Total benefits paid.
		Number.	Amount paid.	Number.	Amount paid.	
1 to 3 days.....	1, 117			409	\$2, 438. 03	2, 438. 03
Over 3 to 14 days.....	3, 198	1, 563	\$17, 652. 56	773	6, 852. 89	24, 505. 45
Over 14 to 28 days.....	1, 378	1, 064	32, 646. 34	564	9, 322. 48	41, 968. 82
Over 28 days.....	1, 242	1, 043	100, 677. 09	669	32, 638. 03	133, 315. 12
Total.....	6, 935	3, 670	150, 975. 99	2, 415	51, 251. 43	202, 227. 42

A number of recommendations were submitted by the commission: (1) That the act be amended so as to include all civil employees of the District of Columbia; (2) that the act be amended so as to provide monthly compensation for total disability not to exceed \$100 nor less than \$50, unless the employee's monthly pay is less than \$50, in which case his monthly compensation shall be the full amount of his monthly pay; the present maximum and minimum are, respectively, \$66.67 and \$33.33; (3) that the act be amended so that, instead of terminating a widow's compensation immediately upon her

remarriage, she shall be paid in such event two years' compensation in 24 equal monthly installments; (4) that the act be amended so as to provide for the payment of compensation to a dependent parent until such parent dies, marries, or ceases to be dependent, instead of limiting the payment of compensation of such parents to a period of eight years as is provided in the present law; (5) that the act be amended so as to provide that in computing compensation 30 days per month for each month in the year shall be used as a basis of such computation; (6) that the act be amended so that when, in the judgment of the commission it is desirable to commute compensation payable to a widow by the payment of a lump sum, such lump sum payment shall be limited to 96 instead of 60 months' compensation as at present; (7) that the act be amended so as to broaden the meaning of the term "employee" to include all civilians in the service of the United States, the Panama Railroad Co., and the District of Columbia whether or not they are considered to be officers or employees; (8) that the act be amended so that whenever any beneficiary entitled to the benefits under the act shall die before the amount due him has been received from the United States, such amount may be paid by the commission to the widow or widower of such beneficiary, or if there is no surviving widow or widower, to the nearest surviving relative or relatives; (9) that the act be amended so as to permit the commission to cooperate with the various Government departments and independent establishments to prevent personal injuries to employees, and to authorize the employment of a safety engineer to direct such cooperative work; (10) that there should be enacted a workmen's compensation law covering employees of private employers in the District of Columbia.

About three-fourths of the volume is devoted to decisions of the commission.

CALIFORNIA.

The outstanding feature of the report of the California Industrial Accident Commission for the fiscal year ending June 30, 1918, a preliminary summary of which has been furnished this bureau, is that there were 31 fewer industrial deaths in the State during 1917 than there were in 1916. In 1916 the deaths reported totaled 657, and in 1917 the total was 626. In view of the larger number of employees in 1917, and the impetus given to hazardous employment as a result of war activities, the reduction in California's industrial deaths is considered very gratifying. The report states that the commission's emphasis on accident prevention has received splendid support from employers and employees. It was anticipated that 1917's death roll would be higher because frequently inexperienced men were assigned to hazardous work, but this fear was dispelled when the reports were tabulated.

There was a substantial increase in the number of acceptances of compensation filed by farmers and householders as well as those hiring casual employees outside of the employer's regular business. For all other employments compensation is compulsory. The total of acceptances filed was 29,317, divided as follows: Farming and kindred occupations, 15,182; domestic, 1,681; casuals, 12,454.

The total number of reported industrial injuries for 1917 was 109,988, of which number 626 were fatal, 1,942 were permanent, and 107,420 were temporary.

The commission awarded life pensions in eight cases of serious and permanent injuries. There were 17,007 injuries that caused a time loss of 15 days or more, the remaining injuries coming within two weeks waiting period.

The 109,988 injured workers were awarded \$2,769,997 in compensation, or an average of \$25.18 each. In this sum is included the estimates in all death and permanent injury cases. The medical, surgical, and hospital payments totaled \$1,178,357. The compensation and medical costs totaled \$3,948,354.

It is obligatory for employers in California either to insure against the compensation risk or secure a certificate of consent to carry their own insurance. Certificates were issued to 140 employers, including many of the largest employers in the State, with approximately 158,927 employees. Security, in the form of surety bonds or approved collaterals to the amount of \$2,715,000, is on deposit with the State treasurer to guarantee the payment of compensation to injured employees or the dependents of killed employees of these self-insured employers.

There were two noticeable decreases reported by the compensation department during the fiscal year; a decrease of over 9 per cent in the number of cases filed, and a decrease of 16 per cent in the time required for making decisions. Compensation was awarded to employees in 69.2 per cent of the contested cases, and denied in 21.4 per cent of the cases decided.

The commission's statistician prepared full information about California's 109,988 industrial injuries in 1917. The following table gives a comparative statement of the different classes of injuries for the years 1914 to 1917.

NUMBER AND TYPE OF INDUSTRIAL INJURIES IN CALIFORNIA DURING THE YEARS 1914 TO 1917, INCLUSIVE.

Type of injury.	1914	1915	1916	1917
Deaths.....	691	533	657	626
Permanent injuries.....	1,292	1,264	1,709	1,942
Eyes suffering impairment of vision or removal.....	172	175	202	230
Arm amputations.....	28	13	20	28
Fingers lost.....	872	798	900	904
Legs or feet lost.....	45	28	26	32
Toe amputations.....	54	40	33	34

In 1917 there were two women workers killed; in 1916, 4; in 1915, 2; in 1914, 2. The average age of the killed during 1917 was 38.8 years, and the average wage was \$22.26 a week. Occupational diseases reported in 1917 numbered 506; in 1916, 348.

The report states that there were 1,947 permanent injuries referred to the permanent disability rating department during 1917. Loss of earning power is the basis of the California compensation act in making awards for permanent injuries. The loss is determined by (1) nature of injury or disfigurement, (2) occupation, and (3) age.

The commission announces that it has commenced a careful investigation to learn definitely what has become of the approximately 7,500 permanently injured men, all of whom sustained their injuries between January 1, 1914, and July 1, 1918. Analyses of the reports indicate that about one case out of every five is severe enough to constitute a serious handicap. This suggests the need of industrial reeducation of the permanently crippled. "No compensation law fulfills its true purpose unless included under its activities is a department to guide men with permanent injuries into new wage earning capacities."

Employers have continued to patronize the State compensation insurance fund in increasingly large numbers, the report states, and the fund wrote compensation premiums in 1917 to the amount of \$1,373,792.54, or 24.4 per cent of California's total compensation premium income. It is estimated that the fund will have a premium income of \$2,500,000 for 1918, representing an increase of about 80 per cent over the business of 1917.

The fund's total assets as of June 30, 1918, were \$2,263,087.85.

The expense ratio, exclusive of the 2 per cent tax, was reduced from 15.46 per cent in 1915 to 10.28 per cent for the first six months of 1918.

A total of \$587,413.50 has been refunded to policy holders in dividends from commencement of operations to July 1, 1918.

IOWA.

The report of the Industrial Commission of Iowa for the biennial period ending June 30, 1918,¹ is an account of the workings of the act and a reproduction of the opinions and rulings interpreting it. Touching first upon the general purpose of compensation laws, the conditions arising under the State law are noted, particularly as to arbitration and review, insurance, the employment of legal service, and the need of amendments to clarify the law in some respects and to liberalize it in others. The limited acceptance of the law and of the provision for insurance is the basis of an appeal for legislation to

¹ Report of the Workmen's Compensation Service for the biennial period ending June 30, 1918, and digest of decisions by the department and State courts. Des Moines, 1918. 76 pp.

compel insurance and an extension of the benefits of the act. The employment of legal services is deprecated as an unnecessary expense in the main; and the importance of an increased medical and surgical benefit is urged to the end of a more general and certain preservation or restoration of earning capacity. The following table shows in summary form the operations under the act:

REPORTS OF ACCIDENTS AND SETTLEMENTS APPROVED UNDER IOWA WORKMEN'S COMPENSATION ACT, JUNE 1, 1916, TO JUNE 30, 1918.

Item.	Number of accidents and amounts of settlements during year ending June 30—		Per cent of decrease, 1918, as compared with 1917. ¹
	1917	1918	
Accidents reported.....	24,679	² 15,607	38.76
Fatal cases reported.....	159	187	³ 17.61
Settlements reported.....	5,092	44,367	14.24
Compensation paid in reported settlements.....	\$249,965.08	\$334,970.15	³ 34.01
Reported paid for medical, surgical, and hospital care.....	\$75,471.60	\$60,080.99	20.39

¹ This column is computed; it does not appear in the report.

² Decrease due to amendment to law providing that injuries disabling no longer than one day need not be reported.

³ Increase.

⁴ Does not include settlement reports in cases where only medical and surgical benefits were paid.

When settlement is not amicably arrived at, the law provides for arbitration by a committee of three, of which the industrial commissioner shall be a member, and shall act as chairman. The following table shows the operation of this provision under the Iowa workmen's compensation act, July 1, 1916, to June 30, 1918.

ARBITRATIONS UNDER THE IOWA WORKMEN'S COMPENSATION ACT, JULY 1, 1916, TO JUNE 1, 1918.

Item.	Year ending June 30—	
	1917	1918
Total number of applications filed.....	174	180
Total number of cases arbitrated.....	67	71
Total number of cases settled without hearing.....	60	84
Total number of cases dismissed.....	9	23
Total number of cases reopened.....	5	6
Total number of cases decided on review by commissioner.....	17	18
Total number of cases appealed to courts.....	11	11

From the above it appears that in 1916-17 the number of applications for arbitration was but 3.4 per cent of the number of settlements reported, while the number actually arbitrated was but 1.3 per cent of this number. The number appealed to the courts was but 0.21 per cent. In 1917-18, the proportions increased somewhat, the applications being 4.1 per cent, the arbitrations 1.6 per cent, and the appeals 0.25 per cent of the total number of settlements reported.

Among the decisions only one or two of special interest will be noted. One of these involved the status of a workman engaged in a

mine in the dual capacity of shot examiner, for which he was paid by the company, and of shot firer, for which he was paid by the miners. It was in evidence that the miners' union insisted on the selection of a shot firer, and that where there is a dual employment, as in the present instance, the employer shall accept their selection of a shot firer as shot examiner, and not the reverse. The employee, Davidson, having lost his life while about his duties, it was found that his widow had failed to show that her husband was an employee of the company. The report does not set forth the circumstances of the death, that is, in which capacity he was serving at the time of the fatal accident. The district court of Wapello County reversed the ruling of the industrial commissioner, and the case was taken to the supreme court of the State, where it was pending at the time of the publication of this report.¹

A second case involves the authority of the Industrial Commission to take action where the employer claims to be engaged in interstate commerce. The injured workman was employed in a railway shop as wheel borer, and lost his life by accident. The widow's claim for compensation was acted upon by the commissioner despite the position taken by the employer that the injured man was an interstate employee. On appeal to the supreme court of the State it was held that the simple assertion that the employment was in interstate commerce was not final, being a mere defense which the employer may plead, but which must be decided by the commissioner, or his committee of arbitration, the exclusive original jurisdiction being thus properly vested by law. (*Davidson v. Funk*, 164 N. W., 648.) However, the defense will be good and complete against a compensation award, if found to be properly made, since interstate commerce is under the Federal law exclusively.

The following are some of the more important amendments to the workmen's compensation act recommended by the industrial commissioner:

1. Increasing minimum and maximum weekly allowance in death cases.
2. Increasing percentage of weekly compensation.
3. Providing coverage for casual employment when for the purpose of the employer's trade or business.
4. Fixing compensation for loss of second eye in industrial employment at 300 weeks.
5. Providing for increase of medical, surgical, and hospital service at discretion of industrial commissioner.
6. Making specific provision for \$100 burial benefit in addition to medical, surgical, and hospital service.

¹ It may be noted that the Supreme Court of Kentucky (*Edwards Admr. v. Lam*, 132 Ky., 32, 119 S W., 175) and Louisiana (*Farmer v. Kearney*, 115 La., 722, 39 So., 967), are in evident agreement with the position taken by the commissioner; while that of Washington (*Pearson v. Steamship Co.*, 51 Wash., 560, 99 Pac. 753), holds with the district court.

7. Authorizing industrial commissioner to institute arbitration or reopening on his own motion.
8. Providing for temporary disability compensation concurrent with schedule injury compensation.
9. Making specific provision for loss of teeth in industrial employment.
10. Providing more definite and workable procedure to insure the prompt reporting of accidents.
11. Providing more complete insurance coverage.
12. Extra-territorial provision.

MINNESOTA.

The commissioner of labor and industries is charged by the workmen's compensation law of the State with the duty of observing the operation of the act and reporting biennially thereon to the legislature with such suggestions and recommendations of changes as may be deemed advisable. Copies of settlements and releases under the act are also required, while a separate act requires reports in detail of all industrial accidents within the State. The commissioner is therefore able to give a full report of the workings of the act and the cases arising under it.¹

Beginning with recommendations for changes in the act, the commissioner vigorously urges an amendment providing for the approval of settlements and the adjustment of disputes by an administrative agency instead of by the courts. The latter method was adopted largely because the law was patterned after that of New Jersey, which State has since abandoned the method. Inherent difficulties and disadvantages attach to the system of court administration, which is characterized as obsolete, and entail formalities and delays entirely out of harmony with the theory and spirit of compensation laws.

Obligatory insurance of the payments coming due is also urged as necessary to secure to the workman the benefits contemplated by the law; and the benefits of an exclusive State fund for this purpose are urged at length. After stating that the department felt two years ago that such a recommendation was outside its province, a change of opinion is announced because of both the primary importance of the question and the functions with which the department is charged under the act.

We have therefore during the biennium just closed given much research and study to the question of State fund, checking with our observations of the operation of the present law, and it is our mature conclusion that a carefully considered State fund law would be the best single improvement that the 1919 legislature could give along the line of compensation. When we say best, we mean best from the point of view of the workingman, the employer, and the public at large. We mean nothing invidious against the insurance companies when we say that they can not be considered as entering into this question. Compensation is a matter between the employee and the employer, with only one other party, the general public, to be considered.

¹ Sixteenth Biennial Report of the Department of Labor and Industries of the State of Minnesota, 1917-18. Minneapolis, 1919. 187 pp. Workmen's Compensation, pp. 12-43.

Particular study had been made of the Ohio fund, which had been found generally satisfactory, the slight objections being capable of remedy in drafting a new law. The commissioner would, however, permit self-insurance under guaranties.

Other recommendations relate to the supply of full medical and surgical treatment to the end of curing and relieving from the effects of the injury and replacing the injured man in industry; more liberal schedule allowances for serious partial disabilities; a provision for second injuries; and making the law compulsory in certain classes of employments.

In the statistical report the uniform classifications and standard tables recommended by the industrial association of industrial accident boards and commissions have been adopted. An important gain has been achieved in the matter of comparability of results under laws having different rates of benefits by adopting a scale of time losses based on an approved weighting system for injuries. On the basis of this system, and adopting very conservative values, it was found that for cases closed in the statistical year 1916-17 (that is all compensation payments completed), the severity was expressed by the equivalent of 1,201,419 industrial days. For 1917-18 the loss equaled 1,439,652 industrial days. Converting this into money values at the average wage prevailing for each period (\$2.77 per day in 1916-17, and \$3.13 in 1917-18), the financial loss would be \$3,327,931 for the former year and \$4,506,111 for the latter. To these amounts must of course be added the amounts of uncompleted cases, which would run the amounts well above five and seven millions respectively.

Limiting the comparison to cases of temporary total disability, a showing is made of the proportion of the total wage loss that is offset by the compensation paid, the amount being 38 per cent in 1916-17, and 48 per cent in 1917-18. From this it appears that the injured workman and his family are still left to bear, without any possibility of shifting the burden to the industry or to the ultimate consumer, a major part of the financial loss due to industrial accidents. The important gain made from the first year named to the second is chiefly attributable to amendments of the law, advancing the compensation rate from 50 per cent to 60 per cent of the wages and the maximum benefits from \$11 to \$12 per week, and reducing the waiting time from two weeks to one.

The following table is selected from those given as showing the important facts in regard to the compensation of injuries by their nature, for the year 1917-18. The table conforms quite closely to the standards prescribed by the international association, but medical expense could not be shown in the manner recommended. The medical relief given amounted to \$336,362, of which \$131,122 was

for treatment by the case and \$205,240 for treatment under contracts.
The table follows:

COMPENSATION PAID ON ACCOUNT OF ACCIDENTS, BY NATURE AND EXTENT OF
DISABILITY.

Injuries causing—	Number of cases.	Compensation.	
		Total.	Average.
Deaths:			
With dependents.....	30	\$48,775	\$1,625
Without dependents.....	9		
Cases closed by statute.....	57		
Total.....	96	48,775	508
Loss, both eyes.....	1	1,500	1,500
Paralysis, both arms or legs.....	3	7,032	2,344
Other permanent total disabilities.....	3	6,067	2,022
Total, permanent total disabilities.....	7	14,599	2,085
Dismemberments:			
Arm.....	5	6,742	1,348
Hand.....	8	8,045	1,005
Thumb.....	18	8,394	466
Index finger.....	37	11,747	317
Middle finger.....	23	5,419	235
Ring finger.....	10	2,761	276
Little finger.....	25	3,424	136
Thumb and finger.....	8	6,105	763
Two or more fingers.....	68	32,949	484
Phalanx of thumb.....	20	4,697	234
Phalanx of index finger.....	36	10,584	294
Phalanx of middle finger.....	32	4,080	127
Phalanx of ring finger.....	19	1,610	84
Phalanx of little finger.....	15	1,574	104
Foot.....	4	5,012	1,253
Toes.....	20	4,114	206
Leg.....	10	10,466	1,046
Eye.....	51	44,767	877
Total dismemberments.....	409	172,490	422
Partial loss of use:			
Arm.....	25	13,983	559
Hand.....	24	12,633	526
Thumb.....	14	2,922	208
Index finger.....	19	2,931	154
Middle finger.....	18	3,600	200
Ring finger.....	6	669	111
Little finger.....	12	1,195	99
Thumb and finger.....	2	765	382
Two or more fingers.....	15	3,923	261
Foot.....	22	11,973	544
Toes.....	4	901	225
Leg.....	26	25,289	973
Eyes.....	22	9,700	440
Ears.....	3	1,334	444
Total, partial loss of use.....	212	91,818	433
Total permanent partial disabilities.....	621	264,308	425
Temporary disabilities:			
Two weeks and under.....	1,827	11,498	6
Over 2 to 3 weeks.....	1,538	25,302	16
Over 3 to 4 weeks.....	1,035	27,447	26
Over 4 to 5 weeks.....	718	26,173	36
Over 5 to 6 weeks.....	517	33,448	45
Over 6 to 7 weeks.....	327	18,177	55
Over 7 to 8 weeks.....	257	16,930	65
Over 8 to 9 weeks.....	198	15,049	76
Over 9 to 10 weeks.....	135	11,843	87
Over 10 to 11 weeks.....	134	12,799	95
Over 11 to 12 weeks.....	92	9,560	103
Over 12 to 13 weeks.....	78	8,957	114
Over 13 to 26 weeks.....	400	64,827	162
Over 26 to 39 weeks.....	101	29,981	296
Over 39 to 52 weeks.....	36	14,506	402
Over 52 weeks.....	65	52,068	801
Total temporary disabilities.....	7,458	368,565	49
Grand total.....	8,182	696,247	85

NEBRASKA.

The compensation law of Nebraska is administered by the State commissioner of labor, who is also designated as compensation commissioner. This title is given by law to the governor of this State, but the actual work of administration devolves upon the chief deputy commissioner. The report of the deputy for the period from January 1, 1917, to October 31, 1918,¹ sets forth some of the needs developed by experience, with recommendations for appropriate amendments, a brief sketch of compensation legislation, the text of the Nebraska law, statistical data, and a summary of the decisions of the compensation commissioner from July 24, 1917, to December 1, 1918. The recommended amendments are of minor importance, seeking for aid in administration for the most part. However, there is a recommendation as to special legislation covering hernia cases, and one asking for an increase in the weekly maximum and minimum benefits fixed by the act, in view of the general advance in wages. The summaries of decisions are brief, and no syllabus or index of any sort is presented.

The statistical data make no division between temporary disabilities and those of a permanent nature, nor does the distribution into time groups follow the usual standards so as to be available for comparison. During the period covered there were 20,359 injuries reported, 28 of which were fatal, 9,773 of which lasted more than one week, and 10,558 of which lasted one week or less. The total amount paid in compensation and medical, hospital, and funeral benefits was \$306,251.48, as shown in the following table:

NUMBER OF INJURIES REPORTED AND AMOUNT OF COMPENSATION AND OTHER BENEFITS PAID UNDER NEBRASKA WORKMEN'S COMPENSATION LAW, JAN. 1, 1917, TO OCT. 31, 1918.

Duration of disability.	1917			1918 ²		
	Number of cases reported.	Benefits paid.		Number of cases reported.	Benefits paid.	
		Compensation.	Medical and hospital services.		Compensation.	Medical and hospital services.
Lasting one week or less.....	5,631		\$17,627.25	4,927		\$14,311.58
Lasting more than one week.....	7,647	\$101,204.51	34,109.07	2,126	\$90,967.48	24,882.91
Fatal.....	15	8,642.28	³ 1,590.90	13	11,573.00	⁴ 1,342.50
Total.....	13,293	109,846.79	53,327.22	7,066	102,540.48	40,536.99

¹ Nebraska. Second biennial report, Compensation Department, Department of Labor. Lincoln, 1918. 69 pp.

² To Oct. 31. ³ Includes \$1,500 for funeral expenses. ⁴ Includes \$1,300 for funeral expenses.

PENNSYLVANIA.

The second volume of decisions of the Pennsylvania Workmen's Compensation Board contains official reports of the cases decided from January 1 to December 31, 1917.¹ Indexes of cases and subject matter, and lists of cases appealed to the courts are added.

The cases presented cover a wide range of subjects, the questions as to the course of employment coming up for consideration 27 times. A like number of cases involved questions of dependency, while in 25 the accidental nature of the injury required determination. Anthrax was classed as an accidental injury (p. 376); and this is regardless of the origin of the scratch or cut by which the germ gained access to the system (p. 493). An appeal from this latter finding was taken to the court of common pleas, but was dismissed. Heat prostration need not be due to conditions peculiar to the employment in order to be a compensable injury under the Pennsylvania law, since the accident need only occur in the course of the employment, the phrase "arising out of" having been omitted by the legislature "with a definite purpose in mind" (pp. 415, 527). The earlier case was carried to the supreme court of the State and there affirmed.

Another among many cases of interest that might be noted is one declaring a fixed bonus a part of the wages, and to be considered as a basis for determining the amount of compensation (p. 522).

A cumulative index would add to the value of this carefully edited volume.

SOUTH DAKOTA.

The industrial commissioner of South Dakota has just issued his first annual report covering the operation of the workmen's compensation act for the year ending June 30, 1918.²

The South Dakota act is an elective one and covers all employees except farm labor and domestic service. Insurance is compulsory, but the only penalty for noncompliance with this provision is that the individual employer is subject to damage suits in case of injury. Recovery of a judgment, however, is frequently impaired by the financial irresponsibility of the employer. Only 25 per cent of the employers who are strictly under the provisions of the act have actually insured their risks.

Every employer accepting the law is required to report all accidents to the industrial commissioner. The waiting period is two weeks. The total number of accidents reported during the year was 1,770, 20 of which were fatal. A large majority of the reported accidents were noncompensable. Of the total number of cases reported com-

¹ Decisions of the Workmen's Compensation Board for the year 1917. Harrisburg, 1918. 596 pp.

² First annual report of the South Dakota Industrial Commissioner for the 12 months ending June 30, 1918. [Pierre, 1918.] 27 pp.

pensation was paid in but 351. The 1,770 accidents were distributed among the various industries as follows:

Mining industry.....	664
Packing houses.....	88
Carpenters.....	70
Construction work other than carpenters.....	45
Railroads.....	56
Lumbering.....	26
Telegraph and telephone.....	18
Power plants.....	15
Manufacturing.....	3
Agriculture.....	5
Miscellaneous.....	570
Cases reported and not closed.....	210
Total.....	1,770

Compensation benefits are based upon 50 per cent of the employee's wages and medical service is furnished for the first 4 weeks but not over \$100 in each case. The total benefits paid amounted to \$66,582.17 of which \$43,656.23 was paid in money benefits and \$24,925.94 for medical service. The total amount paid and outstanding was estimated at about \$100,000.

The following table shows the closed cases classified according to the amount of medical costs:

NUMBER OF COMPLETED CASES CLASSIFIED ACCORDING TO AMOUNT OF MEDICAL COSTS.

Amount of medical fees.	Number of cases.
No relief required.....	319
Under \$10.....	889
\$10 and under \$20.....	216
\$20 and under \$50.....	90
\$50 and under \$100.....	28
\$100.....	12
Over \$100.....	9
Total.....	1,563

Under the law farm labor is not protected. "Most compensation laws," says the report, "are based on the old English law which exempted farm labor as practically all farm work was done by hand labor. With modern machinery, farm operations are just as hazardous as are many other industrial occupations, and the men who work with such machinery should, in the opinion of this department, have the same protection as those working with machinery in industrial plants." In this connection the industrial commissioner ruled that a thrasher operator, who operates his machine for profit, going from farm to farm for this purpose, is under the law. The thrasher men of Brown county formed a mutual insurance association to carry their own risks under the insurance provisions of the act.

Two interpretations of the act, as construed by the attorney general, are worthy of note. (1) It was held that the term "domestic servants" means servants employed in private domestic service as distinguished from service rendered to an employer carrying on a business for profit and that this term does not include servants employed in a hotel, restaurant or other hostelry. (2) Is a church society, which is constructing a new church building by day work, exempted from the act by the section which provides that the law does not apply to laborers not employed in the usual course of the trade, business, profession or occupation of the employer? It was held that the act did not apply under the circumstances because it was not the usual business of the church to build buildings. It is interesting to note that the Wisconsin Industrial Commission takes an entirely different viewpoint. This commission has interpreted the word "usual," as used in the phrase "usual course of employer's trade, etc." as modifying "course" and not "trade." Any person, therefore in the service of another performing work for his employer is covered by the law, provided such work is in the usual course of the trade, business, profession, or occupation.

WYOMING.

The third report of the Workmen's Compensation Department of the State of Wyoming covers the calendar year 1918.¹ During this period 852 employers paid into the industrial accident fund, an increase of 351 employers over the 15-month period ending December 31, 1917, and an increase of 610 over the first 18 months of the operation of the act. Approximately 21,000 employees are protected under the act, of which number about 10,000 are employed in the coal industry, 5,200 in the oil industry, and 5,800 in all other industries. The cost of administration for the 12 months, the report states, was \$9,193.68 or 4.26 per cent of the total amount paid in by the employers and 3.4 per cent of the total amount accrued to the industrial accident fund. The monthly average premium credited to the fund was \$17,958.20. The financial statement showed a balance of \$574,485.92 to the credit of the fund on December 31, 1918.

The statistical report shows that 595 claims were paid, the total payments amounting to \$94,953.67. The following table shows the number of awards and the amount paid, by degree of disability, for the period under review and by way of comparison, for the 18-month period ending September 30, 1916, and the 15-month period ending December 31, 1917, all three periods covering the entire history of the workmen's compensation act.

¹ Third report of the Workmen's Compensation Department of the State of Wyoming, for the 12 months ending Dec. 31, 1918. Laramie, 1919. 99 pp.

NUMBER AND AMOUNT OF AWARDS PAID UNDER WYOMING WORKMEN'S COMPENSATION ACT, APR. 1, 1915, TO DEC. 31, 1918, BY DEGREE OF DISABILITY.

Degree of disability.	Apr. 1, 1915, to Sept. 30, 1916.			Oct. 1, 1916, to Dec. 31, 1917.			1918.		
	Number of awards.	Amount awarded.	Per cent of total amount awarded.	Number of awards.	Amount awarded.	Per cent of total amount awarded.	Number of awards.	Amount awarded.	Per cent of total amount awarded.
Fatal cases.....	26	\$30,828.41	47.2	37	\$35,443.84	35.6	24	\$37,147.07	39.1
Permanent total disability..	3	3,877.00	6.0	1	1,400.00	1.4	3	4,228.50	4.5
Permanent partial disability.	50	17,520.57	26.8	86	42,498.59	42.7	78	32,699.79	34.4
Temporary disability.....	535	13,081.25	20.0	639	20,255.60	20.3	490	20,878.31	22.0
Total.....	614	65,307.23	100.0	763	99,598.03	100.0	595	94,953.67	100.0

¹ Includes \$350 paid for funeral expenses.

SUMMARY OF FINDINGS AND RECOMMENDATIONS OF THE OHIO HEALTH AND OLD-AGE INSURANCE COMMISSION.¹

SICKNESS AND DISABILITY—THE CAUSES AND EFFECTS.

Child welfare.—Statistics of child vitality disclose an unsatisfactory condition. The death rate of infants under one year of age is high, being from 9 per cent to 10 per cent of all babies born. In Ohio, of those that die within one year 48.3 per cent die within the first month. The average for the registration area of the country is 44.5 per cent; for the cities of the country, 40.9 per cent; and for the rural parts of the registration area of the country, 47.1 per cent. These figures measure the extent of prenatal and maternity care and show Ohio behind the country as a whole.

The children who do not die appear to be growing up with far too many defects, which may develop into the disabilities of later life. All the records in this State and outside show that from 40 per cent to 70 per cent of all children in school are suffering from one or more defects. An intensive physical examination of 994 pre-school children in Cincinnati showed that 53 per cent were average height or above and 47 per cent below average. Two hundred and thirty-one, or 23 per cent, had some serious defect.

Statistics of the first draft showed that 32.2 per cent of the young men of Ohio failed to be admitted to the Army. Fully 50 per cent of the causes for rejection could have been prevented in childhood.

To meet the need for physical examination we find that half of the cities, including the larger cities, have some medical inspection, but that only four of the counties are providing for any inspection at all, although statistics show that defects are more prevalent among country children than among the children of the city. In only three or four cities is the medical supervision measurably adequate. Public health

¹ This is a reprint of the findings and recommendations of the commission as transmitted to this bureau.

nursing work has been developed to some extent for prenatal, maternity, and infant care, there being 480 public health nurses, but the beginnings are feeble when compared with the magnitude of the need. There are 40 counties in Ohio where there is no public health nursing work and in many of the others only one nurse is provided.

National vitality.—The death rate for the country has decreased from 19.8 per thousand in 1880 to 14 per thousand in 1916. The rate in Ohio in 1916 was 14.4, and in 1917, 14.8 per thousand. The death rate of Ohio compares favorably with the rest of the country and with the civilized countries of the world. When we analyze the figures for the United States, however, we find that our death rate is excessive in the working ages, and that despite the general improvement, we have made no progress in reducing death rates in the population between 20 and 60 years of age. Certain diseases have increased their ravages in these groups, such as the degenerative diseases.

It appears that rural health is not improving as satisfactorily as the health of the city. Certain diseases which ought not to be serious in the rural sections take a heavy toll in death and disability.

Available statistics of sickness show that every worker loses an average of about nine days annually. Nearly 3 per cent of the people and of the workers are sick at all times, or about 150,000 people. The million industrial workers lose about 9,000,000 days from sickness. Twenty per cent of the workers have a disabling sickness each year. Sixty-five per cent of those who are sick for more than seven days will be sick for less than four weeks; 19 per cent from four to eight weeks; 7 per cent from 8 to 12 weeks; 6 per cent from 12 to 27 weeks; 3 per cent for more than six months, and 1.29 per cent over one year.

Sickness and economic distress.—The advent of sickness is the chief cause for raising the signal of economic distress. Among those who in times of economic distress seek aid from the private relief societies, 35 per cent to 50 per cent of the dependency is due to sickness. Among the inmates in Ohio infirmaries, sickness, next to old age, is the leading cause of dependency, accounting for the presence as infirmary inmates of nearly 30 per cent. Among the aged cared for in private institutions sickness is again the foremost cause for dependency, being responsible for 40 per cent. Where poverty exists, it may cause sickness; sickness in turn aggravates existing poverty. A systematic method of meeting the expenses and losses incident to sickness would prevent many from falling into destitution and would provide a stop-gap to the otherwise endless chain of sickness and poverty. Among those of somewhat larger means, among whom economic distress is manifested not by dependency but by borrowing, sickness leads all other causes. Thirty to 50 per cent of the chattel loans are attrib-

unable to sickness, and among the causes for loans made by the Morris Plan Banks, sickness figures conspicuously.

The conclusion is plain that large numbers are living so close to the margin of income that unusual expenses, such as those connected with illness, force them to resort to charity or to borrowing to tide them over.

The losses from sickness.—The direct losses from sickness fall under three heads:

- I. Loss of wages.
- II. Cost of medical care.
- III. Loss of working power.

The total loss of wages can be readily figured for any large group of workers, and the individual loss for the worker who is sick can likewise be easily determined. It is a serious loss when it extends over a period beyond 30 days and in many cases beyond 15 days.

The cost of medical care for families averages from \$20 to \$40 in the industrial group. Five hundred and eight families earning from \$1,000 to \$1,300 in Cleveland, Lorain, and Toledo, had an average expense of \$41.79. Six of these families had over \$300 expense, while three had none.

The loss of earning power is not easily determined. From most diseases complete recovery is had, but some diseases cut down the working power. Fisher estimates that tuberculous persons lose 50 per cent of their capacity to work. Other studies disclose that the workers are often seriously handicapped temporarily or permanently by being crippled or otherwise unable to do a full man's work.

The factors causing sickness.—Three factors are clearly responsible for sickness—the individual, the industry, and society.

The individual causes sickness to himself by carelessness and recklessness; by intemperance in eating and drinking; by the use of intoxicants, drugs, and tobacco; by personal vice.

The hazards of industry are dust, dirt, heat, fatigue, poisons, bad air, infections, bad light, dampness, inactivity, and weather exposure.

The community is responsible for the spread of communicable diseases. Filth diseases are due to community laxness. Tuberculosis can be checked only by community action. Much of the failure to prevent health hazards of all kinds goes back to the failure of the community to properly educate children in health matters. A great deal of sickness is due to the failure of the community to enforce proper standards of housing, proper hours of labor, proper conditions for work, and a living wage.

One or more of these causes of sickness are generally at work. While some diseases are almost entirely attributable to individual vice, such as venereal diseases; or to the community, as typhoid; to

industry, as lead poisoning; the great bulk of diseases is due to causes arising from a combination of individual, community, and industrial causes.

The worker lives in three distinct environments—his home, his place of work, and his local community. In his home, conditions affecting health are within his control, except so far as the character of the housing which he can afford may not enable him to live decently. In industry, such matters are outside the control of the individual worker, while in community health matters, the individual is affected by conditions for which the community as a whole is responsible.

Who bears the burden of sickness.—The direct burdens of sickness are now borne almost entirely by the individual and the public. The individual loses his wages and generally pays the cost of medical care. He also stands the loss in his depreciated earning capacity. The public pays large sums for hospitals and for institutions for special kinds of sickness. The public also pays a large part of the cost of dependency which arises out of sickness. There is an investment of \$80,000,000 in institutions and equipment for the care of sick and dependent people.

The burden is distributed in Ohio by means of insurance to a slight extent. Fraternal orders paid to their members as sickness benefits in 1917 approximately \$1,500,000; trade unions paid approximately \$250,000; establishment funds distributed approximately \$400,000; commercial accident and health insurance companies received \$2,877,377 in premiums and paid \$1,211,315 in losses; commercial health insurance companies received \$417,149 in premiums and paid \$177,950 in losses. Roughly speaking, 35 per cent of the workers have sickness insurance for about 10 per cent to 15 per cent of their loss. Figures are not available to show the extent to which churches, lodges, and clubs extended special relief in cases of distress.

The amount received in premiums by the industrial insurance companies for burial insurance in Ohio was \$12,164,463 in 1917, and the amount paid out in losses was \$3,455,059.

Liability for sickness losses.—The recognition of the three causative factors of sickness, namely, the individual, the industry, and the community, carries with it the recognition of the liability of each factor for losses incurred. If any one of these factors were the sole cause of sickness, then there would be no divided liability for losses. If the part which each factor causes could be segregated, then each could be charged with the losses it causes.

The causes of sickness are so intertwined among the three factors as to make segregation of blame impossible and, therefore, it is necessary to apportion the whole liability among the three factors with reasonable fairness, leaving the way open for readjustments from time to time as conditions change.

The benefits accruing to each from a comprehensive handling of the health and sickness problems should also properly be considered in establishing a basis for the payment of sickness losses. From a compulsory plan all three will naturally profit and therefore it would appear to be reasonable to apportion the cost also on the basis of benefits.

Lastly, the question should be viewed also from the standpoint of the minimum living wage. We recognize that every man who is willing to work is entitled to a living wage which includes present comforts, in decent living conditions, and proper provisions for sickness, unemployment, and old age. When wages are inadequate for present living necessities, sickness is caused. When wages do not make provision for sickness, dependency or destitution follows. By means of insurance only can the living wage provide with certainty for the contingencies of life.

MEASURES OF PREVENTION AND CARE.

Health administration and medical service.—The health of the people of Ohio is protected by a State department of health and by health boards and officers in the cities, villages, and townships. The State department of health is well organized and nothing further is needed except the creation of new divisions and enlarged appropriations, from time to time, to meet the enlarging needs. The local health department consists of a board of health or health officer. There are 2,141 health units in the State. Only five cities have a full-time health officer. The health officer of nearly all of the cities, villages, and townships give only nominal service and receive only a nominal compensation. The job is given often to the lowest bidder and generally no qualifications are required. The result is a health system quite incapable of promoting public health or protecting the people in emergencies such as the recent epidemic of influenza.

We find that the best thought and experience in the country approves strongly the all-time health officer.

The rural districts, the villages, and small cities suffered severely in the recent epidemic of influenza. They suffer frequent epidemics of smallpox, typhoid, and other preventable diseases. Much of the failure to improve the health of the rural districts is traceable to the lack of public-health work.

Within the last few years the work of the public-health nurse has been rapidly extended, and in September, 1918, there were 480 public-health nurses in the State employed by public and private agencies.

There are in Ohio approximately 8,000 physicians and 5,302 nurses (not taking account of withdrawals for war service). The average for the State is one physician for 650 people. The distribution of physicians is uneven, there being one physician to 384 people

in Columbus and one to 5,000 in some remote sections. Ten mining communities covered by investigation showed an average of one physician to 2,100 people.

There are 150 hospitals and sanatoriums with about 25,000 beds for patients, besides the State institutions, county infirmaries, children's homes, and private homes for the aged. Fifteen hundred beds are available in municipal, county, and district tuberculosis hospitals. Dispensaries number 30.

The practice of medicine is principally on an individualistic basis. There is very little of what has come to be known as group practice. There is some lodge practice, a little contract practice, and a rapidly extending industrial medical service.

From the best evidence available, it appears that the people of Ohio spend between \$7,000,000 and \$8,000,000 for patent or proprietary medicines annually.

Tuberculosis.—The ravages of this disease have been well known for some time. New studies have only confirmed the fact that a tremendous toll is taken every year from the most productive period of life—that between 20 and 40 years of age.

The exact extent of tuberculosis is not known. There were 7,453 deaths from this cause in 1917, but only 6,454 cases were reported by physicians to the State department of health. The best informed experts on the subject agree that there are not less than 25,000 cases of tuberculosis in the State at all times and that probably the number is nearer 50,000.

A widespread campaign has been directed against the disease for the last few years and substantial results have been achieved. The total death rate from this cause has materially decreased.

The Ohio Society for the Prevention of Tuberculosis, local tuberculosis societies, and other groups have carried on a campaign of education, and have established dispensaries and clinics in many cities. Eleven county, district, and municipal tuberculosis hospitals have been established with 1,500 beds. A State sanatorium has also been established with 175 beds. These facilities, it is apparent, are not able to take care of more than a small fraction of the cases. The result is that the tuberculosis hospitals have become asylums for the worst cases and the curative and preventive work is subordinate.

Authorities agree that the efforts should be directed to getting the patients under care before it is too late to arrest the case. All agree that the difficulties are great because men with dependents can not leave their work to go to a sanatorium without some provision other than charity for the maintenance of dependents. Men therefore remain at work until it is too late.

Feeble-mindedness.—No exact information is in existence as to the extent of feeble-mindedness among the people of the whole State. Estimates based on careful but partial surveys indicate that Ohio has not less than 15,000 feeble-minded persons. At present the State institution for the feeble-minded cares for approximately 2,200 persons. Estimates of the population in the State institutions show 15 per cent of the children examined in children's homes to be below normal; in penal and semipenal institutions, approximately 50 per cent below normal. A number of feeble-minded persons are also found in the county infirmaries. Dr. E. J. Emerick, superintendent of the Ohio Institution for the Feeble-Minded, estimated that of the feeble-minded in Ohio less than 20 per cent were cared for in the institution provided and that at least 8,000 were at large. The greater part are therefore not segregated but are living a precarious life in the community—a life dangerous to the individual and to society.

Ohio began some years ago to take a large view of this problem and created a bureau of juvenile research in the board of administration, and provided a special institution for expert examination. The work is now getting rapidly under way and offers much hope that the State will really know the situation and be properly guided in the solution of the problem. Adequate support should therefore be given to the carrying out of the plans already formulated. The problem can be met only by thoroughgoing measures. The State will profit much more by the expenditure of liberal sums to prevent feeble-mindedness than in the expenditure of vast sums to take care of the results of feeble-mindedness.

Venereal diseases.—The amount of venereal disease among the population is variously estimated but the best authorities agree that no less than 10 per cent are afflicted and that a much larger percentage suffer from such diseases at some time during life. The train of physical disability and wreckage which follows venereal diseases is very large. Expert testimony before the commission indicated that the blame for fully one-eighth of the human ills were due to syphilis; that half the stillborn babies are due to venereal diseases; and most of infant blindness is a result of venereal infection.

The situation growing out of the spread of venereal diseases is nothing less than a national peril.

The Federal authorities have formulated a plan for cooperation with the States in the supervision of such diseases. National financial and expert aid is given to the States and the States furnish the necessary legal power to carry on the work. Full support should be accorded to the State and national authorities in this respect.

Hospital legislation.—A special committee appointed by the governor to report plans for hospital legislation has made several

recommendations which are of special interest to the work of this commission. These recommendations meet with the approval of this commission. They are:

That a bureau of hospitals be created in the State department of health to gather information concerning hospitals and give assistance in hospital matters; to define and classify hospitals and dispensaries; to require regulation of all hospitals and dispensaries; to require reports on uniform blanks; to investigate all applications for incorporation of hospitals and dispensaries "not for profit"; and to give to the secretary of state authority on the recommendation of the State department of health to grant or withhold a certificate of necessity for hospitals or dispensaries "not for profit."

There is at present very little real control of these important institutions and very little exact knowledge of actual hospital facilities and costs. The war emergency emphasized the need for more exact information and definition.

HEALTH INSURANCE.

Outlines of a plan.—We find that the burden of sickness is heavy and that it falls with crushing force upon some people, causing economic distress and destitution and that the only way of distributing the burden is by means of insurance. We find that voluntary plans of health insurance distribute only a small fraction of the loss at present. Moreover, it does not appear likely that voluntary health insurance will ever be able to measurably solve the problem. The experience of the world does not warrant any hope that the problem can be solved except by a universal compulsory plan of health insurance. All of the leading European countries are solving the problem that way.

Health insurance should provide against the three losses, namely, loss of wages, cost of medical care, and loss of earning power. A cash benefit should be given for an amount sufficient for the minimum necessities. Medical care, including hospital, dental, and specialists' service and medicines should be provided. Opportunity for physical restoration and for vocational reeducation, when necessary, should be provided in cooperation with public agencies. A death benefit should also be provided for an amount not exceeding \$100.

There should be a waiting period of at least seven days before cash benefits begin, and payments should be continued as long as disability lasts or at least for three years. Medical benefits should be available at any time before and after disability. The cost should be divided between the employers and employees and the State should pay the cost of administration and provide adequate health protection and hospital facilities.

The insurance should be carried by local carriers democratically administered. Establishment funds or mutual benefit funds and local public mutuals are approved as carriers. All extra hazards should be reinsured by the carriers in a State fund. Insurance organizations or companies organized for profits should not be permitted to be carriers. Insured persons should be allowed to insure in fraternal, trade-union, and other health insurance carriers for additional amounts, but provision should be made to minimize the dangers of overinsurance.

The organization for medical care and the fixing of compensation for medical service of all kinds should be left to the State commission which administers the act, because of the necessity for adjustment from time to time to meet new conditions and because of the varying conditions throughout the State. It should be clearly understood, however, that one of the prime necessities of health insurance is adequate medical care.

The system should be administered by a State commission of four members of whom the State commissioner of health should be one. This commission would have wide powers to make all necessary rules and regulations and to supervise all sickness insurance carriers acting under the system.

European experience with health insurance.—Leading industrial nations of Europe have passed beyond the stage of voluntary health insurance for wage earners. The only nations which cling to voluntary health insurance without government subsidy (the method that prevails in the United States) are Turkey, Bulgaria, Greece, Albania, Montenegro, Spain, and Portugal.

Voluntary insurance has been supplemented by State-subsidized voluntary insurance and by obligatory insurance. Under the first plan the State pays part of the premium of workers who insure upon their own initiative in recognized societies. This has been the line of development in France, Switzerland, Belgium, Denmark, New Zealand, and Sweden. In practice this is modified by a trend toward obligatory insurance. In France, Italy, and Denmark insurance is made obligatory for selected occupations; in Belgium a bill for obligatory insurance had passed one chamber in the last session before the war; and in Sweden and some Cantons of Switzerland an obligatory system recently has been placed on the statute books.

The more comprehensive obligatory system has been adopted by the foremost nations in the following order: Germany, Austria, Hungary, Luxemburg, Norway, Serbia, Great Britain, Roumania, Russia, the Netherlands, and Sweden. In Italy insurance against the hazard of sickness is made obligatory for railroad workers and in France for miners and seamen. Protection is usually given in the

form of medical care and a weekly cash benefit during a limited period of sickness and frequently a payment in case of death. The expense is borne jointly and in varying proportions by workers, employers, and State. The insurance is furnished through mutual organizations not operated for profit and democratically controlled by the insured and their employers. These organizations are under the supervision of a State department. In these countries the trend has been to include new groups and to increase the protection offered.

American experience with social insurance.—American experience with social insurance, meaning thereby insurance furnished as a part of the policy of organized society, has been chiefly in the field of workmen's compensation.

The spread of workmen's compensation throughout the country has been rapid; it was only in 1911 that the first effective law was passed, while to-day 38 States have compensation legislation. The tendency has been to give larger cash benefits and more liberal medical care. The insurance has been intrusted to private insurance companies, to mutuals, and to State funds, in various combinations. In Ohio, for example, every employer insures in the State insurance fund or must be approved as a self-insurer. Experience has shown that to be effective such measures must make insurance compulsory. Experience, especially that in Ohio, has shown that the State can operate a State fund efficiently and much more economically than other insurance carriers. Fostered by workmen's compensation a widespread and beneficial campaign to prevent industrial accidents has swept over the country.

Two States, Wisconsin and Massachusetts, have sought to furnish life insurance and annuities at cost. The small numbers of wage earners in these two States who have availed themselves of this opportunity show that this voluntary plan does not meet the need of the masses of wage earners in these States.

Provision for mothers' pensions, sometimes considered a form of social insurance, has been made in nearly every State during the last eight years.

Insurance, as the result of State action, for the hazards of sickness, unemployment, old age, and death has not been developed. Such protection is secured by the worker entirely on his own initiative and at his own expense. Insurance against the hazard of sickness is carried in the fraternal, in the trade-unions, in establishment funds and in commercial companies. Insurance against the risk of unemployment is provided only by a few of the oldest trade-unions. Insurance for old age may be obtained in a few of the fraternal organizations and trade-unions. Insurance in case of death is the most

widely developed, as 38,373,000 industrial policies in force in 1917 and the 8,458,000 fraternal members of 1916 testify, for the country as a whole.

Maternity insurance.—Maternity insurance has been developed primarily for the insured working women as one of the benefits provided in a system of health insurance. Maternity benefit is one of the benefits provided in the obligatory health insurance legislation of Germany, Austria, Hungary, Luxemburg, Norway, Serbia, Great Britain, Russia, Roumania, and Holland. The expense of the entire system is defrayed in varying proportions by the workers, employers, and the State. In a few instances, notably in Great Britain, maternity benefit is also extended to the uninsured wives of insured workers. Under the stimulus of war both Great Britain and Germany have extended their provision for maternity care. In Sweden, Denmark, and Switzerland, maternity benefit is included, sometimes with a special Government subsidy for this purpose.

Three countries departed from the general practice. Italy installed, at the joint expense of the employer and the insured, a system of compulsory maternity insurance including all gainfully employed women of childbearing age; from public funds, France grants a weekly allowance during disability of women of small means who are gainfully employed; and Australia provides from public funds a sum of £5 to every mother upon the birth of a child.

The cost of health insurance.—Sickness entails heavy losses to all three factors, the individual, the industry, and society. The individual and society stand their portion of the loss either directly or in the form of insurance. Industry charges its loss to operation and passes the cost to the consumer. Health insurance on a universal scale merely proposes to take the entire cost of sickness and distribute it equitably over the three factors which cause it and which suffer by it. There is no added cost in this proposal but merely an equitable distribution of existing costs.

The exact amount of money to be thus distributed is determined by the amount of sickness and disability which the workmen suffer. The estimate upon which practically all authorities agree and which the findings of this commission support is that the workmen suffer an average loss of nine days annually. When the waiting period of seven days is subtracted from the total, we find a maximum of seven days on the average for which compensation would be paid if compensation is paid for a full year of disability.

The cash cost can then be readily computed by multiplying by the weekly cash benefit. At \$12 a week the total cost is \$12,600,000 for 1,000,000 workmen.

The experience with regard to the cost of medical care is not uniform but all the available data indicate that if medical care is given to the worker and his dependents the cost will approximate the total cost for cash benefits. Thus a total cost of \$12,600,000 for medical care for 1,000,000 workmen and their dependents is a liberal estimate.

A death benefit of \$100 to the workers would cost not to exceed \$1,000,000 annually.

To this should be added the cost of administration of the system by the State, which would probably reach the sum of \$500,000. Better medical care would also require the enlargement of public hospital facilities by the State and local communities and entail considerable necessary expense.

OLD-AGE DEPENDENCY AND PENSIONS.

Economic facts concerning the aged.—There were in Ohio in 1918, 169,000 people 70 years of age and over and 304,137 persons 65 years of age and over. The number of people 65 and over increased from 4 per cent of the population in 1880 to 5.8 per cent in 1918. The number of males 65 and over in 1910 was 129,598 and of females 132,212.

In 1910, 7,784 men and 8,361 women were single; 84,126 men and 46,968 women were married; 36,476 men and 75,696 women were widowed; and 1,005 men and 568 women were divorced.

The total number of foreign born in 1910 was 70,586, or 26.9 per cent of the total 65 years of age and over. There were 5,037 Negroes 65 and over.

The larger part of the people 65 and over lived in rural communities in 1910; 146,974 were rural and 114,836 were urban. Of the city population 4.3 per cent were 65 and over, while 7 per cent of the rural population were 65 and over.

We find that in 1910, 51.2 per cent of all homes in Ohio were owned, that 71.8 per cent of the farm homes were owned, and 45 per cent of other homes were owned. More than one-fourth of the farm homes and a third of the other homes were mortgaged. Moreover, home ownership is decreasing, the percentage being 52.4 per cent in 1900 and 54.3 per cent in 1890; and the per cent owned free being 34.6 per cent, 35.6 per cent, and 38.6 per cent in 1910, 1900, and 1890, respectively.

Statistics were gathered by the United States Census Bureau in 1910 showing farm ownership for people 65 and over: 32,007 farmers were reported out of a total of 146,974 persons 65 and over classified as rural; 24,406 such farmers owned their own farms free; 3,860 had encumbrances; 1,506 were part owners, and 2,124 were tenants. These figures showed a large reduction from 1900 when 37,907 owned their own farms, 30,585 owned their farms free, 6,359 had encumbrances, and 2,874 were tenants.

Figures for home ownership by age groups have not been compiled since 1900 when 41.3 per cent of all persons 65 and over owned their homes but 6.4 per cent of the total were encumbered. It appears that home ownership by persons 65 and over has greatly decreased since 1900, the decrease for farm homes alone being 15.5 per cent, although the number of persons 65 and over increased. Those who owned their farms free decreased 20.2 per cent between 1900 and 1910.

We find that home ownership is decreasing somewhat and that home ownership among persons 65 and over is very markedly decreasing.

No figures are available to show other property ownership by all persons in the State 65 and over. The total number of savings depositors in postal savings banks in 1917 was 39,347 with \$8,943,607. The amount of savings deposits in State banks was \$410,148,309 and in private banks \$3,816,076. The time deposits in national banks were \$110,627,000. Building and loan deposits were \$99,955,368, by 261,508 depositors, the amount of running stock was \$135,796,709 and of paid-up stock \$44,530,232.

A survey of 1,432 persons over 50 years of age in Hamilton in 1918 disclosed that 36.6 per cent owned their own homes free and 9.6 per cent had mortgaged homes. The bulk of the homes (366 out of 691) were valued at less than \$2,200. One hundred and ninety-eight of the home owners had other property but the property of 80 of these was less than \$500. One hundred and nineteen who did not have homes had other property but 80 of these had less than \$500.

A statistical analysis made by the staff of the commission shows that while the number of aged persons is increasing, the proportion engaged in gainful occupations is decreasing. In many occupations the decrease is very marked.

Causes of aged dependency.—The causes of aged dependency have been examined with much care.

An examination of records of 1,608 persons in county infirmaries showed that 482 or 29.9 per cent were dependent because of disease or accident; 468 or 29.19 per cent because of intemperance; 178 or 11 per cent because of improvidence; 187 or 11.6 per cent because of misfortune; and 96 or 5.9 per cent because of low wages. It was found that 113 had had property at one time valued at over \$2,000 and 39 had had property worth more than \$10,000 at one time.

An examination of 500 cases in private homes showed that 204 or 40.8 per cent were made dependent because of sickness and accident; 98 or 19.6 per cent because of misfortune; 60 because of

intemperance; 59 because of low wages; 50 because of improvidence; and 29 unknown.

In the Hamilton study of 1,432 persons over 50, there were 360 dependent on their children or relations. 61 out of 416 aged persons studied in Cincinnati were dependent on their children and others. The cause of this dependency was generally traceable to sickness rather than to old age.

Present method of care.—Aged people who are dependent are cared for in the following ways:

By relations and friends.

By private benevolences and public or private pensions.

By private old folks' homes, church homes and society or lodge homes.

By State institutions.

By county infirmaries.

By outdoor relief from public or charity organization societies.

There are 89 public infirmaries in Ohio which cared for 14,959 different persons in 1916. About 8,000 constitutes the permanent infirmary population. Forty-six private old folks' homes cared for about 2,700 aged people. About half of the persons in State institutions are over 60, which means about 16,000.

The number of aged persons aided in outdoor relief is not known but a conservative estimate would be that 7 per cent to 10 per cent of applicants were dependent because of age.

On the basis of studies in Hamilton and Cincinnati from 15 per cent to 25 per cent of all persons over 50 are dependent on relations and friends. In 1917, there were in Ohio 63,703 Federal pensioners, practically all of whom were aged. Approximately 2,100 persons are receiving public or private service pensions in Ohio.

An investigation of county infirmaries disclosed that this public system of care for the aged was woefully deficient in many counties.

Old-age insurance v. pensions.—There are three main systems of providing for old age, namely, compulsory old-age insurance, old-age pensions and voluntary insurance or annuities.

Compulsory old-age insurance is a means by which the insured persons pay regular premiums throughout their working life into an insurance fund from which they draw a pension after a certain age. The insured may pay all the premium or the employer and the State may assist.

Old-age pensions contemplate that the fund shall be created out of taxation and that persons who live beyond a certain age and have insufficient support shall receive a regular amount as a pension.

Annuities are annual payments for life or a certain number of years, from a fund created by the insured persons either in regular contributions or by paying in a lump sum.

Compulsory old-age insurance has the advantage of requiring the insured to provide directly for himself. But it has several weaknesses which appear to make it unworkable. It can not provide for the wives of insured men; it will not be of benefit for many years until a new generation which has paid the premiums gets old; it is expensive and cumbersome to administer, requiring as it does the keeping of accounts on every man throughout his lifetime.

The experience with voluntary annuities does not warrant an expectation that that plan will solve the old-age dependency problem.

The old-age pension plan is simpler and more certain, and if properly safeguarded should provide for all worthy aged. Inasmuch as the fund is created by taxation, which all persons bear, the pension is indirectly a contributory pension. England, New Zealand, Australia, Denmark, and France pay pensions directly out of the public treasury. Ohio does likewise in the case of the blind and of mothers with young children.

Provision for old age in European countries.—Three methods of providing for dependent old age are found in European countries. The earliest development is that of State-subsidized insurance. This form has been developed in France, Belgium, Spain, and Italy. In practice it has failed to solve the old-age problem for any appreciable proportion of wage earners.

The second line of development, that of obligatory insurance for old age, is found in Germany, Luxemburg, Austria, France, Roumania, and Sweden. This principle has also been applied in Belgium, Russia, and Italy to special groups, such as miners, seamen, and railroad employees, while Belgium was on the point of enacting a comprehensive obligatory system. Acts include specified groups of those gainfully employed. Provision is made for a small stipend during permanent invalidity and during old age. The funds are usually derived from the joint contribution of workmen, employers, and the State. Insurance is carried by State institutions, as in Germany, or in agencies selected by the worker, as in France.

Almost coincident has been the development of noncontributory old-age pensions in which the State raises through taxation the funds to provide pensions for those declared eligible by law. Such systems have been adopted by Denmark, New Zealand, France, Australia, and Great Britain. These systems, which are a substitute for poor relief, do away with the vexatious question under insurance as to the provision to be made for those already aged

and for wives of insured men. They customarily require proof of age, citizenship, residence, and good moral habits as conditions for eligibility.

The cost of old-age pensions.—It will be impossible to make an exact estimate of the number of persons over 65 years of age who would make application for a pension and be qualified to receive one until such a plan is actually in force. We do not know exactly the economic status of people, and no census or survey plan can obtain the exact information. If we were to have the same experience as Australia and New Zealand we would find that about 100,000 people over 65 would apply for a pension in Ohio. There are factors here which apparently would reduce this estimate at least for a number of years.

1. There are about 60,000 Federal pensioners, most of whom are over 65 and who are receiving sufficient pensions to provide for their wants.

2. There is a considerable number of foreigners over 65 who have not been naturalized and would not be qualified for a pension.

3. Home owning is at least as common as in the Australian countries, and large numbers of old people who would otherwise be dependent have small homes, which would become the property of the State when the pensioner dies.

Taking all factors into account in Ohio it appears to be a fair estimate that 75,000 to 80,000 qualified persons over 65 would apply for a pension. The cost of pensions on this basis at \$3 a week would be \$225,000 to \$240,000 a week, or \$11,700,000 to \$12,480,000 annually. To this should be added the cost of administration, which would probably reach \$500,000.

RECOMMENDATIONS.¹

Sickness prevention.—I. Adequate health supervision of all elementary and high schools, including annual medical examinations of all children by physicians and supervision by public health nurses, should be provided. The cost should be borne by the State, the cities, and the counties in some equitable proportion.

II. Provision should be made for adequate public health nursing service in each city and county, including prenatal and infant care. The cost should be borne by the State, the cities, and counties in an equitable proportion. The State department of health should fix the qualifications of public health nurses and have general supervision over the work.

¹ In January a typewritten copy of these recommendations was furnished this bureau by the commission in advance of their publication in connection with the summary of findings reproduced herewith, and they were accordingly printed in full in the February issue of the MONTHLY LABOR REVIEW (pp. 239-242). Because of the importance of the subject it has been deemed advisable to reprint the recommendations so that they may be considered in connection with the findings upon which they are based.

III. Physical education should be required in all schools for all children, and practical teaching of health and hygiene should be required in the elementary schools.

IV. The teaching of home economics, including home nursing, should be developed as rapidly as possible under the system of vocational education provided by the State in cooperation with the Federal Government through the Smith-Hughes Act. Home demonstration work should be widely extended under the Smith-Lever Act, and legislation to authorize such work on the same basis as farm demonstration should be immediately enacted.

V. All children's homes should provide for adequate health care and supervision, and the board of State charities and the State department of health should have wider power to enforce standards of health care of children in institutions.

VI. The local public health system should be revised. The township, village, and small city health boards and officers should be abolished and in their place should be a county or a district health commissioner, subject to the supervision of the State department of health, who should have control of all public health work in the county or the district. Cities of more than 50,000 population may, if they so elect, be separate health units as now constituted, subject to the same State supervision as the county health unit.

VII. A State program should be adopted to cooperate with the Federal public health service for the suppression of venereal diseases in the State.

VIII. A law should be passed prohibiting industrial work by women for at least six weeks after childbirth.

IX. Every child under 18 should be physically examined before going to work and a certificate be obtained from the health authorities that the work to be engaged in will not be physically injurious to him. The State department of health shall formulate rules and regulations for such examinations.

X. The program adopted for the study and care of the feeble-minded by the Ohio board of administration under recent legislation should be pushed through as rapidly as possible.

XI. Provision should be made without delay for the care of tuberculosis patients in county and State institutions. These institutions should become agencies for treating incipient cases and not merely for the treatment of incurables. The counties should be required to furnish sanatorium facilities.

XII. In accordance with the report of a special committee, made to the governor, on hospital legislation, there should be created a bureau of hospitals in the State department of health to survey the

hospital facilities of the State, classify hospitals and dispensaries, and require reports on uniform blanks.

Health insurance.—I. The principle of health insurance is approved as a means of distributing the cost of sickness.

II. Health insurance should be required for all employees to be paid for by employers and employees in equal proportion. The State should pay all costs of State administration as in the case of the workmen's compensation act and all costs of supervision of insurance carriers.

III. The benefits to workers under health insurance should consist of: (a) Cash payment of a part of the wages of workers disabled by sickness; (b) complete medical care for the worker including hospital and home care and all surgical attendance and the cost of all medicines and appliances; (c) adequate provision for rehabilitation both physical and vocational in cooperation with existing public departments and institutions; (d) dental care; (e) medical care for the wives and dependents of the workers if the same can be done constitutionally, and a burial benefit for the worker.

IV. (a) The exact form of organization of the medical service, including hospital and dental service, should be left largely to the State health insurance commission which administers the act to develop plans to meet conditions in different parts of the State. Minimum standards should, however, be established to insure that such service shall be adequate.

(b) It should be clearly established that medical, hospital, and dental care shall be adequately compensated.

V. The insurance should be carried in establishment funds mutually managed and in public mutual associations. Companies or associations writing insurance for profit should not be permitted to be carriers of such insurance.

VI. The system should be administered by a State health insurance commission of four members, one of whom shall be the State commissioner of health. The State commission may fix such administrative districts as may be necessary and shall coordinate their work so far as possible with the local health authorities.

VII. There should be a reasonable waiting period, not less than six days, before cash benefits are paid. Medical benefits should be given during the entire time of disability. Benefit payments should be continued as long as disability lasts, but not exceeding three years.

Old-age pensions.—I. The State should provide for the payment of a weekly pension not exceeding \$5 per week to all persons over 65 years of age, but the combined pension and income of any such person shall not exceed \$350 annually.

II. The following shall be excluded:

1. Aliens and persons who have been citizens for less than 15 years.
2. Persons who have not been residents of the State for 15 years.
3. Persons convicted of a penitentiary offense within 10 years.
4. Persons who have disposed of any property in order to qualify for a pension.
5. Tramps and professional paupers.

III. A voluntary system should be established and administered at the expense of the State so that individuals may purchase annuities not to exceed \$10 a week by regular payments or by lump sum purchase.

IV. A person 65 years of age or over who qualifies for a pension, but does not take his pension until later, should receive the deferred pension, computed from the date of qualification as an annuity when he does go on the pension roll. Such deferred pension shall not be considered in determining the amount of income as provided in Section I.

V. The property in excess of \$100 of any person who receives an old-age pension shall, upon the death of such person, be transferred to the State for disposal and from the proceeds thereof shall be deducted the amount which has been paid to the pensioner. Any residue shall then be paid to the lawful heirs.

VI. The old-age pension system should be administered by a State board of pensioners, consisting of three members.

VII. A county board of welfare should be created to combine all of the welfare work of the county, including administration of old-age pensions, mothers' pensions, and blind pensions. The board should be unpaid and should employ a county welfare director selected from a civil-service list without regard to residence or political consideration.

HOUSING.

ADJUSTMENT OF RENT PROFITEERING CASES BY THE DEPARTMENT OF LABOR.

With America's entrance into the war the housing shortage in many of the manufacturing and shipyard centers became acute. For some time previously the cost of labor and materials had caused a slackening in the normal rate of new construction and even of repairs of existing structures. On the other hand, the mobilization of armies of war workers in the industrial centers created an unprecedented demand. Everything possible was done to provide the needed quarters by using to capacity the accommodations in the locality or within commuting distance, if necessary supplementing these as rapidly as possible by new construction. In spite of well-directed and vigorous efforts along these lines, the rentals both of rooms and of houses began to soar. The rise was most marked in places where large bodies of contented labor were necessary to secure maximum production in war materials.

It was recognized by tenants as well as landlords that certain increases were legitimate in view of increased costs in taxes, service, maintenance, repairs, etc. But in large numbers of cases the tenants felt that the landlords were deliberately taking advantage of the emergency and were profiteering at the tenants' expense. Doubtless this feeling was often unjustified, but it was important even in such cases that tenants should be brought to realize this fact, in order to quiet their grievances and consequent unrest. Very often, however, there was justification for complaints. Many unscrupulous landlords raised their rentals time and again until they reached two, three, and, in a few instances, even four times the normal amount. This was aggravated also by the fact that they refused even to make necessary repairs. War workers were thus driven to housing accommodations that were insanitary and cramped. The exorbitant rentals for such quarters and the constant danger of still higher costs, enforced by the threat of eviction, created discontent and worry and seriously impaired industrial efficiency. Naturally the employees who constituted the very best and the most efficient class of workers were unwilling to remain in such surroundings, and left their employment to seek cities having better living conditions. The loss of time, the confusion, and the large labor turnover thus resulting meant a serious interference with the production of needed war materials.

It was early realized by the Bureau of Industrial Housing and Transportation of the United States Department of Labor that one of its tasks was to protect loyal war workers against illegitimate rentals and threats. To accomplish this it promoted the organization, in industrial centers, of community committees on rent profiteering. These committees, consisting of representatives of organized labor, real estate interests, the legal profession, and the general public, undertook, by democratic methods, to investigate and adjust the various difficulties arising between landlords and tenants. In 76 localities active committees were organized. In 50 other cities the bureau adjusted the complaints which came to its attention through local councils of defense or other representative organizations. Thus, in no less than 126 localities the bureau has sought to combat the rent profiteer and to adjust grievances in matters of housing.

The work done by the local committees on rent profiteering has been significant both in its amount and in the degree of success achieved. In Cleveland, Ohio, there have been filed to date 2,867 complaints, the vast majority of which have been adjusted in a manner acceptable to both landlord and tenant. During the month of the armistice, to be more specific, the Cleveland committee dealt with 233 cases, of which 131 were of a minor nature involving only brief attention and 102 were such as to require hearings and investigations. Of these 102 cases, 80 were decided in favor of the tenant, 14 in favor of the landlord, and eight were settled by the landlord without the assistance of the committee. The saving to the tenants averaged \$464 per month. In Philadelphia, Pa., besides hundreds of minor cases, there were 1,123 cases sufficiently important to be made of record. Of these, 868 were satisfactorily adjusted. The latest reports show totals of complaints received as follows: Seattle, Wash., 691; Newark, N. J., 327; Portland, Oreg., 318; Oakland, Cal., 300; Waterbury, Conn., 168; New London, Conn., 152; Charlestown, W. Va., 152; Buffalo, N. Y., 133; Trenton, N. J., 125; Canton, Ohio, 125; Coatesville, Pa., 125; Davenport, Iowa, 112; Bridgeport, Conn., 100; Erie, Pa., 90. During the first five weeks of its existence, the committee of Vallejo, Cal., effected 38 reductions in rentals, amounting to \$198.50 per month, in addition to various adjustments in Napa, Cal., reaching a total of 69 cases. Complaints dealt with in other cities are as follows: Norfolk, Va., 86; Perth Amboy, N. J., 73; New Brunswick, N. J., 60; Bayonne, N. J., 35; Lowell, Mass., 65; Sharon, Pa., 37; Youngstown, Ohio, 73; Allentown, Pa., 22; Warren, Ohio, 27; Hamilton, Ohio, 15; Rock Island, Ill., 58. Through the very tactful and efficient administration of the committee most complicated and apparently irreconcilable situations have been com-

promised and adjusted out of court in a manner satisfactory to all parties concerned.

The committees have also done much to prevent evictions. If one family moves, another must, as a rule, also move and so on indefinitely. Thus there is loss of time, money, energy, and contentment, and also of morale and industrial efficiency. In Norfolk, Va., 77 attempted evictions of families of war workers were prevented. Cleveland, Ohio, has to its credit 99 evictions prevented; New London, Conn., 51; Bridgeport, Conn., 50; Buffalo, N. Y., 34; Davenport, Iowa, 25; Sharon, Pa., 15; Canton, Ohio, 11; Warren, Ohio, 6; Lorain, Ohio, 5; Rock Island, Ill., 4.

When the landlords in Seattle, Wash., learned that a committee on rent profiteering was to be organized, 12 of them at once voluntarily reduced rentals. In many, if not all, localities the very existence of committees has served to deter landlords from attempting to profiteer.

In hundreds of instances, sanitary conditions have been improved, necessary repairs made, and properties rendered more habitable as a result of the activities of committees.

An important part of the work of the committees on rent profiteering consists in getting landlords and tenants to see each other's point of view and in furthering a better understanding between the various elements of the community represented on the committee. The president of the central labor council in a southern city recently said of the local committee that it has "handled hundreds of cases, adjusting rents to the satisfaction of all parties concerned—also stopped ejections. The four labor members of the committee reported that the lawyers and business men on the committee were 'real men'—while the chairman of the council of defense, president of a number of corporations, admitted that his views on labor questions and labor unions had been radically changed."

CHEAP DWELLINGS IN FRANCE.¹

A circular issued by the French minister of labor calls to the attention of provincial governors the present crisis in the housing problem, due principally to the influx of refugees, colonial and foreign laborers, and to the overpopulation of industrial centers working for the national defense. This crisis, particularly noticeable as regards popular lodgings, will not show an appreciable decrease with the close of the war.

Upon the return of the demobilized troops, numerous lodgings will have to be provided and numberless homes and workshops built or

¹ Bulletin du Ministère du Travail, Paris, August-September-October, 1918.

rebuilt. Above all, it is important to see to it that these homes are healthful and to continue without relaxation the fight against the hovel. The development of workmen's habitations, the improvement of housing, is one of the most pressing problems of the post-war period, and it is imperative to prepare for the widest possible application of the laws in regard to cheap dwellings and small properties.

The law of December 23, 1912, provides, among other things, for the institution of "Public offices for cheap dwellings" organizations destined to play a particularly useful rôle, the creation of which it is important to encourage. These offices are intended to manage the construction and disposal of sanitary dwellings and to make necessary improvements on existing ones; to establish city and workmen's gardens, community laundries, baths, nurseries, and playgrounds; and to establish stores, provided that no alcoholic beverages be sold therein. Such offices are created by a decree at the request of a municipal council, one or more associated municipalities, or a general council, which bodies must assure them an endowment in the form either of a subvention or of property.

Several such institutions have been organized and, although hampered by extremely unfavorable conditions, have obtained interesting and important results.

The ministerial circular admonishes:

It is necessary that with as little delay as possible the whole country be covered with a network of these offices, departmental, interdepartmental, or communal, and that all within their own well-defined territories rival one another in their zeal and activity in the interest of common welfare.

The cheap dwellings bureau in the department of the Seine has shown remarkable activity. It has undertaken the development of a series of public gardens and in some cases has acquired land for public use through expropriation proceedings. The general council of the Seine pledged a donation of 150,000 francs (\$28,950), available in 10 yearly payments of 15,000 francs (\$2,895), and the departmental assembly authorized an endowment of 10,000,000 francs (\$1,930,000), to be used exclusively for the acquisition of land.

The general aim of the council in the Seine has been to intervene in the matter of laborers' dwellings throughout the entire department. Conditions in the suburbs are probably worse than in the city. The problem demands a rational, coordinated, and methodic treatment, embracing both the city of Paris and the suburbs. To prepare for the proper development of their plans, public officials have made considerable progress in the acquisition of suburban land for public use. Several tracts of land near Paris have been purchased, and very little of the 10,000,000 francs (\$1,930,000) remains unexpended.

In all purchases the following characteristics have been considered: The geological formation of the land, source of supply of drinking water, possibilities for sewage disposal, means of access, and the price.

While the office realizes that communities must be permitted to act independently, it nevertheless feels charged with the duty of cooperating and aiding in all initiatives taken by them, of laying out city gardens, and of erecting sample dwellings which shall have individual character and harmony of construction and the best hygienic features.

CONCILIATION AND ARBITRATION.

CONCILIATION WORK OF THE DEPARTMENT OF LABOR, JANUARY 16, 1919, TO FEBRUARY 15, 1919.

Under the organic act of the department, which gives the Secretary of Labor the authority to mediate in labor disputes through the appointment, in his discretion, of commissioners of conciliation, the Secretary exercised his good offices between January 16, 1919, and February 15, 1919, in 121 labor disputes. The companies involved, the number of employees affected, and the results secured, so far as information is available, were as follows:

STATEMENT SHOWING THE NUMBER OF LABOR DISPUTES HANDLED BY THE DEPARTMENT OF LABOR, THROUGH ITS COMMISSIONERS OF CONCILIATION, JAN. 16, 1919, TO FEB. 15, 1919.

Name.	Workmen affected.		Result.
	Directly.	Indirectly.	
Threatened strike, machinists in contract machine shops, Beaumont, Tex.	66	165	Adjusted.
Controversy, toolmakers, machinists, and machinists' helpers, H. W. Butterworth & Sons Co., Philadelphia, Pa.	80	250	Pending.
Controversy, machinists, Standard Steel Car Co., Hammond, Ind.	600	800	Adjusted.
Strike, carpenters, United States nitrate plant No. 2, Muscle Shoals, Ala.	500	.....	Do.
Threatened strike, plasterers and cement finishers, United States nitrate plant No. 2, Muscle Shoals, Ala.	30	.....	The men agree to stop any further agitation and to prepare their case and submit it to the Construction Division of the War Department.
Strike, plumbers and pipe fitters, United States nitrate plant No. 2, Muscle Shoals, Ala.	350	.....	Unable to adjust.
Threatened strike, structural-iron workers, United States nitrate plant No. 2, Muscle Shoals, Ala.	141	.....	Men agree to stop further agitation and submit their case to War Department.
Controversy, Berkshire Street Railway Co., Pittsfield, Mass.	337	.....	Pending.
Strike, Kahn Tailoring Co., Indianapolis, Ind.	300	400	Adjusted.
Controversy, boilermakers, Utica Steam Engine and Boiler Co., Utica, N. Y.	18	100	Pending.
Strike, garment workers, Brown-Evans Mfg. Co., Sedalia, Mo.	150	10	Company told commissioner they had made up their minds to discontinue the manufacturing end of the business, and that they would not need their employees.
Lockout, Marquette Rod Mill, branch of the American Steel and Wire Co., Cleveland, Ohio.	150	.....	Adjusted.
Controversy, chain makers, Nixdorf & Kroein Manufacturing Co., St. Louis, Mo.	43	100	Unable to adjust.
Controversy, Decker Packing Plant, Mason City, Iowa.	.....	.....	Adjusted before commissioner's arrival.
Threatened strike, paper makers, West Virginia Pulp & Paper Co., Tyrone, Pa.	530	.....	Pending.
Threatened strike, waist and dress industry, New York, N. Y.	35,000	.....	Do.

STATEMENT SHOWING THE NUMBER OF LABOR DISPUTES HANDLED BY THE DEPARTMENT OF LABOR, THROUGH ITS COMMISSIONERS OF CONCILIATION, JAN. 16, 1919, TO FEB. 15, 1919—Continued.

Name.	Workmen affected.		Result.
	Directly.	Indirectly.	
Strike, core makers, chippers, mold makers, Pratt Malleable Iron Works, Joliet, Ill.	12	.....	Commissioner can render no service as there is no trouble in the shop.
Strike, teamsters, Melter-Larkin Paving Co., Chicago, Ill.	.....	.....	Pending.
Controversy, fish industry, Boston, Mass.	.....	.....	Do.
Controversy, annealers, United States Cartridge Co., Lowell, Mass.	.....	.....	Do.
Strike, General Electric Co., at Pittsfield, Mass., Lynn, Mass., Schenectady, N. Y., Fort Wayne, Ind., and Erie, Pa.	.....	.....	Referred to National War Labor Board.
Controversy, stationary engineers, Cleveland, Ohio:			
New York Central	.....	.....	Pending.
Baltimore & Ohio	.....	.....
Nickle Plate & Wheeling	.....	.....
Lake Erie R. R.	.....	.....
Threatened strike, foremen and switchboard operators, United States nitrate plant No. 2, Muscle Shoals, Ala.	75	270	Charges investigated and appear to be unfounded.
Strike, Gaslight Co., Murphysboro, Ill.	.....	.....	Adjusted before commissioner's arrival.
Strike, painters, Government housing operations, Bath, Me.	.....	.....	Adjusted.
Controversy, Massey Machine Co., Watertown, N. Y.	.....	.....	Pending.
Controversy, track repair men and foremen, New York State Railways Co., Syracuse, N. Y.	.....	.....	Do.
Lockout, A. Strisch & Bros. Co., Oshkosh, Wis.	.....	.....	Do.
Threatened strike, pressmen, Huntington, W. Va.:			
Huntington Advertiser	.....	.....	Adjusted.
Herald-Dispatch	.....	.....
6 others	19	184	
Lockout, leather workers, Nashville, Tenn.	58	64	Unable to adjust.
Threatened strike, Inland Steel Co., Chicago Heights, Ill.	350	.....	Adjusted.
Lockout, Western Drop Forge Co., Marion, Ind.	250	10	Pending.
Threatened strike, General Refractories Co., Joliet, Ill.	12	600	Adjusted.
Strike, boiler makers and helpers, Tippet & Wood Boiler Works, Phillipsburg, N. J.	50	8	Do.
Controversy, Cleveland Railway Co., Cleveland, Ohio.	20	2,500	Unable to adjust.
Threatened strike, bricklayers, United States nitrate plant No. 2, Muscle Shoals, Ala.	520	.....	Adjusted.
Strike, Pacific Car & Foundry Co., Renton, Wash.	400	.....	Do.
Strike, electrical workers, Tacoma, Wash.	98	.....	Do.
Controversy, furniture clerks, four largest stores, Seattle, Wash.	59	.....	Do.
Threatened strike, fish workers, Seattle, Wash.	87	.....	Do.
Strike, Mayer Bros. Jewelry Manufacturing, Seattle, Wash.	20	200	Do.
Threatened strike, Independent Telephone Co., Everett, Wash.	10	.....	Do.
Threatened strike, engineers and janitors, school buildings, Seattle, Wash.	45	.....	Matter referred to local committee on industrial relations.
Lockout, building trades, Kansas City, Mo.	500	2,500	Pending.
Strike, machinists, Kingsbury Co., Philadelphia, Pa.	16	.....	Do.
Strike, teamsters, Wilson Co., Scranton, Pa.	11	.....	Adjusted.
Strike, Doehler Die Casting Co., Brooklyn, N. Y.	150	.....	Unable to adjust.
Controversy, Egleston Bros. Co., New York, N. Y.	7	.....	Do.
Strike, foundry employees, 22 foundries, Brooklyn, N. Y.	400	900	Pending.
Strike, molders and helpers, Big Savage Fire Brick Co., Frostburg, Md.	50	100	About two-thirds of the men are back working.
Controversy, Washington Railway & Electric Co., Washington, D. C.	700	.....	Referred to National War Labor Board.
Threatened strike, United Alloys Steel Co., Canton, Ohio.	500	2,000	Adjusted.
Threatened strike, paper makers, West Virginia Pulp & Paper Co., Piedmont, W. Va.	500	700	Pending.
Controversy, Standard Steel Car Co., Ordnance Department, Hammond, Ind.	27	1,400	Do.
Threatened strike, Nagle Steel Co., Seyferts, Pa.	.....	.....	Do.
Strike, building trades, New Orleans, La.	837	2,700	Adjusted.
Threatened strike, Akin-Erskine Milling Co., Evansville, Ind.	40	80	Do.
Controversy, Master Slag & Composition Roofers, Philadelphia, Pa.	.....	.....	Referred to National War Labor Board.
Strike, Barnett Leather Co., Little Falls, Mass.	400	.....	Pending.
Threatened strike, Acme Evans Milling Co., Indianapolis, Ind.	10	100	Adjusted.

STATEMENT SHOWING THE NUMBER OF LABOR DISPUTES HANDLED BY THE DEPARTMENT OF LABOR, THROUGH ITS COMMISSIONERS OF CONCILIATION, JAN. 16, 1919, TO FEB. 15, 1919—Continued.

Name.	Workmen affected.		Result.
	Directly.	Indirectly.	
Controversy, boiler makers and helpers, McDermott Bros., Allentown, Pa.	3	10	Adjusted.
Controversy, boiler makers, Allentown Boiler Works, Allentown, Pa.	2	90	Grievance proved to be not a valid one.
Strike, boiler makers, Traylor Engineering Co., Allentown, Pa.	35	451	Adjusted.
Strike, fish and oystermen, Bay City Packing Co., Apalachicola, Fla.	75	200	Pending.
Strike, Rockwell-Drake plant, branch of Marlin Arms Co., Plainville, Conn.	99	15	Company was compelled to reduce forces because of lack of orders.
Controversy, Klots Throwing Co., Cumberland, Md.	3	36	Adjusted.
Strike, Newport Rolling Mill Co., Newport, Ky.	525		Company claims Department of Labor has no right to interfere.
Threatened strike, Norfolk Navy Yard, metal trades, Portsmouth, Va.	4,000		Commissioner's authority was limited to endeavoring to prevent a strike or walkout. Men did neither.
Strike, Indian Packing Co., Green Bay, Wis.	4	500	There was no case, as the complainants had been untruthful.
Controversy, Ely Walker Shirt Co., Mascoutah, Ill.	75		Adjusted.
Strike, sheet-metal workers, Atlantic City, N. J.	2,500		Do.
Strike, journeymen painters, O. H. Guttridge Co., Atlantic City, N. J.	38		Pending.
Strike, plumbers, Atlantic City, N. J.			Adjusted.
Threatened strike, Eastman Kodak Co., Rochester, N. Y.	300	1,500	Do.
Threatened strike, Dodge Bros. (Inc.), Detroit, Mich.	2,100	5,900	Pending.
Strike, building trades vs. Crowell, Lunduff, Little Co., on construction project for Pennsylvania R. R., Fort Wayne, Ind.	130	220	Adjusted.
Controversy, National Match Co., Joliet, Ill.	115		Pending.
Controversy, structural iron workers, Vierling Steel Co., Chicago, Ill.	60		Adjusted.
Strike, plumbers, metal crafts, laborers, Jahneke Ship Yard, Madisonville, La.	163	200	Do.
Controversy, harness makers, Western Saddlery Co., Milwaukee, Wis.			Do.
Lockout, machinists, Spang Co., Butler, Pa.	1,125		Unable to adjust.
Threatened strike, express sorters, Chicago, Ill.	2,000		Adjusted.
Controversy, Southern Pacific Ry., Los Angeles, Cal.	50		Referred to United States Railroad Administration.
Controversy, stevedores, Aviation General Supply Depot, Houston, Tex.			Pending.
Lockout, stove mounters, Hoosier Stove Co., Marion, Ind.	26	130	Adjusted.
Controversy, hardwood products Co., Neenah, Wis.			Pending.
Strike, broom makers, Merkle-Wiley Broom Co., Paris, Ill.	45	155	Unable to adjust.
Controversy, machinists, General Electric Co., Fort Wayne, Ind.			Pending.
Controversy, Western Weighing Association, Chicago, Ill.			Do.
Controversy, machinists, molders, pattern makers, blacksmiths, Flory Manufacturing Co., Bangor, Pa.	156	180	Do.
Controversy, shipyards of Northwest, Tacoma, Wash.	40,000		Do.
Controversy, carpenters, housing projects, Bath, Me.			Do.
Controversy, United Iron Works, Iola, Kans.			Do.
Strike, silk mills, Paterson, N. J.	30,000		Do.
Strike, machinists, Excelsior Motor Supply Co., Chicago, Ill.	700	300	Do.
Lockout, building crafts, Dallas, Tex.	600	650	Adjusted.
Strike, Rose & Rose, Cleveland, Ohio.			Pending.
Controversy, Midland Milling Co., Kansas City, Mo.			Do.
Walkout, shipyard employees, Foundation Shipyard, Savannah, Ga.	125		Do.
Controversy, Gillette Safety Razor Co., Boston, Mass.			Do.
Controversy, Union Electric Light & Power Co., St. Louis, Mo.			Do.
Controversy, Walnut Creek Flour Mill, Great Bend, Kans.			Do.
Strike, Wright Lathe Co., Chicago, Ill.	70		Do.
Controversy, textile situation, Philadelphia, Pa.			Do.
Controversy, textile situation, Biddeford, Me.			Do.

STATEMENT SHOWING THE NUMBER OF LABOR DISPUTES HANDLED BY THE DEPARTMENT OF LABOR, THROUGH ITS COMMISSIONERS OF CONCILIATION, JAN. 16, 1919, TO FEB. 15, 1919—Concluded.

Name.	Workmen affected.		Result.
	Directly.	Indirectly.	
Controversy, textile situation, Saco, Me.....			Pending.
Controversy, Mundorf Chain Co., York, Pa.....			Do.
Controversy, Worden-Allen Co., Milwaukee, Wis.....			Do.
Controversy, Milwaukee Bridge Co., Milwaukee, Wis.....			Do.
Controversy, electrical workers, Foundation Shipyard Co., Savannah, Ga.....			Adjusted.
Controversy, sawmills, Orange, Tex.....			Pending.
Strike, Liggett & Myers Tobacco Co., Philadelphia, Pa.....	500		Do.
Controversy, L. Davis vs. American Hominy Co., Terre Haute, Ind.....	1	150	Adjusted.
Controversy, carmen and helpers, Sinclair Refining Co., Coffeyville, Kans.....			Pending.
Controversy, electrical workers vs. electrical contractors, Atlanta, Ga.....			Do.
Controversy, timber workers, St. Maries, Idaho.....			Do.
Controversy, textile industry, Chattanooga, Tenn.....			Do.
Controversy, Southern California Box Co., Los Angeles, Cal.....			Do.
Controversy, leather manufacturers, Blumenthal & Co., Wilmington, Del.....			Do.
Controversy, molders, Kutztown Foundry & Machine Co., Kutztown, Pa.....			Do.
Controversy, painters, Standard Steel Car Co., Hammond, Ind.....			Do.

ADJUSTMENTS REPORTED.

Threatened strike, electrical workers, Commonwealth Edison Co., Chicago, Ill.
 Strike, packing department, National Milling Co., Toledo, Ohio.
 Threatened strike, butchers, Los Angeles, Cal.
 Strike, pipe fitters, service men, stationary engineers, and machinists, Atlanta Gas Light Co., Atlanta, Ga.
 Controversy, machinists, American Steel & Wire Co., De Kalb, Ill.
 Controversy, Sinclair Refining Co., Vinita, Okla.
 Controversy, machinists, Independent Pneumatic Tool Co., Aurora, Ill.
 Controversy, cooperage workers, Green Bay, Wis.
 Controversy, foundry employees, several establishments, Brooklyn, N. Y.
 Controversy, leather workers, Pfister & Vogel Leather Co., Milwaukee, Wis.
 Controversy, Pittsburgh Railways Co. and Pressed Steel Car Co., McKees Rocks, Pa.
 Controversy, Alamo Iron Works, San Antonio, Tex.
 Strike, carpenters and other building trades, Bausch & Lomb plant, Rochester, N. Y.
 Controversy, coal companies vs. miners, Carbon County (Salt Lake City), Utah.
 Controversy, electrical workers, Santa Barbara, Cal.
 Controversy, bakers, New Orleans, La.
 Controversy, The Industrial Works, Bay City, Mich.
 Controversy, Smalley-General Co., Bay City, Mich.
 Controversy, building trades, New Orleans, La.
 Controversy, blacksmiths, Chambersburg Engineering Co., Chambersburg, Pa.
 Strike, Jessop Steel Co., Washington, Pa.

LABOR RESULTS OF FEDERALIZED RAILROADS.¹

The annual report of the Director General of Railroads for the year 1918 contains a chapter in which are reviewed the labor results of the Federalized railroads, some of which results have been noted from time to time in the REVIEW. Among the first orders issued by the Director General, according to the report, were one (Circular No. 1, Feb. 9, 1918) creating the division of labor, another (General Order No. 5, Jan. 18, 1918) creating a railroad wage commission² and "directing a general investigation of the compensation of persons in the railroad service, the relation of wages to wages in other industries, and other matters pertaining to conditions of employment of railroad employees," and a third (General Order No. 8, Feb. 21, 1918) directing that safety appliance laws be observed, that excessive hours of service be avoided where possible, and that matters of controversy arising over interpretations of existing wage agreements and other matters in relation to wages and hours of service take their usual course. This order, it is stated, provided, that "no discrimination will be made in the employment, retention, or conditions of employment of employees because of membership or nonmembership in labor organizations." "Unquestionably," the report continues, "these initial orders did much to bring about a better feeling on the part of those employees who believed they had not been treated justly in the past."

The reasons for the establishment of the division of labor are briefly outlined in the report, as follows:

During the two or three years antedating Federal control of the railroads an alarming situation was created, in that the employees' organizations as a whole and through federations, found themselves confronted with similar federations on the part of the railroads, the roads being represented by conference committees, and the conference committees being subordinate to "advisory committees." It was alleged by employees that these conference committees of all of the principal railroads in a district were not permitted to grant the demands of employees or even to make favorable compromises without the consent of the advisory committee. The advisory committee, it is alleged, was the agent of the great banking institutions that controlled the financial policy of all the railroads.

Arbitrations have been resorted to in the later years in these district movements, with the result that employees reached the conclusion that an arbitration award depended entirely upon the frame of mind of the neutral arbitrator. Persons selected to perform this function were liberal in their awards in accordance with the liberality of their minds, when appointed upon such arbitration boards.

There seems to have been a public opinion that any man, even indirectly connected with labor, would be unqualified to act as a neutral arbitrator, with the result

¹ Annual report of W. G. McAdoo, Director General of Railroads, 1918. Labor. Washington, 1919. 27 pp. That portion of the report which is devoted to the Woman's Service Section is noted on pages 209 to 212 of this issue of the LABOR REVIEW.

² The report of this commission was printed in the MONTHLY REVIEW for June, 1918 (pp. 21-45). General Order No. 27, giving effect to the report of the commission, was also published in the MONTHLY REVIEW for June, 1918 (pp. 1-21).

that most estimable gentlemen who had never had any connection with, and who had little knowledge of, labor conditions were called upon to act as umpires in these great contests. It was alleged by the employees that usually these arbitrators, having no technical knowledge of wage schedules, often made awards that were difficult of interpretation, if they did not, in fact, bring about conditions the very opposite to that intended by the neutral arbitrator. It also became apparent that in the application of the arbitration award, the officials of a railroad were the sole administrators thereof, with the result that after employees had been led to believe that an arbitration award brought them much relief, it was applied in a manner that "took away from them more than had been given them."

Later, provisions were made for submitting controversies over the application of an arbitration award back to the arbitration board, or to some other umpire, but this resulted in the continuation of controversies over a period of two or three years.

It may be truthfully said that at the time the railroads passed under Federal control, because of these vexatious contentions, the morale of railway employees had sunk to a low degree. In many instances there was an entire absence of esprit de corps, so necessary for efficient operation.

It was with the knowledge of this alarming situation, and with a determination to restore harmonious relations between employees and the railroads, and thereby increase the efficiency of the railroads, that the division of labor of the railroad administration was created.

After the creation of the labor division, it was found advisable to establish separate bipartisan boards to adjust any differences of opinion which might arise between employees and officials where the former were working under wage agreements already in existence. The result was the formation of railway boards of adjustment Nos. 1, 2, and 3,¹ created, respectively, on March 22, May 31, and November 13. Railway Board of Adjustment No. 1 concerns itself with controversies affecting conductors, engineers, trainmen, and firemen and enginemen. Railway Board of Adjustment No. 2 handles controversies affecting workers in the mechanical departments, and Railway Board of Adjustment No. 3 affects telegraphers, switchmen, clerks, and maintenance-of-way employees.

All controversies growing out of the interpretation or application of the provisions of wage schedules or agreements in effect, which were not promptly adjusted by the officials or employees on any of the individual railroads under Federal control, and all personal grievances or controversies arising under interpretation of wage agreements and all other disputes arising between officials of a railroad and its employees were to be handled in the usual manner by the committees of the employees and the officials of the railroads up to the chief operating officer of the railroad (or some one officially designated by him). If, after this usual process, an amicable adjustment was not reached, then it became obligatory (by virtue of the "memorandum of understanding") on both the part of the railroads and officials of employees' organizations to submit the matter in controversy to the railway board of adjustment having jurisdiction. Provisions were made for joint submission of facts and brief argument in each case submitted, and if it was deemed advisable, such railway board of adjustment could call for additional information, either oral or written, and when the matter had been entirely investigated a decision would be rendered by the board.

¹ The creation of the first two boards was noted respectively in the REVIEW for May, 1918 (pp. 180-182) and July, 1918 (p. 132), and the creation of the third board is noted in this issue (p. 162).

The division of labor, through an assistant director, adjusts controversies affecting approximately 1,000,000 employees whose interests are not looked after through working agreements with their respective companies.

General Order No. 27, which gave effect to the report of the wage commission and established a new scale of wages for a large proportion of railroad employees, made provision for the creation of a board of railroad wages and working conditions—

To hear and investigate matters presented by railroad employees or their representatives affecting—

(1) Inequalities as to wages and working conditions whether as to individual employees or classes of employees.

(2) Conditions arising from competition with employees in other industries.

(3) Rules and working conditions for the several classes of employees either for the country as a whole or for different parts of the country.

The report states that rapid advances toward standardization of wages of all railroad employees have been made, and "but for the possible early return of the railroads to private control it could safely be said that the logical conclusion of the work of the present board of railroad wages and working conditions would be standardized rates, standardized days, and other standardized conditions of employment for all employees on railroads under Federal control." The report notes the general recognition of the 8-hour day for railroad employees and the establishment of rules providing for the administration of discipline and the maintenance of the seniority principle for more than a million employees.

IMMIGRATION.

IMMIGRATION IN DECEMBER, 1918.

In January, 1918, the number of immigrant aliens admitted into the United States decreased 9 per cent as compared with the number admitted in December, 1917. February showed an increase over January of 16.2 per cent, while March as compared with February showed a decrease of 11.9 per cent. April as compared with March showed an increase of 46.7 per cent, May as compared with April an increase of 59.5 per cent, while June as compared with May decreased 6.4 per cent. July as compared with June showed a decrease of 45.4 per cent. In August there was an increase of 1.1 per cent over the number reported for July, and the number in September showed an increase of 27.2 per cent over the number for August. October compared with September showed an increase of 17.7 per cent and November compared with October showed a decrease of 27.8 per cent. In December the increase over November was 26.5 per cent.

IMMIGRANT ALIENS ADMITTED INTO THE UNITED STATES IN SPECIFIED MONTHS,
1913 TO 1918.

Month.	1913	1914	1915	1916	1917	1918	
						Number.	Per cent increase over preceding month.
January.....	46,441	44,708	15,481	17,293	24,745	6,356	19.0
February.....	59,156	46,873	13,873	24,710	19,238	7,388	16.2
March.....	96,958	92,621	19,263	27,586	15,512	6,510	11.9
April.....	136,371	119,885	24,532	30,560	20,523	9,541	46.7
May.....	137,262	107,796	26,069	31,021	10,487	15,217	59.5
June.....	176,261	71,728	22,598	30,764	11,095	14,247	6.4
July.....	138,244	60,377	21,504	25,035	9,367	7,780	45.4
August.....	126,180	37,706	21,949	29,975	10,047	9,997	1.1
September.....	136,247	29,143	24,513	36,398	9,228	11,771	27.2
October.....	134,440	30,416	25,450	37,056	9,284	11,771	17.7
November.....	104,671	26,298	24,545	34,437	6,446	8,499	27.8
December.....	95,387	20,944	18,901	30,902	6,987	10,748	26.5

¹ Decrease.

Classified by nationality, the number of immigrant aliens admitted into the United States during specified periods and in December, 1918, was as follows:

IMMIGRANT ALIENS ADMITTED INTO THE UNITED STATES DURING SPECIFIED PERIODS AND IN DECEMBER, 1918, BY NATIONALITY.¹

Nationality.	Year ending June 30—				December, 1918.
	1915	1916	1917	1918	
African (black).....	5,660	4,576	7,971	5,706	286
Armenian.....	932	964	1,221	221	6
Bohemian and Moravian.....	1,651	642	327	74	12
Bulgarian, Serbian, Montenegro.....	3,506	3,146	1,134	150	28
Chinese.....	2,469	2,239	1,843	1,576	166
Croatian and Slovenian.....	1,912	791	305	33	2
Cuban.....	3,402	3,442	3,428	1,179	28
Dalmatian, Bosnian, Herzegovinian.....	305	114	94	15	1
Dutch and Flemish.....	6,675	6,443	5,393	2,200	166
East Indian.....	82	80	69	61	7
English.....	38,662	36,168	32,246	12,980	2,122
Finnish.....	3,472	5,649	5,900	1,867	81
French.....	12,636	19,518	24,405	6,840	1,103
German.....	20,729	11,555	9,682	1,992	128
Greek.....	15,187	26,792	25,919	2,002	68
Hebrew.....	26,497	15,108	17,342	3,672	249
Irish.....	23,503	20,636	17,462	4,657	568
Italian (north).....	10,660	4,905	3,796	1,074	103
Italian (south).....	46,557	33,909	35,154	5,234	48
Japanese.....	8,609	8,711	8,925	10,168	733
Korean.....	146	154	194	149	8
Lithuanian.....	2,638	599	479	135	24
Magyar.....	3,604	981	434	32	.....
Mexican.....	10,993	17,198	16,438	17,602	2,510
Pacific Islander.....	6	5	10	17	.....
Polish.....	9,065	4,502	3,109	668	57
Portuguese.....	4,376	12,208	10,194	2,319	119
Roumanian.....	1,200	953	522	155	11
Russian.....	4,459	4,858	3,711	1,513	153
Ruthenian (Russniak).....	2,933	1,365	1,211	49	19
Scandinavian.....	24,263	19,172	19,596	8,741	573
Scotch.....	14,310	13,515	13,350	5,204	799
Slovak.....	2,069	577	244	35	1
Spanish.....	5,705	9,259	15,019	7,909	261
Spanish-American.....	1,667	1,881	2,587	2,231	198
Syrian.....	1,767	676	976	210	17
Turkish.....	273	216	454	24	4
Welsh.....	1,390	983	793	278	51
West Indian (except Cuban).....	823	948	1,369	732	22
Other peoples.....	1,877	3,388	2,097	314	11
Total.....	326,700	298,826	295,403	110,618	10,748

¹ The total number of departures of emigrant aliens in December was 7,038.

PUBLICATIONS RELATING TO LABOR.

OFFICIAL—UNITED STATES.

ALABAMA.—*Law Reform Commission. Report submitted in conformity to joint resolution of September 25, 1915. In the legislature of the State of Alabama. Regular session, 1919. Legislative document No. 2. Montgomery, 1919. 31 pp.*

— *State Prison Inspector. Report for the period of two years ending September 30, 1918. Montgomery, 1919. 128 pp.*

The State prison inspector enforces the child-labor law, and Part III of this report is devoted to an account of the child-labor laws, past and present, the workings of the act, and recommendations for amendments. Amendments are recommended forbidding work during school hours in any occupation by children under 16 years of age, and an 8-hour day and 48-hour week for such children when employed, requiring fourth-grade education as prerequisite to work permit, and making 14 years the minimum age for employment permits in offices and stores in small towns as well as elsewhere.

CALIFORNIA.—*Industrial Accident Commission. Safeguards against injury in quarries. Bulletin No. 10. January 1, 1919. Sacramento, 1918. 24 pp. Bulletin issued in cooperation with United States Bureau of Mines.*

— *State Board of Education. Report of the Commissioner of Industrial and Vocational Education for the biennial period ending June 30, 1918. Sacramento, 1918. 78 pp.*

— *State Board of Health. Bureau of Tuberculosis. What you should know about tuberculosis. Sacramento, 1918. 33 pp. Illustrated.*

Brief and simple explanation of the more important facts concerning the nature and treatment of tuberculosis, for the use of patients and their families.

DELAWARE.—*State Council of Defense. Americanization in Delaware. A State policy initiated by the Delaware State Council of Defense. Prepared by Esther Everett Lape. [Dover.] 48 pp.*

Chapters on The need of Americanization in Delaware; A survey of the field; The Census of aliens in Delaware; Industrial Americanization in Delaware; The training course for teachers; The night school campaign; Americanization schools; Emergency English schools—military English; Racial cooperation; and Proposed State legislation.

IOWA.—*State Mine Inspectors. Report for the biennial period ending December 31, 1917. Des Moines, 1918. 102 pp.*

The total production of coal in 1917 was the largest ever recorded for one year in Iowa and was so large that, notwithstanding the fact that the production in 1916 was less than in any of the three preceding years, the total production of the biennial period of 1916–1917 was also the largest for any similar period. In the 22 coal-producing counties of the State 7,217,979 tons of coal were produced from 243 mines by an average of 15,198 men employed in 1916 as against 9,049,806 tons produced from 256 mines with an average of 15,464 men employed in 1917. Shipping mines were in operation on an average 240 days in 1917 as compared with 212 days in 1916, and local mines 157 days in 1917 as compared with 151 in 1916. In 1917 there were 36 fatal accidents and 230 nonfatal, as against 31 fatal and 291 nonfatal in 1916.

— *State College of Agriculture and Mechanic Arts. Agricultural experiment station. A rural social survey of Orange Township, Blackhawk County, Iowa. Ames, December, 1918. pp. 396–452. Illustrated. Bulletin No. 184.*

IOWA.—*Workmen's Compensation Service. Report for the biennial period ending June 30, 1918, and digest of decisions by the department and State courts. Des Moines [1918] 76 pp.*

This report is noted more fully on pages 254 to 257 of this issue of the MONTHLY LABOR REVIEW.

— (DES MOINES).—*Housing Commission. Report. Des Moines, November, 1917. 64 pp.*

The Commission, consisting of five unpaid members, was created by ordinance January 10, 1917. The report here listed consists of a survey of housing conditions in Des Moines, made by Robert E. Todd. Among the evils pointed out in Des Moines housing conditions are the existence of interior rooms and alley houses, and absence of city water and sewerage in certain thickly settled communities. There is a lack of control by the city over house building in general, fire hazards, and lot arrangements. The outlines of the housing program for Des Moines include the following points:

(1) Establishment of minimum standards; (2) effective control of new construction; (3) gradual elimination of central semislum districts; (4) community education in care of houses and housing reform; (5) greater control by the city over water and sewer zones, and opening up of new subdivisions.

MASSACHUSETTS.—*Bureau of Statistics. Labor division. Forty-third quarterly report on employment in Massachusetts, quarter ending September 30, 1918. Boston, 1918. 16 pp.*

The total number of strikes recorded during the quarter ending September 30, 1918, was 97. As to employment conditions in the principal industries the report states:

According to returns received from 1,133 labor organizations in Massachusetts at the close of September, 1918, representing 227,286 members, 6 per cent of the total membership were unemployed for all causes, as compared with 3 per cent for the close of June, 1918, and with 5.6 per cent at the close of September, 1917. Many of those who were reported as unemployed at the close of the quarter were absent from work because of influenza, so that had it not been for the epidemic then at its height the percentage unemployed for all causes would probably have been even lower than the percentage (3) for the close of June, 1918, which was the lowest corresponding percentage of record since this Bureau began in 1907 to collect data of this character.

— *District Police. Report for the year ending October 31, 1918, including the detective, building inspection, and boiler inspection departments. Boston, 1919. 118 pp.*

— *Industrial Accident Board. Fifth annual report, including a general introduction, statistical tables of the experience for the industrial injuries for the year, comparative analysis of injuries for five years, and general information on matters under the compensation act during the period of July 1, 1916, to June 30, 1917. Boston, 1918. 254 pp. Charts. Public Document No. 105.*

This report is reviewed on pages 223 to 225 of this issue of the MONTHLY LABOR REVIEW.

— *State Board of Labor and Industries. Fifth annual report. January, 1918. Boston, 1918. 81 pp. Public document No. 104.*

States that there are in the State about 50,000 industrial establishments. Complaints were made by the public concerning violations of law to the number of 3,037, of which 1,832 related to nonpayment of wages. Orders relative to hours of labor totaled for the year 6,469; and orders relative to industrial safety totaled 1,214.

— *Teachers' Retirement Board. Fourth annual report for the year ending December 31, 1917. Boston, 1918. 20 pp. Public document No. 109.*

During 1917 the retirement board granted allowances to 52 applying teachers between the ages of 60 and 69 years. The bill providing for the retirement of teachers who become permanently disabled before the age of 60 years was favorably considered by the legislature of 1917, and the retirement law amended, allowing a teacher who has not attained the age of 60 years and who has served in the public schools of Massachusetts for 20 or more years, the last five of which must precede retirement, and who is

incapable of rendering satisfactory service on account of mental or physical disability, to be retired by the employing school committee, subject to the approval of the retirement board. The smallest annual retiring allowance granted under the provisions of this amendment is \$186.40, the largest \$300, and the average \$262.17.

MINNESOTA.—*Department of Labor and Industries. Sixteenth biennial report, 1917-18. Minneapolis, 1919. 187 pp.*

This report is noted on pages 257 to 259 of this issue of the MONTHLY LABOR REVIEW.

MONTANA.—*Superintendent of Public Instruction. Fifteenth biennial report, 1918. Helena, 1918. 126 pp. Tables. Illustrated.*

The section on vocational education gives a list of schools which were reimbursed during 1917-18 for vocational education, according to the provisions of the Smith-Hughes Act.

NEBRASKA.—*Department of Labor and Department of Compensation. Sixteenth biennial report of the Department of Labor, 1917-18. Second biennial report, Compensation Department, Department of Labor, 1917-18. Lincoln, 1918. 258, 69 pp.*

The reports named are bound in a single volume and are made by the same official, the chief deputy commissioner of labor, the governor of the State holding the title of commissioner. The first part gives a brief account of the work of the department, reports the work of the board of mediation in regard to labor disputes, reproduces the laws relating to the employment of women and creating a child-labor commission, the one as to mothers' pensions and that providing for a minimum wage for women and minors, and gives general suggestions as to safety in factories, besides reproducing the law on the subject. Manufacturing and other State statistics fill up the remainder of the report.

The section devoted to workmen's compensation is noted on page 60 of this issue of the MONTHLY LABOR REVIEW.

NEVADA.—*State Inspector of Mines. Biennial report for 1917-18. Carson City, 1919. 97 pp.*

The report states that the average number of men employed in the mining industry in Nevada during 1917 was 6,091, and during 1918, 6,295, the largest numbers in the history of the State. The number of fatal accidents for the year ending November 30, 1918, was 26. A number of recommendations for the improvement of safety conditions in mines are made.

NEW JERSEY.—*Commissioner of banking and insurance. Annual report relative to building and loan associations. October 31, 1917. [Trenton.] 1918. 131 pp.*

— *Prison Labor Commission. Sixth annual report for the year ending October 31, 1917. Rahway, New Jersey Reformatory Print, 1918. 21 pp.*

— (NEWARK).—*Board of Education. Vocational overview of Newark, N. J. Report of advisory committee to the board of education on the proposed girls' vocational school. 115 pp. Illustrated. Report of advisory committee to the board of education on the proposed boys' vocational school. 159 pp. Illustrated. [Newark, 1918.]*

These reports give the results of a survey made, under the direction of the Newark (N. J.) board of education, to determine the industrial and economic needs of the city with reference to which vocational education for girls and boys should be developed and the extent to which the schools are now meeting these needs for special types of vocational education, to formulate a complete scheme of vocational courses, to recommend the types of buildings required to provide adequately for the conduct of vocational work in the community, and to determine the character and amount of equipment required. The first report notes that "perhaps the most important finding of the overview" is that the price paid for inefficiency by Newark employers and wage earners individually, and by the community collectively, is enormous, and that this large item of cost in economic service is a serious handicap to the community in its effort to improve or even to maintain the present standard of economic and social

welfare. "Every dollar wisely spent now for vocational education and training will yield back in the course of a few years the original investment together with a large dividend of profit to the community and to the State." To this end the committee recommends the erection of a school building adequately equipped to carry on vocational education, respectively, for women and girls and for boys, and outlines new courses of study including courses in junior salesmanship, home planning, budget making, mechanical drawing and tracing and machine-shop practice, and electricity for girls, and courses in machine work and tool making, molding, pattern making, carpentry, electric wiring, plumbing and steam fitting, painting and decorating, printing, etc., for boys. A school year of 48 weeks, a school week of 5 session days, and a school day of 6 hours are recommended. There is a table in each report showing the number, per cent, and average weekly wages of certified boy and girl workers, by industrial groups in 1916.

NEW YORK.—*Department of Health. Thirty-seventh annual report for the year ending December 31, 1916. 2 vols. Albany, 1917. 462 and 845 pp.*

— *Industrial Commission. Special bulletin No. 90, December, 1918. A simple and inexpensive respirator for dust protection. Albany, 1918. 10 pp. Illustrated.*

Describes a cheap respirator which can be made at home and which not only filters out dust while being worn but can be kept clean at a small cost. It is intended to replace the more complicated and less easily cleaned respirators in operations in which the constant use of a respirator is necessary, such as sand blasting of metal castings, rag sorting, working with certain poisonous substances, and bag filling and bin trimming of the cement industry. It is made of a muslin strip 33 inches long by 5 inches wide cut to allow the free use of the eyes and supplied with absorbent cotton filtering media covered with a thin film of cheesecloth, and is held in place by two safety pins. It is recommended that this type of respirator be accepted in compliance with Rule 722 of the Industrial Code of the Labor Law of New York State.

— *Superintendent of Insurance. Fifty-ninth annual report. Part III. Casualty, fidelity and surety, credit, real estate title and mortgage guaranty insurance. Albany, 1918. lxxxviii, 452 pp.*

OHIO.—[*Secretary of State.*] *Ohio general statistics for the fiscal year commencing July 1, 1916, and ending June 30, 1917. Vol. III. Springfield, Ohio, 1918. 446 pp.*

A volume of statistical matter and reports from the various departments of State, 36 in number, and from 20 institutions, i. e., hospitals, schools, reformatories, and the penitentiary.

The workmen's compensation department reports several amendments as being made to the workmen's compensation law, by the Eighty-second General Assembly, the more important being: The prohibiting of liability insurance companies from writing workmen's compensation policies; increasing the maximum death award from \$3,750 to \$5,000 (effective Jan. 1, 1918); providing for the payment of a sum greater than \$200 for medical, nurse, and hospital services. The amount of premiums paid into the State insurance fund during the fiscal year ending June 30, 1917, exceeded that paid in during the preceding fiscal year by 74.8 per cent; the disbursements for compensation, medical, nurse, and hospital services also increased 57.8 per cent; the balance in the treasury to the credit of the fund increased 62.8 per cent; the number of claims disposed of increased 35.8 per cent.

In the single year 1916 there occurred in Ohio 166,000 industrial accidents, or an average of 553 accidents per day.

The department of inspection reports a total of 38,216 inspections made during the year, of which 24,201 were factory inspections. The number of orders issued as a result of these inspections was 9,307.

The department of investigation and statistics reports on two special unfinished investigations. The first being an inquiry into the industrial futures of 269 workmen

awarded compensation for permanent partial injury during the period January 1, 1914, to June 30, 1915. The cases selected were those representing major disabilities and the purpose was to ascertain in what measure these handicaps had affected their subsequent employment as to rate of wages, loss of time, change of trade or employer, and cause of unemployment, if not found at work. The second of these unfinished special investigations was a survey of conditions in the railroad, construction, factory and mill, and other labor camps of the State.

OREGON.—*Bureau of Labor Statistics and Inspector of Factories and Workshops. Eighth biennial report, from October 1, 1916, to September 30, 1918. Salem, 1918. 48 pp.*

Gives information as to factory inspections, prosecution for infractions of the labor laws, work of the industrial welfare commission, protection of workers obtaining employment through commercial employment agencies, war activities of public-school children, and labor's part in the war and after the war. Contains a complete statistical survey of the shipbuilding industry of Oregon for the two-year period, July 1, 1916, to July 1, 1918. Reports also the results of a land survey to determine the area which may be used for settlement by returned soldiers.

PENNSYLVANIA.—*Workmen's Compensation Bureau. Decisions of the Pennsylvania Workmen's Compensation Board for the year 1917. Vol. II. Harrisburg, 1918. 596 pp.*

A summary of this report is given on page 261 of this number of the MONTHLY LABOR REVIEW.

PORTO RICO.—*Department of Agriculture and Labor. Bureau of Labor. Special bulletin of the bureau of labor on strikes in Porto Rico during the fiscal year 1917-18 and appendix of labor laws approved from 1916 to March, 1918. San Juan, June 1, 1918. 62 pp.*

— *Legislature. Acts and resolutions of the second special session, 1918, of the ninth legislature. San Juan, 1918. 56 pp.*

SOUTH DAKOTA.—*Industrial Department. First annual report for the 12 months ending June 30, 1918. [Pierre, 1918.] 27 pp.*

This report is noted more fully on pages 261 to 263 of this issue of the MONTHLY LABOR REVIEW.

VIRGINIA.—*Bureau of Labor and Industrial Statistics. Twenty-first annual report, 1918. Richmond, 1918. 80 pp.*

Includes a report showing that during the year ending Aug. 31, 1918, 41 fatal and 846 nonfatal accidents occurred in coal mines. Of the latter 546 resulted in disability for 2 weeks or less; 173, over 2 weeks, to and including 1 month; 66, over 1 month, to and including 2 months; 28, over 2 months, to and including 3 months; 15, over 3 months, to and including 6 months; 5, over 6 months, to and including 1 year; 7, permanent; and 6, severe, but length of disability not reported.

WISCONSIN.—*Industrial Commission. Industrial lighting code for factories, mills, offices and other work places. Revised, 1918. Madison, 1918. 80 pp. Illustrated.*

This code, which establishes the minimum lighting service which will sufficiently safeguard the safety and health of the employees, went into effect, so far as new construction is concerned, on July 1, 1918. Two years, and, if necessary, an even longer period, are allowed in which to change existing systems so that they will conform with the revised code. The report contains the text of the code, together with a detailed explanation of each of its provisions.

WYOMING.—*Workmen's Compensation Department. Third report, 1918. Laramie, 1919. 99 pp.*

This report is noted on pages 263 and 264 of this issue of the MONTHLY LABOR REVIEW.

UNITED STATES.—*Civil Service Commission. Thirty-fifth annual report for the fiscal year ended June 30, 1918. Washington, 1918. xxxi, 244 pp.*

States that in the year covered by the report, 551,391 persons were examined, of whom 214,567 were appointed. The number appointed was nearly as large as the whole number appointed during the preceding 5 years—241,856. In addition, 28,704

were appointed to positions not under the Federal civil-service act and rules, 61 of this number being in the Philippine service and 28,643 under labor regulations. During the year "137,620 women were examined, as compared with 25,457 in the year previous, an increase of 441 per cent; whereas the increase of men was only 122 per cent." The report states that "inequalities in salaries and the failure to adjust pay to the work performed by employees occasion an increasing percentage of declinations of appointments and of resignations, rising recently in Washington to more than 5,000 employees a month, or nearly 6 per cent, in a force of 85,000." The commission recommends uniform entrance and promotion conditions to make possible a more efficient organization, to assure a degree of stability, and to make the service an inviting career.

UNITED STATES.—*Council of National Defense. Second annual report, for the fiscal year ended June 30, 1918. Washington, 1918. 275 pp.*

Contains sections describing the work of the Committee on Labor, the Labor Division (War Industries Board), Committee on Housing, and the Section on Industrial Service. Among the specific accomplishments of the Committee on Labor was the initiation of the Soldiers and Sailors' War Insurance plan, later turned over to the Treasury Department for administration. An account is also given of the Council's part in developing a plan for war labor administration, turned over by the President to the jurisdiction of the Secretary of Labor.

The report presents in detail the work accomplished by the various branches of the Council and states that among the varied problems which have come before the Council and Advisory Commission have been those relating to governmental organization, war labor policy, including general industrial relations, the housing and transportation of workers, the training of emergency labor, the I. W. W. problem, and many allied questions; shipping, food, fuel, and transportation; general medical policy; industrial policy, including the transference of industrial plants from peace to war work; the question of commercial conservation; and many problems involving the general public morale.

— *Department of the Interior. Annual report of the Secretary for the fiscal year ended June 30, 1918. Washington, 1918. 193 pp.*

The Secretary, in his report, explains at length "the new farm idea," and states:

More than one-third, probably one-half of the men who are in Europe, it is estimated, come from the farm. We must turn, as Europe has in her centuries of experience, to the farm village, the settlement of farmers around a center which is their home, in which can be gathered most of the advantages of the city—the good school, the church, the moving picture, the well-outfitted store—and these with good roads, the rural express, the telephone, the automobile, and the post office will make life on the farm a thing of far different meaning from the isolated life it has been.

In a letter to the President dated May 31, 1918, included in this report, the Secretary suggests that lands that can be made available for farm homes for our soldiers include arid lands in the West, cut-over lands in the Northwest, Lake States, and South; and swamp lands in the Middle West and South. These, he states, should be appraised and prepared for those men in the forces who may desire to settle thereon. It is estimated that one or two million dollars will be required to inaugurate this work. This plan does not contemplate anything like charity to the soldier. He is not to be given a bounty. On the contrary, he is to continue in a sense in the service of the Government. It is pointed out that Canada with less than 7,000,000 people is offering to each man 160 acres of land and \$2,500 with which to improve it.

— *Bureau of Education. Educational directory, 1918–19. Bulletin, 1918, No. 36. Washington, 1918. 247 pp.*

— *Report of the Commissioner for the year ended June 30, 1918. Washington, 1918. 155 pp.*

Contains sections describing the work of the Federal Board for Vocational Education under the provisions of the Smith-Hughes Act providing financial aid to States

promoting vocational education in agriculture, in trades and industries, and in home economics, and under the Smith-Sears Act providing for the vocational rehabilitation and return to civil life of disabled persons discharged from the military or naval forces.

UNITED STATES.—*Department of the Interior. Bureau of Education. Industrial arts in secondary schools in the war emergency. Washington, September, 1918. 31 pp. Secondary school circular No. 4.*

A program formulated by the Commissioner of Education assisted by two groups of specialists who were summoned to advise with him, by which the high schools of the country might undertake to give boys training which would be of value in war emergency work and at the same time provide them with a foundation for work in industry after the war. Besides a statement of the recommendations agreed upon and practical suggestions for carrying out the recommendations of this report, the pamphlet contains definite courses of study grouped by industry.

— — — *A manual of educational legislation for the guidance of committees on education in the State legislature. Prepared under the direction of the Rural Division, United States Bureau of Education. Bulletin, 1919, No. 4. Washington, 1919. 68 pp. Maps, tables, charts.*

Part X deals with teachers' salaries, tenure, and retirement pensions. A map shows the average annual salary of teachers, ranging in 1915-16, from \$234 to \$998. A table gives the average monthly salary of teachers in continental United States at \$85.36 for men, \$66.88 for women, and the average annual salary of all teachers as \$563.08. The results of a study of 67 pension plans for teachers in the United States, representing 25 States and 64 counties and cities is included.

The existing pension systems are sometimes administered by the superintendent or commissioner of education, sometimes by the board of education.

The representative salary of the teachers in the 63 systems reporting is \$730 a year, and the representative pension is \$500 a year. The representative total contribution on the part of the teachers is \$510, a frequent requirement being a sum equal to the first year's annuity.

— — — *Bureau of Mines. California mining statutes annotated, by J. W. Thompson. Including all California mining laws. Bulletin 161. Law serial 13. Washington. 1918. 312 pp.*

— *Department of Labor. Children's Bureau. Children before the courts in Connecticut. By Wm. B. Bailey, Ph. D. Washington, 1918. 98 pp. Bureau publication No. 43. Dependent, defective, and delinquent classes, series No. 6.*

Gives a historical summary of the methods of treating juvenile offenders in Connecticut from colonial times to the present day, an account of the methods of conducting cases of juveniles brought before the courts, a discussion of the probation system as used in Connecticut, a description of the institutions to which children brought before the courts may be committed, and a study of juvenile delinquency in certain cities and towns. The material on which the report, apart from the historical study, is based was obtained in 1914, 1915, and 1916 "through interviews with public officials, through visits to courts and institutions, examination of court and other public records, including those of the Connecticut Prison Association, and through correspondence." A new act concerning juvenile offenders, under which considerable improvements in method are possible, went into effect in 1917. Professor Bailey emphasizes the importance of more careful examination into the mental condition of juvenile delinquents, and the crying need of more institutions in which delinquents who are mentally below par may be properly cared for, instead of being sent to reformatory institutions for which they are not fitted, and in which they constitute a heavy burden on a system designed for the mentally normal.

UNITED STATES.—*Department of Labor. Children's Bureau. Rural children in selected counties of North Carolina, by Frances Sage Bradley, M. D., and Margaretta A. Williamson. Washington, 1918. 118 pp. Illustrated. Bureau publication No. 33. Rural child welfare series, No. 2.*

Part II, reporting the findings of the Lowland county survey and Part III, reporting those of the Mountain county survey take up the subjects of: The economic status of families; housing and sanitation; children's farm and other work, including their working hours, and wages when at work away from home.

— *U. S. Training Service. Training labor for peace time. Suggestions for saving an investment made for war. Washington, 1918. 8 pp. Training bulletin No. 5.*

— *District of Columbia. Department of Playgrounds. Annual report for the fiscal year ended June 30, 1918. Washington, 1918. 34 pp.*

— *Employees' Compensation Commission. Second annual report, July 1, 1917, to June 30, 1918. Washington, 1918. 286 pp.*

A digest of this report appears on pages 250 to 252 of this issue of the MONTHLY LABOR REVIEW.

— *Federal Board for Vocational Education. Army occupations as preparation for civilian employment. Opportunity monograph. Vocational rehabilitation series, No. 5. Washington, 1918. 20 pp.*

— *The Metal Trades. Molders, Sheet metal workers, Machinists and machine operators, Bench hands, Assemblers and erectors. Opportunity monograph. Vocational rehabilitation series, No. 7. Washington, January, 1919. 15 pp.*

— *Factory woodworking trades. Planing-mill operators, Cabinetmakers, Finishers. Opportunity monograph. Vocational rehabilitation series, No. 8. Washington, December, 1918. 14 pp.*

— *Forestry pursuits. Foresters, Rangers, Forest guards. Opportunity monograph. Vocational rehabilitation series, No. 10. Washington, December, 1918. 16 pp.*

— *Automobile maintenance and service. Repair-shop men, Starting and lighting experts, Ignition experts, Storage battery men, Tire-repair men, Automobile and truck drivers. Opportunity monograph. Vocational rehabilitation series, No. 11. Washington, January, 1919. 18 pp.*

— *Employment management. A new executive position in industry. Opportunity monograph. Vocational rehabilitation series, No. 12. Washington, December, 1918. 15 pp.*

— *The practice of medicine as a vocation. Opportunity monograph. Vocational rehabilitation series, No. 17. Washington, 1919. 8 pp.*

— *Federal Trade Commission. Food investigation. Report on the meat-packing industry. Part II. Evidence of combination among packers. Washington, 1918. 290 pp. 2 folders.*

— *Library of Congress. A check list of the literature and other material in the library of Congress on the European War. Washington, 1918. 293 pp.*

— *Railroad Administration. Statement of Hon. W. G. McAdoo, Director General of Railroads, before the Interstate Commerce Committee of the United States Senate. [Washington.] January 3, 1919. 48 pp.*

Statement shows that wage increases granted during the year are estimated to aggregate between \$600,000,000 and \$700,000,000 per annum and they were in large measure retroactive from January 1, 1918. These wages were fixed, not upon the theory that the railroads should compete in prices with labor in transient war industries, but as the result of an effort to find a just and equitable basis which would outlive the war and which would give a living wage and decent working conditions to every railroad employee. General Order No. 8 issued on February 21 contained the words "No discrimination will be made in the employment, retention, or conditions of employment of employees because of membership or nonmembership in labor organizations." As a result of this order many railroad employees have joined labor unions, although equal consideration has been shown to employees regardless of whether they were affiliated with unions or not. The principle of the eight-hour day was recognized early and strengthened whenever possible; and special efforts have been made to better the working conditions of women in railroad service, General Order No. 27

providing that "The laws enacted for the government of their employment must be observed and their pay, when they do the same class of work as men, shall be the same as that of men."

UNITED STATES.—*Shipping Board Emergency Fleet Corporation. Aids to employment managers and interviewers on shipyard occupations, with description of such occupations. Special bulletin. Series on employment management in the shipyard. Philadelphia, 1918. 147 pp.*

A handbook, prepared to aid employment managers and interviewers in selecting workers and adjusting them to their jobs. It is expected, also, that this book will be used by foremen in making requisitions for help and assisting the workers. A supplement will be issued covering shipyard occupations in which handicapped persons of various types can be employed.

— *War Department. Personnel Branch. Operations Division. General Staff. Index of occupations for use in classification of Army personnel. Form CCP. 4. Washington, November 1, 1918. 39 pp.*

— *War Industries Board. Employment Management Section. Bibliography of employment management. Washington, 1918. Typewritten.*

Classified lists under the following subjects: General on labor, Functions of the employment manager, Administration, organization and relations, Formanizing, Employment manager's associations, Records, forms, and office methods, The labor survey or audit, The labor market, Selection of employees, Physical examinations, Mental tests, Job analysis, Dilution, Labor turnover, Vocational guidance, Unemployment, Regularization, Public employment bureaus, Law of the labor contract, Education of employees, Rehabilitation, Americanization, Psychology of the task, Wages, The minimum wage, Profit sharing, Promotions, Health, Medical aid, Fatigue and work schedules, Absenteeism, Shop standards, Women in industry, Welfare work, Accidents, Workmen's compensation, Insurance, Restaurants, Home conditions of employees, Housing, Thrift and saving, Pensions, Legal aid for employees, Clubs and club houses, Games, recreations and rest periods, Community agencies, Government of the shop, Suggestion systems, Shop committee systems, Collective bargaining contracts, Associations of employees, Trade-unions, The I. W. W. strikes, The basis of discipline and loyalty.

OFFICIAL—FOREIGN COUNTRIES.

ARGENTINA.—*Dirección General de Estadística de la Nación. Intercambio Económico de la República. 1910-1917. Buenos Aires, 1918. 342 pp.*

This volume is a compilation of statistical data relative to production, exportation, and importation during the period 1910-1917.

AUSTRALIA.—*Department of Trade and Customs. Committee Concerning Causes of Death and Invalidity in the Commonwealth. Final report, 1917-18. Victoria. 1918. 8 pp. No. 73-F. 10573.*

The report considers Infantile mortality, Diphtheria, Enteric fever, Tuberculosis, Risks of middle life, Venereal disease, Maternal mortalities in childbirth, Further investigations, The allocation of responsibility, The example of America, and The duty of the Commonwealth.

— (WESTERN).—*Registrar of Friendly Societies. Report of proceedings under the Friendly Societies Act, 1894; Benefit Building Societies Act, 1863; Cooperative and Provident Societies Act, 1903; Workers' Compensation Act, 1912; and Truck Act, 1899; for the year ended 30th June, 1918. Perth, 1918. 18 pp. No. 15. Second session of 1918.*

States that during the year the membership of the societies was 17,969, of which number 16,760 were males and 1,209 females. During the year £43,209 (\$210,276.60) was disbursed in payment of sickness claims, medical benefits, etc.; of this total the funeral benefits amounted to £7,708 (\$37,510.98). In the aggregate 19,487 weeks of sickness were suffered, and 367 deaths occurred. The funds of the societies amount to £274,546 (\$1,336,078.11).

AUSTRIA.—*Gewerbe-Inspektorat. Bericht 1914, 1915, 2 vols. Vienna, 1915, 1916.*

These two volumes give a detailed account of the activities of the Austrian factory inspection service for the years 1914 and 1915. Each volume consists of a general report covering the whole country and dealing with the personnel of the service, the number of inspections made, the establishments inspected, investigations of industrial accidents, reports of contraventions, enforcement of protective labor laws, approval of new industrial establishments, trade diseases, child and woman labor, hours of labor and overtime work, rest periods, working regulations, wage payment, the economic situation of the workers, employment and unemployment, labor exchanges, housing conditions, and welfare institutions, and a detailed report for each inspection district covering the same subjects. In addition, each volume contains detailed reports on the inspection of the Government tobacco factories.

CANADA.—*Minister of Trade and Commerce. Census of prairie Provinces. Population and agriculture, Manitoba, Saskatchewan, Alberta, 1916. Ottawa, 1918. 356 pp.*

A section on housing shows that in 1916 the population of the three Provinces, numbering 1,698,220, was housed in 362,362 dwellings containing 387,334 families as compared with a population of 1,328,725 divided among 300,958 families, occupying 290,466 dwellings in 1911—an increase of 24.8 per cent in the dwellings, as against an increase of 28.7 per cent in the number of families. In not one rural community of Manitoba was there a dwelling for each family; in Saskatchewan the number of dwellings corresponded to that of families in four municipalities, and in Alberta, in six.

— (YUKON TERRITORY).—*Council. The workmen's compensation ordinance, passed in the year 1917. Dawson, 1917. 15 pp.*

Contains a schedule regulating the amount of compensation for various injuries, and a second schedule covering regulations for settlement of disputed claims.

COSTA RICA.—*Dirección General de Estadística. Anuario Estadístico. Año 1917. San Jose, 1918. xxxix, 106, 16 pp.*

This volume is the statistical yearbook of the Republic of Costa Rica.

DENMARK.—*Centralarbejdsanvisningskontorets Virksomhed, 1917-18. Copenhagen, 1918. 16 pp.*

Report of the central employment office for Denmark. Through this office there were placed 33,773 workers in 1914-15; 37,921 in 1915-16; 40,913 in 1916-17; and 28,298 in 1917-18.

— *Sygekasseinspektøren. Indberetning til Indenrigsministeriet for Aaret 1917. Copenhagen, 1918. 60 pp.*

The annual report of the sick fund inspector of Denmark for the year 1917 discloses the existence of 1,550 sick funds throughout the Kingdom, whose members in 1917 numbered 990,690. The membership of the sick funds in Denmark forms 49.8 per cent of the population of the Kingdom 15 years of age and over. It should also be understood that the funds are required to furnish sick help to members' children under 15 years of age.

The average days of sickness per male member in 1916 was 4.5; in 1917, 4.4; for female members 4.6 and 4.4 days respectively.

Health insurance legislation in Denmark dates from 1892; the present revised law is dated May 10, 1915.

In the following table are summarized the principal activities of the sick funds of Denmark for the years 1914 to 1917:

STATISTICS OF REGISTERED SICK BENEFIT FUNDS, DENMARK, 1914 TO 1917.

	1914	1915	1916	1917
Assets.....	\$2,507,118.02	\$2,606,226.03	\$2,721,316.49	\$3,001,298.77
Receipts:				
Benefit premiums.....	1,745,020.90	1,842,401.11	2,132,167.80	2,321,575.19
State subsidies.....	741,017.05	786,916.61	924,267.14	996,149.57
Municipal subsidies.....	54,951.52	60,229.78	69,415.22	85,441.88
Other.....	139,630.95	145,272.35	166,604.08	.....
Total.....	2,680,620.42	2,834,819.85	3,292,454.24	3,556,978.01
Expenses:				
Pecuniary aid.....	738,663.48	783,214.46	798,374.95	804,337.68
Maternity aid.....	23,993.50	23,361.29	100,232.00	106,727.78
Hospital service.....	284,307.00	311,178.02	343,893.58	377,458.70
Sanatorium treatment for tuberculosis.....	42,258.24	42,483.63	53,068.29	55,470.64
Treatment for insane persons.....	7,337.57	9,002.12	10,299.24	11,922.52
Medical service.....	999,731.66	1,102,344.57	1,302,702.44	1,438,236.47
Medicines.....	275,431.91	322,693.98	300,247.10	305,788.54
Other sickness expenses.....	21,294.74	18,347.82	24,001.81	26,690.12
Administration.....	189,392.65	218,118.77	277,390.45	280,083.32
Other.....	21,988.60	24,333.60	26,989.21	31,027.43
Total.....	2,604,399.35	2,855,078.26	3,237,199.07	3,437,743.20

FRANCE.—*Commission Supérieure des Caisses Nationales d'Assurances. Rapport. Années 1914, 1915, and 1916. Paris, 1915, 1917, 1918. 3 vols.*

Contain account of the operations under the National Accident Insurance Fund acts of July 11, 1868, May 24, 1899, and July 31, 1907. For a review of these laws and the operation of the fund up to 1909, see Twenty-fourth Annual Report of this Bureau, 1909, Washington, 1911, pp. 715-722.

— *Ministère de l'Agriculture et du Ravitaillement. Recueil des Lois, Décrets, Arrêtés, Circulaires, Rapports, Documents intéressant le Ravitaillement de la France. Vols. 1 and 2. Paris, 1917 and 1918. 411 and 484 pp., respectively.*

These volumes contain an official compilation of laws, decrees, orders, circulars, etc., issued by the Ministers of Commerce, Public Works, Maritime Transport, and of General Supplies, and acts of the French Parliament from July 31, 1914, to April 1, 1918.

— *Ministère de la Guerre. Instruction du 1er Decembre, 1916, mise à jour au 6 Septembre, 1917, réglant l'emploi de la main-d'oeuvre féminine dans les corps de troupe dépôts et services. Paris, 1917. 20 pp.*

In 1916 the French Government decided to use women for all services in connection with the military establishment which they were able to perform, except where public decorum or some equally good reason forbade. This pamphlet gives the regulations concerning women thus employed. In general they were to be recruited from the neighborhood, but special provision was made to permit a woman to be employed near her husband, if he were in military service. Wages were to be fixed with reference to the standards prevailing in each locality, with provision for annual advancement. The work offered varied from cooking, washing, and various forms of unskilled labor, up to responsible clerical work. Conditions of work were strictly regulated; after six months' service half pay in case of illness could be drawn for three months, and absence with pay for eight weeks was provided for in case of confinement. Penalties for unsatisfactory service range from reprimands through demotion to a lower salary grade to dismissal in extreme cases.

GERMANY.—*Statistisches Amt., Abteilung für Arbeiterstatistik. Die verbände der Arbeitgeber, Angestellten und Arbeiter im Jahre 1915. Berlin, 1918. 35*, 33 pp. (16. Sonderheft zum Reichs-Arbeitsblatte.)*

A supplement to the Reichs-Arbeitsblatt giving statistics of employers, salaried employees, and workmen's organizations for the year 1915. The following table

showing the development of the various trade-union organizations in Germany during the period 1910-1915 is reproduced below as given in the above supplement:

MEMBERSHIP AND FINANCIAL DEVELOPMENT OF GERMAN TRADE-UNIONS AND WORKERS' SOCIETIES, 1910-1915.

	Social Democratic trade-unions.	Christian trade-unions.	Hirsch-Duncker trade societies.	Independent societies.
Membership at the end of—				
1910.....	2,128,021	316,115	122,571	269,599
1911.....	2,421,465	350,574	107,743	285,858
1912.....	2,583,492	350,930	109,225	298,185
1913.....	2,525,042	341,735	106,618	318,508
1914.....	1,502,811	218,197	77,749	205,360
1915.....	994,853	162,425	61,086	172,391
Total receipts:				
1910.....	\$15,320,581	\$1,306,856	\$696,553	\$517,143
1911.....	17,176,934	1,485,987	624,325	594,895
1912.....	19,129,392	1,572,787	663,146	699,791
1913.....	19,558,066	1,708,308	682,320	623,139
1914.....	16,905,891	1,395,554	605,721	531,106
1915.....	9,903,143	789,648	452,159	347,593
Total disbursements:				
1910.....	13,786,523	1,170,072	602,690	420,243
1911.....	14,305,874	1,261,348	548,421	491,223
1912.....	14,574,744	1,243,009	558,179	568,890
1913.....	17,858,641	1,452,440	623,766	641,159
1914.....	18,970,895	1,397,489	636,055	574,201
1915.....	8,341,391	834,382	344,926	350,073
Total assets:				
1910.....	12,512,970	1,455,063	1,113,171	666,645
1911.....	14,785,781	1,685,740	1,017,058	793,919
1912.....	19,238,294	2,041,007	1,071,020	756,221
1913.....	20,970,383	2,304,505	1,062,751	882,576
1914.....	19,386,935	2,315,111	965,548	844,103
1915.....	21,095,425	1,795,799	1,059,730	779,241

	Non-militant societies.	Federation of Catholic workmen's societies.	Federation of Catholic societies of German working women and girls.	Total.
Membership at the end of—				
1910.....	121,126	129,000	28,000	3,114,432
1911.....	170,192	128,000	30,300	3,494,132
1912.....	224,299	125,614	30,000	3,721,745
1913.....	280,002	124,253	30,000	3,726,158
1914.....	167,074	115,680	30,000	2,316,871
1915.....	133,353	100,526	28,000	1,652,634
Total receipts:				
1910.....	\$240,417	\$237,863	\$36,573	\$18,355,987
1911.....	350,497	215,741	44,773	20,493,151
1912.....	523,103	184,532	49,796	22,822,547
1913.....	646,775	185,565	52,988	23,457,162
1914.....	689,775	159,597	59,592	20,347,236
1915.....	616,091	138,906	52,414	12,299,953
Total disbursements:				
1910.....	196,819	225,246	30,555	16,432,148
1911.....	281,451	203,696	34,540	17,126,553
1912.....	372,590	169,053	38,782	17,525,249
1913.....	508,618	170,578	39,897	21,145,098
1914.....	625,707	167,125	46,270	22,417,741
1915.....	610,398	138,257	40,074	10,659,501
Total assets:				
1910.....	209,552	109,217	11,492	16,078,111
1911.....	282,152	121,262	15,708	18,701,621
1912.....	572,642	135,600	19,344	23,834,127
1913.....	645,955	151,809	23,801	25,783,841
1914.....	692,546	144,341	26,535	24,375,121
1915.....	747,521	123,314	33,999	25,635,029

GERMANY (BERLIN).—*Statistisches Amt. Die Arbeiterkrankenversicherung in Berlin und Vororten im Jahre 1913. Berlin, 1916. 44 pp.*

A set of statistical tables illustrating the activities of the workmen's sickness insurance funds in Berlin and its suburbs during the year 1913.

GREAT BRITAIN.—*Army. Memorandum on War Office contracts. London, 1917. 27 pp. Cd. 8447. Price, 3d. net.*

— *Board of Agriculture and Fisheries. Report on the working of small holdings acquired under the Small Holdings and Allotments Act, 1908. London, 1918. 6 pp. Cd. 9203. Price, 1d. net.*

— *Board of Education. Scheme for the establishment of juvenile unemployment centers by the Board of Education. Circular to local educational authorities. London, 1918. 2 pp. Circular 1072, 12th November, 1918.*

Outlines plans of a scheme to secure the establishment of educational unemployment centers for young persons registered at juvenile employment exchanges as applicants for employment, particularly in places in which substantial changes in the conditions of juvenile employment may be expected as part of the process of industrial resettlement. The purpose is to minimize the mischief which might arise by the discharge from employment, in consequence of the termination of hostilities, of a large number of young persons, many of whom were employed under conditions unfavorable to the development of stable character.

— *Board of Trade. Reports of the departmental committee appointed to consider the position of the shipping and shipbuilding industries after the war. London, 1918. 284 pp. Price, 2s. net.*

The first report is on The German control stations and the Atlantic emigrant traffic; the second on Shipbuilding and marine engineering; and the final report is divided into three parts devoted, respectively, to The reconstruction of the British mercantile marine; International competition and navigation policy; and a Summary of Parts I and II. The report on Shipbuilding and marine engineering devotes sections to the question of the Education of boys and apprentices and to Labor. In connection with the latter the question is considered of the steps which should be taken to accelerate output after the war, and a recommendation is made for a system of payment by results, for a departure from the present limitation of output, and for the working of machinery to its full capacity. It is stated that while the committee did not consider it its specific duty to report in detail upon the matter, it was convinced that "some mutually satisfactory settlement in these directions must be arrived at between employers and employed, if this country is to maintain its position in international competition."

— *Chief Registrar of Friendly Societies. Reports for the year ending 31st December, 1917. Part A. General report. 145 pp. Price, 1s. 3d. net. Part A. (Appendix A.) Friendly societies, Industrial and provident societies, Building societies, Trade-unions, Workmen's compensation schemes, Loan societies, Scientific and literary societies, and Post office, trustee and railway savings banks. 47 pp. Price, 6d. net. London, 1918.*

The total membership in 1916 of Friendly Societies, with branches, was 2,900,159, and the funds £32,452,708 (\$157,931,103); Branchless Friendly Societies, 3,832,832 members, and funds £25,835,171 (\$125,726,860); Collecting societies, 8,747,625 members, and funds £13,218,000 (\$64,325,397); Cooperative societies, 4,014,288 members, and funds £69,099,985 (\$336,275,077); Building societies, 628,285 members, and funds £51,518,980 (\$250,717,116); Trade-unions, 3,693,572 members, and funds £10,567,450 (\$51,426,495); making a total of registered provident societies, 24,820,500 members, and funds £214,632,013 (\$1,044,506,691).

Two hundred and twenty-three savings bank disputes were referred to the registrar during the year, this being the largest number for any one year recorded. One hundred and ninety-eight awards were made, involving a total sum of £10,273 16s. 6d. (\$49,993), or an average of £51 17s. 9d. (\$253) apiece.

GREAT BRITAIN.—*Committee on Commercial and Industrial Policy. Final report of the committee on commercial and industrial policy after the war.* London, 1918. 81 pp. Cd. 9035. Price, 9d. net.

— *Interim report on certain essential industries.* London, 1918. 16 pp. Cd. 9032. Price, 2d. net.

— *Committee on Financial Facilities. Report.* London, 1918. 10 pp. Cd. 9227. Price, 2d. net.

— *Committee on Staffs. Second interim report of the committee appointed to inquire into the organization and staffing of Government offices.* 1 p. Cd. 9219. Price, 1d. net. *Third interim report, etc.* 26 pp. Cd. 9220. Price, 3d. net. London, 1918.

This committee was appointed in February, 1918, "to inquire into the numbers and organization of the clerical staffs employed in the new ministries created and in other departments in which large additions to the staff engaged have been made since the beginning of the war, the method of recruitment, and the rates of remuneration, and to report what measures should in our opinion be taken to secure better coordination in respect both to recruitment and organization, to effect economies in numbers and cost and to prevent overlapping." The first interim report was noted in the MONTHLY LABOR REVIEW for August, 1918 (pp. 248, 249). The third interim report considers in detail the results of the inspection of the various ministries and departments carried out with a view to fulfilling the terms of reference, and suggesting measures to be taken to effect general improvements in organization.

— *Departmental Committee on Building Byelaws. Report.* London, 1918. 52 pp. Cd. 9213. Price, 6d. net.

Appointed in April, 1914, the report of the committee has been considerably delayed and did not appear until late in 1918. It consists of an analysis of the various building laws and codes in force in Great Britain, with recommendations for changes in both general laws and local regulations. The committee takes the view that so far as possible byelaws should be recognized as the standard method, and that any of the matters now regulated otherwise which are inherently capable of byelaw control should be transferred to byelaws which are made by the local authorities after hearing and with sanction of the Local Government Board. The laws of Parliament governing the byelaws may be general in their terms; limited authority should be included in regulations which are drafted without preliminary hearings and without sanction of the Local Government Board; and very little should be left to discretionary control.

— *English and Scottish Boards of Agriculture. Land settlement in the mother country. Issued with the approval of the Admiralty and War Office.* [London] December, 1918. 8 and 10 pp., respectively. L. S. 8 and L. S. 9.

The object of these booklets is to explain briefly the steps that have been or will be taken to settle ex-service men on the land, and to explain impartially the prospects of success and the necessary qualifications for those who desire to take up farming or market gardening.

— *Home Office. Committee on Anthrax. Report of the departmental committee appointed to inquire as to precautions for preventing danger of infection from anthrax in the manipulation of wool, goat hair, and camel hair.* Vol. II—*Report of the committee.* 45 pp. Cd. 9171. Price 6d net. Vol. III—*Summary of evidence and appendixes.* 171 pp. Illustrated. Cd. 9172. Price, 1s. 6d. net. London, 1918.

— *Mines and quarries: General report, with statistics, for 1917, by the chief inspector of mines. Part II, Labor.* 38 pp. Part III, Output. 24 pp. London, 1918.

According to this report, the total number of persons ordinarily employed at mines and at the quarries under the Quarries Act in the United Kingdom and the Isle of Man during 1917 was 1,085,471 (1,041,840 at mines and 43,631 at quarries), or a net increase of 19,757 (1.9 per cent) persons as compared with the preceding year (an increase of 24,322 at mines and a decrease of 4,565 at quarries). Of the persons employed at

mines 823,986 worked underground. Of the total employed 32,982, or 3.4 per cent, were 16 years of age or less, and of this number 1,429, or 4.3 per cent, were females. The report records 1,408 separate fatal accidents causing the loss of 1,451 lives, an increase of 57 fatalities as compared with 1916. The fatality rate per 1,000 persons employed at mines was 1.339 as compared with 1.313 in 1916; the fatality rate at quarries was 1.283.

The report on output of mines and quarries during 1917 shows total of 248,499,240 tons of coal, a decrease of 7,876,126 tons, or 3.2 per cent, from 1916. The average price of coal was 16s. 8.68d. (\$4.07) in 1917 as compared with 15s. 7.24d. (\$3.80) in 1916.

GREAT BRITAIN.—*Local Government Board. Forty-seventh annual report, 1917-18. Part I—Public health: Local administration; Local taxation and valuation. Part II—Housing and town planning. Part III—Administration of the poor law. Part IV—Special work arising out of the war. London, 1918. 72 pp. Cd. 9157. Price, 4d. net.*

— — — *Local authorities (land and housing). Return to an order of the honorable the House of Commons, dated 4 August, 1914. London, 1918. 5 pp. Price, 1d.*

The return shows (1) the acreage of land held by each county council in England and Wales, other than the London county council, distinguishing agricultural land from other land, (a) as owners of fee simple; and (b) as leaseholders or otherwise, and the purposes for which the land is used or was acquired; (2) the number of dwelling houses provided by each county council (including the standing joint committee) in England and Wales, other than the London county council, for housing (a) small holders; (b) police; (c) county council employees; and (d) other persons, since the 1st day of January, 1906; and (3) the number of dwelling houses in rural districts for the provision of which loans have been sanctioned under Part III of the Housing of the Working Classes Act, 1890, since the 1st day of January, 1906.

— — — *Manuals of Emergency Legislation. Food supply manual, revised to July 31st, 1918. Comprising the food controller's powers and orders, and orders of other departments ancillary thereto. London, July, 1918. 701 pp. Price, 5s. net.*

— — — *Ministry of Pensions. The disabled soldier's handbook. [London.] 1918. 32 pp.*

This handbook takes the place of "Soldier's pensions" and "Disabled sailors and soldiers," and is given to every disabled man upon discharge. It gives a general account of what the State is ready to do for disabled men and is arranged under the general heads of What a man should do after discharge; How the State can help him; Pensions; National health insurance; Medical treatment; and Employment and training.

— — — *Ministry of Reconstruction. Adult Education Committee. Second interim report. Education in the army. London, 1918. 10 pp. Cd. 9225. Price, 2d. net.*

— — — *Juvenile employment during the war and after. London, 1918. 114 pp.*

A digest of this report is given on pages 218 to 222 of this issue of the MONTHLY LABOR REVIEW.

— — — *Local Government Committee. Report on transfer of functions of poor law authorities in England and Wales. London, 1918. 26 pp. Cd. 8917. Price, 3d. net.*

— — — *Memorandum on the Ministries of Health Bill, 1918. London, 1918. 4 pp. Cd. 9211. Price, 1d. net.*

— — — *Reconstruction problems, 1. The aims of reconstruction. London, 1918. 18 pp. Price, 2d.*

The first of a series of pamphlets dealing with reconstruction problems. The object of this pamphlet, which is compiled from speeches made by the minister of reconstruction, is to outline in general terms the main problems of reconstruction and the way in which they are being approached by the ministry. The subjects include the Ministry of reconstruction, Shipping, Raw materials, Allocation of materials, Transport, Remobilization—reinstatement, Industrial organization, Joint industrial

councils, Interim reconstruction committees, Working conditions, Rural development, Health, housing, and education, Problems of finance, all of which are very briefly treated. Subsequent pamphlets deal in detail with specific subjects.

GREAT BRITAIN.—*Ministry of Reconstruction. Reconstruction problems, 3. The demobilization and resettlement of the army. London, 1918. 21 pp. Price, 2d.*

— — — *Reconstruction problems, 4. Housing in Scotland. London, 1918. 23 pp. Price, 2d.*

The subject is treated under the headings of "The task, The conditions in Scotland, Attempts to improve housing, The need for action, and The housing policy after the war."

— — — *Reconstruction problems, 5. New fields for British engineering. London, 1918. 18 pp. Price, 2d.*

In this study of new industries involving the utilization of engineering after the war, which has resulted from the work of the Board of Trade committee to "consider the position of the engineering trade after the war, especially in relation to international competition and to report what measures, if any, were necessary or desirable in order to safeguard the position," the various suggested industries are briefly considered, and in connection with them two "points of principle" of special interest to labor are laid down: "1. No new industry should be introduced into this country that would not insure to all employed in it a wage compatible with an adequate standard of living and unless machinery exists therein or be set up for regulating the rate of wages and hours of labor. 2. No new industry should be introduced which exposes those engaged in it to special risk of industrial disease."

— — — *Reconstruction problems, 6. Raw materials and employment. London, 1918. 20 pp. Price, 2d.*

Considers specifically Metal trades, Textile industries, Boot and shoe industry, Timber, Paper making, Other industries, General conclusions, and The organization of control.

— — — *Reconstruction problems, 7. Guide to work and benefits for soldiers and civil war workers. London, 1918. 15 pp. Price, 2d.*

Practical explanation of means provided for facilitating the placement in industry of soldiers and civil war workers, arranged under the heads of Men from the forces, Civilian workers, and Beginning of peace production. For further information with regard to the change over to peace production readers are referred to the pamphlets of the series dealing with The resettlement of civil war workers and Raw materials and employment.

— — — *Reconstruction problems, 8. Resettlement of civil war workers. London, 1918. 16 pp. Price, 2d.*

Considers separately the Demand for labor, New openings for labor, Resettlement department, Measures of resettlement, Measures for extending existing employment, Release of munition workers, and Summary of policy. The last sets forth proposals for dealing with the problems of civil resettlement in two classes, namely, those belonging to the emergency period immediately following the cessation of hostilities, and those belonging to the period of permanent resettlement and industrial organization, the latter covering "The instruction to Government departments and the encouragement of public bodies and private employers to formulate their requirements and place contracts either at revisional prices or on a costing basis; The expedition by central and local authorities, as material becomes available, of the execution of works and repairs which have been suspended on account of war conditions, and particularly with regard to (a) Housing, (b) The road board program for road improvement, (c) The afforestation scheme, (d) Land reclamation schemes; The extension of juvenile advisory committees and choice of employment committees where neces-

sary, and the possible establishment of centers in connection with the juvenile employment exchanges, at which some form of instruction or occupation shall be provided for juveniles for whom no employment can be found * * * ; The extension of national unemployment insurance to all workers—other than nonmanual workers in receipt of not less than £160 [\$778.64] per annum and persons included under a superannuation act—with a benefit higher than the prewar standard * * * .”

GREAT BRITAIN.—*Ministry of Reconstruction. Reconstruction problems, 9. Naval demobilization. London, 1918. 16 pp. Price, 2d.*

— — — *Report of the committee appointed by the minister of reconstruction to consider the position of the building industry after the war. London, 1918. 13 pp. Cd. 9197. Price, 3d. net.*

— — — *Report of the acquisition of powers subcommittee of the reconstruction committee. London, 1918. 10 pp. Cd. 8982. Price, 2d. net.*

— — — *2d, 3d, 4th, and 5th interim reports of the civil war workers' committee. London, 1918. 27 pp. Cd. 9192. Price, 3d. net.*

This committee was appointed “to consider and report upon the arrangements which should be made for the demobilization of workers engaged during the war in national factories, controlled establishments, in other firms engaged in the production of munitions of war and on Government contracts, or in firms where substitute labor has been employed for the duration of the war.” The first interim report was noted in the MONTHLY LABOR REVIEW for October, 1918 (p. 299). This pamphlet contains the report of the unemployment insurance subcommittee, with which is submitted two proposals embodying schemes of general insurance, and the suggestion that the minister of labor should be asked to frame definite and detailed proposals for general insurance and to give effect thereto as soon as possible. The third interim report deals with the matter of holidays for munition workers after the war, the committee concluding that it can not support the proposal for a holiday for workers on full pay either immediately on demobilization or, as has been suggested, as an alternative, during the 12 months following the cessation of hostilities. The fourth interim report takes up the question of special arrangements which may be found necessary during an armistice, and the fifth interim report is a continuation of the first interim report, taking up various miscellaneous questions which were reserved for further consideration.

— — — *Statement with regard to advisory bodies (other than reporting committees) appointed by the minister of reconstruction. London, 1918. 10 pp. Cd. 9195. Price, 2d. net.*

The advisory bodies appointed consist of (1) The advisory council, including sections on Finance, transport, and common services; Production and commercial organization; Labor and industrial organization; Rural development, including agriculture; Social development, including education, health, housing; Women's advisory committee of the council; (2) The advisory council on the disposal of surplus Government property; (3) Engineering trades (new industries) committee; (4) Supply of raw materials after the war; (5) Council on priority after the war; (6) Interim industrial reconstruction committees; and (7) Storage executive.

— — — *Women's employment committee. Memorandum on subsidiary health and kindred services for women. Prepared by Miss A. M. Anderson. London, 1918. 24 pp. Price, 3d. net.*

Outlines the purpose of this committee, which is to train and employ industrial women of a superior type, who may be thrown out of employment after the war, for work in the wide field of the prevention of disease and the promotion and preservation of the health of the community and all its members. The chief directions in which it is proposed that organization for an increased supply of trained women for service, to carry with it an assured livelihood, should be called for are: Midwives; home helps;

sanitary inspectors and health visitors; maternity and infant welfare centers and schools for mothers; nursery schools and day nurseries; mothers' pensions; play centers and playgrounds; country holidays; public baths and laundries of cottage type, with women attendants; pure clean milk supply; invalid kitchens; superintendents and forewomen in factories; care committee organizers, boys' and girls' club organizations; police women and women patrols; probation officers; and orderlies in hospitals.

GREAT BRITAIN.—*Select Committee on Transport. First and second reports, together with the proceedings of the committee and minutes of evidence.* London, 1918. 179 pp. Price, 1s. 9d. net.

— *Treasury. Government appointments. Return to an order of the House of Lords, dated 31 July, 1918; for return of the various new departments or new subdepartments of permanent offices that have been created since the outbreak of the war and are now in existence, with the date on which they were created, and a statement of the names, rank, and remuneration, if any, received from public funds by the heads and principal officers of each such departments.* London, 1918. 44 pp. Price, 3d. net.

ITALY.—*Cassa Nazionale di Maternità. Legge costitutiva della cassa nazionale di maternità, modificazioni emanate per decreto-legge, e regolamento della cassa.* Rome, 1918. 20 pp.

The text of the Italian law of July 17, 1910, establishing a maternity insurance fund, of the decrees of February 17, 1917, and January 10, 1918, amending the above law, and of the regulations of June 21, 1917, for its application.

— *Cassa Nazionale di Previdenza per l'invalidità e per la vecchiaia degli operai. Legge 22 Giugno 1913 No. 767 costitutiva della cassa degli invalidi della marina mercantile.* Rome, 1914. 55 pp.

The text of the law of June 22, 1913, relating to the establishment of an invalidity insurance fund for the Italian merchant marine.

— — *Regolamento approvato con decreto luogotenenziale 18 novembre 1915, No. 1811, per l'esecuzione della legge 22 giugno 1913, No. 767, sulla cassa degli invalidi della marina mercantile.* Rome, 1916. 34 pp.

The text of the regulations for the application and enforcement of the Italian law of June 22, 1913, creating an invalidity insurance fund for the merchant marine.

— *Direzione Centrale di Statistica. Annuario Statistico Italiano.* Rome, 1918. xii, 494 pp. Graphic tables. Series II, vol. 6, 1916.

The issue for 1916 of the annual statistical yearbook of Italy. Of interest to labor are the data on industrial establishments, wholesale and retail prices, workers' and employers' organizations, internal migration, wages, women and child labor, factory inspection, labor disputes, arbitration boards, and social insurance.

— *Ministero per l'Industria, il Commercio e il Lavoro. Ufficio del lavoro. Statistica delle organizzazioni di lavoratori al 1° gennaio 1914.* Rome, 1918. xxxi, 125 pp. (Supplemento al Bollettino dell' Ufficio del Lavoro, No. 31).

A supplement to the bulletin of the Italian labor office giving statistical data of Italian agricultural and industrial labor organizations for the year 1914. The total number of organized agricultural workers is shown to have been 488,705 and that of industrial workers 473,292, making the total membership of labor unions 961,997. The free (socialistic) unions had a membership of 682,002, the Catholic unions of 103,326, and the independent unions of 176,669. The number of workers organized in labor councils (*cameredilavoro*), the most frequent form of organization in Italy, was 608,049 and that of workers organized in trade federations (*federazione*) 111,546.

NETHERLANDS (AMSTERDAM).—*Arbeidsbureau. Het georganiseerd overleg met de gemeenteverkiezenorganisaties te Amsterdam.* Amsterdam [1918]. 16 pp.

Report of the joint conferences between the city authorities of Amsterdam and the representatives of the four national organizations of municipal workers which were begun as a result of action taken by the city council in October, 1916.

NETHERLANDS (AMSTERDAM).—*Veiligheidsmuseum. Jaarverslag van de stichting het Veiligheidsmuseum, 1916. Amsterdam. 55 pp. Illustrated.*

The Museum of Safety and Industrial Hygiene was founded in Amsterdam in January, 1893. The purpose of the museum is to exhibit various forms of safety devices and to supply information concerning the safety movement. In 1917 over 22,000 persons visited the museum; in 1916, 12,000; and in 1915, 13,000.

NEW ZEALAND.—*Results of a census of the Dominion of New Zealand taken for the night of the 15th October, 1916. Part V.—Education; Part VI.—Infirmity; Part VII.—Conjugal condition. Wellington, 1918. 38, 12, and 104 pp., respectively.*

NORWAY.—*Statistiske Centralbyraa. Dyrtidens virkninger paa levevilkårene. 2den del. Utgit av det Statistiske Centralbyraa. Christiania, 1918. 75 pp. (Norges Officielle Statistik, VI: 124.)*

A summary of this report appears on pages 123 to 127 of this number of the MONTHLY LABOR REVIEW.

SPAIN.—*Dirección General del Instituto Geográfico y Estadístico. Anuario Estadístico de España. Año IV, 1917. Madrid, 1918. 656 pp.*

This volume contains statistical data relative to population; production, consumption and commerce; education, social economy, etc.

UNOFFICIAL.

AMERICAN ACADEMY OF POLITICAL AND SOCIAL SCIENCE. *The annals. Vol. 81, Whole No. 170. A reconstruction labor policy. Philadelphia, 36th and Woodland Avenue, January, 1919. 211 pp.*

Besides editorial comment and a "Who's who of contributors" the volume is made up of articles arranged under three general heads as follows: Part I—Release of man power for post-war industry. British demobilization plans, by Robert C. Clothier; and Release of industrial leaders from Government service for industrial supervision, by Mark M. Jones. Part II—Industrial placement. United States Employment Service and demobilization, by I. W. Litchfield; Lessons of the war in shifting labor, by John B. Densmore; The extension of selective tests to industry, by Beardsley Ruml; War's challenge to employment managers, by Joseph H. Willits; Housing and transportation problems in relation to labor placement, by John Ihlder; A national policy—public works to stabilize employment, by Otto T. Mallery; Placing soldiers on farm colonies, by Elwood Mead; and Immigration standards after the war, by Henry Pratt Fairchild. Part III—Standards for replaced labor. Seven points for a reconstruction labor policy, by V. Everit Macy; Federal policies for women in industry, by Mary Van Kleeck; Can we eliminate labor unrest? by Robert W. Bruère; Post-war causes of labor unrest, by Malcolm Keir; The measurement of the cost of living and wages, by William F. Ogburn; Wages for women workers, by Mary Anderson; Health problems of industrial workers, by John A. Lapp; Training labor: a necessary reconstruction policy, by C. T. Clayton; The employment manager and applied vocational guidance, by Ida May Wilson; Resolutions of the war emergency congress of the Chamber of Commerce of the United States; Capital and labor, by Charles M. Schwab; Post-war standards for industrial relations, by Henry P. Kendall; Representation in industry, by John D. Rockefeller, jr.; Labor standards after the war, by Samuel Gompers; and Resolutions on reconstruction of the British Labor Party, from The Survey.

AMERICAN ANTI-BOYCOTT ASSOCIATION. *League for Industrial Rights. Law and labor. A monthly periodical on the law of the labor problem. New York City, January, 1919. 7 pp.*

An organ of cooperation, circulated without charge, which seeks to advise employers and employers' associations concerning legal phases of the labor problem which come to the attention of the editor.

AMERICAN FEDERATION OF LABOR. *Labor and the war. American Federation of Labor and the labor movements of Europe and Latin America. Washington, December, 1918. 288, iii pp. Price, 50 cents.*

- AMERICAN FEDERATION OF LABOR. *Arizona Branch. Proceedings of the seventh annual convention held at Miami, Ariz., August 5 to 9, 1918.* Globe, 1918. 88 pp.
- *Arkansas Branch. Proceedings of the thirteenth biennial convention held at Russellville, Ark., Oct. 7 to 10, 1918.* Little Rock [1918]. 71 pp.
- *Constitution. Revised October 7 to 10, 1918, Russellville, Ark.* Little Rock [1918]. 16 pp.
- *Connecticut Branch. Official proceedings of the thirty-third annual convention, New London, Conn., September 3 to 6, 1918.* New Haven [1918]. 26 pp.
- *Indiana Branch. Official proceedings of the thirty-fourth annual convention held at Fort Wayne, Ind., September 25 to 27, 1918. Constitution, by-laws, platform of principles.* Indianapolis. [1918.] 263 pp.
- *Kentucky Branch. Book of laws as amended and adopted January 14, 1918, together with the proceedings of the biennial convention held at Ashland, Ky., January 14 to 16, 1918.* Louisville, 1918. 74 pp.
- *New York State Branch. Fifth report of the Committee on Health. Progress toward health insurance legislation.* Albany, 1918. 20 pp.
- *The State Fund v. Casualty insurance companies. Argument before the Senate Judiciary Committee in favor of eliminating companies organized for profit from doing business under the provisions of the workmen's compensation law, by F. Spencer Baldwin, manager of the New York State Insurance Fund, and Hon. Thomas J. Duffy, chairman Ohio State Industrial Commission.* [New York] 1918. 15 pp.
- *North Carolina Branch. Constitution, with proceedings of the twelfth annual convention held at Asheville, N. C., August 12 and 13, 1918.* Asheville, 1918. 62 pp.
- *Ohio Branch. Proceedings of the thirty-fifth annual convention held in Columbus, Ohio, October 14 to 18, 1918.* Cincinnati, 1918. 132 pp.
- *Virginia Branch. Proceedings of the twenty-third annual session, held at Portsmouth, Va., June 3 to 5, 1918.* Roanoke [1918]. 55 pp.
- ANDERSON, B. M., JR. *Price readjustment.* New York, National Bank of Commerce, December, 1918. 10 pp.

A consideration of price control which aims to aid business men to a clearer view of conditions resulting from the return of peace. "The stand is taken that the business changes involved in this transitional period should be allowed to follow the normal course, and that they should not be subjected to artificial influences." Subjects considered are A new kind of price fixing; Fall in prices desirable; Artificial price levels; Loans to allies for reconstruction; Forced expansion of bank credit; Falling prices stimulate demand; Stabilization by public expenditures; A buffer for profits and wages; and Summary.

- *When prices drop.* New York, National Bank of Commerce, November, 1918. 18 pp.

A discussion of the conditions to be expected in preparing for peace and how the author believes the country should prepare to meet them.

- ANDREWS, JOHN B. *National effectiveness and health insurance.* Philadelphia, July, 1918. 8 pp. Reprinted from *The Annals of the American Academy of Political and Social Science.*

- ATKISSON, H. L. B. *Readjustment: A cross section of the best considered literature and discussions. Prepared for the National Association of Manufacturers.* December 10, 1918. New York City, 30 Church Street, 1919. 92 pp.

A chapter on labor considers briefly the chief problems to be solved under this head, which are stated to be "the demobilization of the Army and the return of over 3,000,000 men to the ranks of industry, besides at least an equal number more who are engaged in war industries which will cease upon the complete restoration to peace, the advisability of retaining women in the industrial occupations where they have already taken the place of men, and the readjustment of wages with the least possible friction."

The greater part of the chapter is devoted to the substance of the report on conciliation and arbitration, rendered January 31, 1918, by the committee on relations between employers and employed of the British Ministry of Reconstruction, the text of which was printed in full in the August, 1918, issue of the MONTHLY LABOR REVIEW, pages 237-240.

L'AVENIR DE LA FRANCE. *Réformes Nécessaires*. Paris, 1918. viii, 568 pp.

This volume is a compilation of 25 chapters written by various authors, "guided only by their desires to aid in solving the problems of the future, and who in their collaboration freely and patriotically express their ideas for the future public welfare." Among the studies presented are: The customs systems, by M. Fernand Pila; Employers, by Camille Cavalier; Employees, by Auguste Keufer; Social legislation, by Charles Gide; Industry, by C. Cavalier, etc.

BAKER, JAMES H. *After the war—what?* Boston, The Stratford Co., 1918. 177 pp.

An attempt to "set in order some of the ideas growing out of the war, to draw some inferences and note the shadows of coming events." A chapter devoted to "Socialism—Labor" considers Aims of socialism, Limitations to socialistic tendencies, Effect of the war on socialism, and Labor problems, the latter being treated under the heads of Regulation of disputes, Regulation of profits, Improvement of labor conditions, Insurance against unemployment, etc., and Class confidence, cooperation, and voluntary arbitration.

BARLOW, SIR MONTAGUE, AND WILLIAMS, W. GORDON. *War pensions, gratuities, allowances, treatment, and training for officers, N. C. O.'s, and men. A handbook, with scales of payment and full index.* London, Dryden Press, 1918. 38, xxxix-xlix pp. Price 1s.

Prepared principally for the use of members of Parliament, and especially for those who are members of the Parliamentary War Pensions Bureau, in response to many inquiries for a short and clear statement of what officers, men, and their dependents are entitled to for pensions and allowances, treatment, and training.

BEVAN, EDWYN. *German social democracy during the war.* London, 1918. viii, 280 pp.

A consecutive narrative of the principal events which make up the history of the German Social Democratic Party from the outbreak of the war till the appointment of Count Hertling as imperial chancellor at the beginning of November, 1917. This account is based upon the printed utterances—in papers, pamphlets, and books—of those who have themselves taken part in the events narrated. The volume is a valuable reference book, especially with respect to the numerous factions within the German Social Democratic Party, their leaders, and the principles represented by them.

BRIDGE AND STRUCTURAL IRON WORKERS UNION NO. 1, CHICAGO. *Second or supplementary industrial accident report, for the period Apr. 1, 1917, to Dec. 31, 1917.* Chicago, December, 1918. 14 pp.

This report is noted on pages 225 and 226 of this issue of the MONTHLY LABOR REVIEW.

BUREAU OF INDUSTRIAL RESEARCH. *The industrial council plan in Great Britain. Reprints of the report of the Whitley committee on relations between employers and employed of the ministry of reconstruction and of related documents.* Washington, 1722 H Street NW., 1919. 132 pp. Price, 25 cents.

CANADIAN FEDERATION OF LABOR. *Proceedings of the ninth annual convention, held at Sherbrooke, Quebec, September 5-7, 1917.* Ottawa [1917]. 19 pp.

CANISY, COMTE DE. *L'Ouvrier dans les mines de fer du Bassin de Briey.* Paris, 1914. 235 pp.

The preface of this study consists of a history of the operations of iron mines of France. The study is devoted to social conditions in the mining districts of Briey, including conditions of employment, living conditions, and welfare of workers.

CARNEGIE ENDOWMENT FOR INTERNATIONAL PEACE. *Division of economics and history. Preliminary economic studies of the war, No. 6. Effects of the war upon insurance, with special reference to the substitution of insurance for pensions, by William F. Gephart. New York, Oxford University Press, 1918. 302 pp.*

The sixth of a series of preliminary studies on the war. Chapters are devoted to general considerations of war and insurance, and to the effect of the war on each of the following different forms of insurance: Life insurance; social insurance and pensions; marine insurance; and fire insurance. Appendixes give the text of the War-Risk Insurance Act and the two amendments thereto, application blanks and policy forms for war-risk insurance, and forms of policies used in Great Britain in the agreement between the Government and insurance companies.

CARRIAGE BUILDERS' NATIONAL ASSOCIATION OF THE UNITED STATES OF AMERICA. *Forty-sixth annual convention, 1918. Cincinnati [1918]. 139 pp.*

CLARKE, JOSEPH I. C. *Japan at first hand: her islands, their people, the picturesque, the real, with latest facts and figures on their war-time trade expansion and commercial outreach. New York, Dodd, Mead and Company, 1918. 482 pp. Illustrated.*

The chapter on Japan and big business contains interesting information concerning the volume and methods of labor in industrial establishments in Japan, and some statistics on these manufactures are given in the chapter on Japan at a glance. At the close of 1915 factories and enterprises numbered 16,809, of which 8,406 were textile, 1,426 machine and iron-work, 1,838 chemical, 2,377 foodstuffs and beverages, and 2,585 miscellaneous.

Cotton manufacturing is the most elaborate of the industries, with 278 cotton mills, a capital of 85,279,734 yen (\$42,469,308), 2,787,720 spindles working daily, and a total production of cotton yarn of 683,629,704 pounds in 1915. In the manufacture of silk fabric and hemp fabric there were in the same year 418,419 weaving houses with 680,530 looms producing 380,128,122 yen (\$189,303,805) worth of goods. There is considerable factory production of Japanese paper, European paper, matches, porcelain and earthen ware, matting, camphor, lacquer-ware, strawplaits, electric and gas enterprises. Female labor is cheap and abundant, the proportions of factory female and male labor throughout Japan being 65 and 35 per cent. In cotton spinning and weaving industries the author saw young girls from 13 years of age to women of 24 working in the mills he visited. In most of these mills work is practically continuous, a night force and a day force changing ranks at intervals. He makes the statement that "there seemed to be no end of welfare work, all sorts of leagues for sick benefits, schools of many kinds, lectures, nurseries, recreation halls."

CLERET-ALBESSARD, DR. MARIE. *La protection de l'enfant du premier age dans les centres ouvrier. Paris, Vigot Frères, 1918. 74 pp.*

The writer points out the inconsistency of the French system under which the Government cares for the feeble-minded, the insane, the halt, the maimed and the blind, but leaves the care of the infants on whom the welfare of the race depends to private initiative, until illness develops, when Government aid becomes available. On the ground that prevention is better than cure, she advises a unified system of care from the time a working mother's confinement leave ends till the child is old enough to enter the primary schools. For this, two types of institution are needed—the nursing room, which under the French law of August, 1917, must be maintained in every establishment with as many as 100 female employees over 15, and the nursery-kindergarten, which should be established in every working class residence section.

COLLA, ETTORE (PSEUDONYM, A. COLLETTORE). *Le grandi opere di ricostruzione economica e sociale nel dopo guerra. I°. Il collocamento preventivo degli smobilizzati. Vincenza, 1918. 54 pp.*

A brochure containing a detailed outline of a scheme for the employment of demobilized soldiers and militarized workers, with the aid of an extensive net of public

employment exchanges. A technological summary classification of occupations and 20 forms to be used in the proposed employment service are appended to the brochure.

COMPENSATION INSPECTION RATING BOARD. *Manager's fifth annual report submitted at annual meeting, Jan. 9, 1919. New York, 135 William Street, 1919. 6 pp. mimeographed.*

CONFERENCE OF INDUSTRIAL PHYSICIANS AND SURGEONS. *Proceedings of the Sixth Conference, held at Harrisburg, April 9, 1918. 48 pp. Reprinted from the Pennsylvania Medical Journal, August, 1918.*

An address, published in this pamphlet, dealing with the question of whether hernia should be classed as a compensable injury or as a disease, is summarized on pp. 249 and 250.

DAVIS, MICHAEL M., AND WARNER, ANDREW R. *Dispensaries, their management and development. A book for administrators, public health workers, and all interested in better medical service for the people. New York, The Macmillan Co., 1918. 438 pp.*

Contains a chapter describing the needs and possibilities of social service work in dispensaries.

DAWSON, SIR BERTRAND. *The Nation's welfare—the future of the medical profession. Being the Cavendish lectures delivered before the West London Medico-Chirurgical Society. With introduction and folding plan of model health center. London, Cassell and Company, Ltd., 1918. 40 pp. Diagram. Price, 6d.*

The introduction outlines a plan for England and Wales by which the best medical talent of the country might be brought into the service of the public health, the plan being based upon the creation of a medical advisory committee as a part of the permanent organization of a ministry of health, which in itself would consist of three divisions, namely, health, housing, and local government, each division to have its permanent head responsible to the minister. The subject of the lectures, the author states, "was selected with a view to encouraging deliberation and discussion, and from these the united action so urgently needed."

ERNEST-CHARLES, J. *La Rééducation Professionnelle des mutilés et l'Union des Colonies Étrangères en France. Paris, Union des Colonies Étrangères en France, 1917. 59 pp.*

Outline of the work of vocational reeducation for disabled soldiers carried on by the Union of Foreign Colonies in France.

FEDERATION OF BRITISH INDUSTRIES. *Rules (as amended at a special general meeting October 29, 1918). London, W. C. Diprose, Bateman & Co., October, 1918. 23 pp.*

An account of the program of the Federation of British Industries and its attitude toward industrial councils is given in the MONTHLY LABOR REVIEW for October, 1918, pp. 44-47.

GALLOWAY, LEE. *Office management: Its principles and practice. Covering organization, arrangement, and operation with special consideration of the employment, training, and payment of office workers. New York, The Ronald Press Company, 1918. 701 pp. Illustrated.*

GALTIER-BOISSIÈRE, DR. *Œuvres protectrices du Soldat Blessé ou malade. Réformé (Rééducation). Prisonnier de guerre. Paris, Librairie Larousse. [1918.] Illustrated. Price 1 fr. 20. Brochures Larousse.*

Under the title of Protective work for wounded, sick, and disabled soldiers and prisoners, Dr. Galtier-Boissière has arranged lists of the various organizations for the assistance of disabled soldiers in order, giving the name, address, and a brief outline of the purpose and facilities of each organization. These are divided into three general classes: Protective societies for the wounded and sick; Protective societies for disabled soldiers, which includes various works for reeducation; and Protective societies for prisoners.

GOMPERS, SAMUEL. *Should a political labor party be formed? An address to a labor conference held at New York City, December 9, 1918.* Washington [1918]. 16 pp. Price, 10 cents.

GULICK, SIDNEY L. *A comprehensive immigration policy and program.* (Revised edition.) New York City, 105 East 22d Street. [1918.] 22 pp. Charts.

— *A constructive policy for the regulation of immigration. Fundamental principles. Comprehensive statistics. Illuminating diagrams.* New York City, 105 East 22d Street. [1918.] 15 pp. Charts.

The policy outlined is based upon needed legislation dealing with The regulation of immigration, The registration of aliens, The distribution of immigrants, The education of aliens for American life, The protection of aliens by the Federal Government, and The naturalization of aliens.

HARRIS, LOUIS I., M. D. *A clinical study of the frequency of lead, turpentine, and benzine poisoning in 402 painters.* Chicago, American Medical Association, 1918. 28 pp. Reprinted from the *Archives of Internal Medicine*, August, 1918, Vol. XXII, pp. 129-156.

This pamphlet is noted more fully on pages 226 to 229 of this issue of the MONTHLY LABOR REVIEW.

HENDERSON, ARTHUR. *The league of nations and labor.* London, Oxford University Press, 1918. 13 pp. Price, 3d. net.

HERTEL, H. *Cooperation in Danish agriculture, by Harald Faber. An English adaptation of "Andelsbeoegelsen i Danmark."* London, Longmans, Green & Co., 1918. 176 pp.

This book covers the history of agricultural cooperation and the cooperative credit and insurance associations and banks in Denmark. An appendix giving tables compiled and condensed from official sources helps to show the agricultural development in regard to rural tenure, cultivation of crops, live stock, and import and export of farm produce.

HODSON, CLARENCE. *Money lenders. Draft of ideal anti loan-shark statute for regulating and licensing the business of money lenders of small loans.* New York Legal Reform Bureau to Eliminate the Loan-shark Evil, 26 Cortlandt Street, January 2, 1919. 32 pp.

Contains general remarks and caution against substantial changes in the bill, by Clarence Hodson, director of the bureau; the draft of the proposed statute, which is a revision and extension of the uniform act adopted in a number of States; suggestions and instructions for filling in blanks and making necessary changes to adapt uniform draft for enactment in any State; and other matter.

— *Money lenders. License laws and the business of making small loans on unsecured notes, chattel mortgages, salary assignments. A handbook.* New York, Legal Reform Bureau to Eliminate the Loan-shark Evil, 26 Cortlandt Street, January, 1919. 128 pp.

This work is stated to be "the only publication of its kind which supplies comparative details of legislation and explains the underlying conditions upon which the economics of the small-loan business is predicated. It is hoped that it will be a practical guide to those who recognize that sympathy for needy borrowers will not abolish loan sharks, but that in a number of States practical reform loan legislation is needed, and that legitimate capital and public-spirited men must thereby be attracted to money lending." The legitimate and essential business of making small loans under existing regulations is explained and the need for reform legislation set forth, followed by a list of laws of the different States regulating small loans unsecured or secured by chattel mortgages or assignments of wages, a list of decisions of higher State courts in civil or criminal cases involving constitutionality of laws regulating the small-loan business, preambles to several small-loan acts, and other related data.

JEANBRAU, EMILE. *L'École professionnelle des blessés de la XVI^{me} région a Montpellier. Fondation de l'oeuvre régionale des mutilés de la guerre. Montpellier, Imprimerie Firmin et Montane, 1916. 96 pp. Illustrated.*

A description of the work of the vocational school for the wounded of the sixteenth region at Montpellier, with a preface by Andrien Sachtet.

KELLY, ROY WILLMARTH, AND ALLEN, FREDERICK J. *The shipbuilding industry. Boston, Houghton, Mifflin Company, 1918. 303 pp. Illustrated.*

Chapters on Recruiting and training an industrial army, and Future opportunities for employment in American shipbuilding, consider, respectively, the subjects of The problems of service management; The causes of labor turnover; The industrial service section of the Emergency Fleet Corporation; The service work of various shipyards; The organization of a typical service department; The qualifications of the service manager and his assistants; Training service managers; The older methods of apprenticeship and training in the yards; Emergency training for shipbuilding trades; From high-school instructor to riveter; and The kind of workmen who will be needed in the shipyards; The outside trades from which men can be transferred; The work of women in the shipyards; Some opinions from representative shipbuilders. There is an introduction by Charles M. Schwab.

LECLERCQ, J., AND MAZEL, P. *La main-d'oeuvre nationale après la guerre. Paris, Librairie Larousse [1916]. 163 pp. Brochures Larousse, D-6. Price, 1 fr. 50.*

This work on the national labor problem after the war is devoted to the physiological aspects of manual labor and considers disabled men and the law relating to industrial accidents, the Taylor system, efficiency methods based on a knowledge of anatomy and physiology, the vocational reeducation of disabled men, female labor, apprenticeship, and the workman and his environment.

LEE, FREDERIC S. *The human machine and industrial efficiency. New York, Longmans, Green & Co., 1918. 119 pp. Illustrated.*

Most of this book constituted the Cutter lectures on preventive medicine and hygiene given at the Harvard Medical School in 1918 under the title "Industrial efficiency and the war." But though many of the facts presented relate to the war industries the author states that "they are none the less pertinent as illustrating the principles enunciated." He believes that "any activity in which the human body plays so large a part as it does in industry must be organized on a physiological basis before the highest degree of efficiency can be secured. In the field of human activity here discussed a science of industrial physiology must come into being, a science of the human machine in industry, and this must be developed largely within industrial establishments themselves." Chapters deal with The qualifications of workers, Output and fatigue; Secondary sources of fatigue; Resting periods; The length of the working day; Capacity and the self-limitation of output; The maintenance of working power—overtime; The labor turnover; The industrial efficiency of women compared with men; Night work in comparison with day work; Industrial accidents; Industrial medicine—welfare work; Food; Scientific management; and The physiological organization of work. Data secured through investigation and experimentation, supplemented by diagrams, form most of the subject matter presented.

LIDBETTER, E. J. *Reconstruction and public health. Reprinted from The Eugenics Review, January, 1918. [London] Eugenics Education Society [1918]. 11 pp.*

An exposition of the defects of the British poor law in relation to the public health and of the need for the establishment of a ministry of health, the author stating that "all public service—both official and unofficial—has for some time past converged upon the coordination of the public health service."

MACARA, SIR CHARLES W. *Social and industrial reform.* Manchester, Sherratt & Hughes, 1918. 207 pp.

Chapters included in this volume treat of War in the sphere of industry, Industrial reconstruction, Labor's postwar problems, The organization of trade, and Man power and industry.

MCCURDY, CHARLES A. *A clean peace. The war aims of British labor. Complete text of the Official War Aims Memorandum of the Inter-Allied Labor and Socialist Conference, held in London, February 23, 1918.* New York, George H. Doran Co. [1918]. 26 pp.

This statement of the war aims adopted by the socialist and labor parties of Great Britain, France, Italy, and Belgium, is, the writer states, "practically the same" as the program of the British Labor Party and British Trade Unionist Congress, except that it "contains here and there suggestions which will be received with more sympathy in socialist circles than elsewhere."

MCURTREE, DOUGLAS C. *The disabled soldier.* New York, The Macmillan Company, 1919. 232 pp. Illustrated.

This volume aims to give a clear statement of the principles which have been developed for carrying on the rehabilitation of the disabled soldier and of the means for actually putting these theories into practice. After a brief history of the attitude of the public toward cripples in general, the work which is being done for the disabled soldier in France and other countries is outlined. The author elaborates the many different occupations for which the courses of training in the institutions of the various countries prepare the permanently disabled and the measures being taken to place men in industry after they are trained.

— *The rehabilitation of the disabled civilian. Testimony submitted to the Joint Committee on Education and Labor of the Senate and the House of Representatives in hearing on the Bankhead-Smith bill, Dec. 10-12, 1918.* 14 pp.

MADAY, ANDRÉ DE. *Legislation sociale comparée (droit ouvrier). Tome premier.* Paris, 1917. 334 pp.

In preparing this volume the author says: "This work has been prepared from two points of view: Practice and theory. From the first point of view we propose to present a manual of labor legislation which will permit employees and employers, authorities and legislators, to find summarized social experiences in other countries and in Switzerland. From the theoretic point of view we propose to give a sociological explanation of social legislation." The volume is divided into two books: I, The social problem, and II, Social legislation. The new Federal factory law (June 18, 1914) is fully discussed.

LE MEMORANDUM DES SOCIALISTES DES PAYS ALLIÉS ADOPTÉ A LA CONFÉRENCE DE LONDRES LES 21, 22, ET 23 FÉVRIER 1918. Paris, 1918. 31 pp.

The preface of this brochure consists of a historical review of the acts of the "socialist party and the General Confederation of Labor" relative to the "aims of the war in the allied countries and the conditions for an international peace of the peoples." The brochure itself consists of the text of the allied socialists' memorandum adopted in February, 1918.

MILLER, E. C. *The socialists. An address delivered before the Winter's Night Club of Brooklyn, N. Y., January 16, 1918.* [New York, 1918.] 32 pp.

A history of socialism from its inception to the present. The pamphlet is dedicated to the chamber of commerce of the State of New York.

MINNEAPOLIS (KANS.) SOCIAL SURVEY COMMITTEE. *Report of Manuel C. Elmer, Director of Survey, University of Kansas. Topeka, 1918.* 39 pp. Illustrated.

Designated as "A limited report of a study made of social conditions and activities in Minneapolis, Kans., as a basis for a constructive program of community work, under the direction of the department of sociology, University of Kansas. The

following are among the subjects investigated: Housing and sanitation; Public utilities; Wealth and industry; Remedial and corrective agencies; Recreation.

MOULTON, HAROLD G. *Public works or public charity? How to meet the labor crisis arising from the demobilization of troops and war workers.* Chicago, Union League Club, 1919. 19 pp. Price 5 cents.

The author recommends that the provision of employment on public works of enduring value is the socially efficient method of preventing an unemployment crisis upon demobilization of the army.

NATIONAL ASSOCIATION OF CORPORATION SCHOOLS. *Bulletin.* Vol. VI, No. 2. New York, February, 1919. pp. 49-96.

The article of chief interest in this number is the outline of the cooperative plan of the Philadelphia Rapid Transit Co. as broadened and amended to meet present conditions and known as the cooperative plan of 1918. A brief review is given of conditions existing at the time the plan was put into effect in 1910 and of the advantages that have accrued to the public, the management, and the employees through the practically unanimous desire on the part of management and men to establish and maintain satisfactory working conditions and relations.

NATIONAL CHILD LABOR COMMITTEE. *Child welfare in Alabama: An inquiry by the National Child Labor Committee under the auspices and with the cooperation of the University of Alabama.* New York, 1918. 249 pp.

Contains chapters on public health, education, rural school attendance, child labor law administration, juvenile courts and probation, child-caring institutions and home finding, recreation, and law and administration, all based on a recent survey of the State. The report gives much first-hand information about conditions in Alabama, and contains much that will be of value to child welfare workers in other States, suggesting directions in which their own work needs strengthening or altering. The essential interdependence of all movements relating to the care of children is emphasized, a matter of special importance since this is precisely the side which is apt to be overlooked in the development of a community's sense of responsibility for its juveniles. The following summing up of the situation in Alabama might, unfortunately be applied to very many other States:

Such action as Alabama has so far taken for the welfare of her children, except in public schooling, has been remedial rather than preventive. Furthermore the method has been local rather than comprehensive, and independent rather than cooperative. The complete care of every child has not been insured. What has been done has been in response to isolated impulses and agitations—a certain condition has been brought prominently to the attention of the people at one time, with the result that action has been taken relating to that specific condition, and at another time another condition has been similarly made known and changed. Hence the body of measures built up for the social welfare has been of spasmodic and more or less haphazard growth; one agitation and its measures for improvement have borne little or no relation to other agitations and their results. Educational progress has been to a great extent independent of progress in health work; what has been accomplished for the child laborer has had no relation to the relief of poverty; efforts for the prevention of juvenile delinquency have been made without regard to what had been or should be done in the other branches of child welfare work; and gaps are left where nothing whatever has been done.

NATIONAL CONFERENCE OF SOCIAL WORK. *Proceedings at the forty-fifth annual session held in Kansas City, Mo., May 15-22, 1918.* Chicago, 1919. 722 pp.

Among the sessions of special interest to labor were those devoted to industrial and economic problems, with papers or discussions relating to Industrial reorganization after the war; Pensions; Insurance and the State; Social work and radical economic movements; Insurance, pensions, inheritance; Labor problems of the war, and Labor problems of the reconstruction; and to social problems of the war and reconstruction, with papers and discussions on The girl problem in war time; Future

prospect of leading war-time efforts and movements; The rôle of the volunteer in social work; and The new social data and its use.

NATIONAL INDUSTRIAL CONFERENCE BOARD. *Hours of work as related to output and health of workers. Boot and shoe industry. Boston, 15 Beacon Street, 1918. 76 pp. Research Report No. 7, June, 1918.*

Contains a description of the main features of the boot and shoe industry, a consideration of the experience of 77 establishments which had reduced hours, for the most part in 1916 or 1917, and a summary of what could be learned concerning the health of shoe workers. Handwork is said to play an important part in the industry. Hours are not in general excessively long, more than half the workers covered by the investigation being in establishments working 54 hours or less per week. The Saturday half-holiday was general. Work was often unsteady and hours consequently irregular.

The 77 establishments reporting a change in hours showed the following situation with regard to hours and output, the table being reproduced from the report:

SUMMARY COMPARISON OF ESTABLISHMENTS AND EMPLOYEES, BY HOUR GROUPS, ACCORDING TO EFFECT ON OUTPUT ACCOMPANYING REDUCTION IN HOURS.

Nominal hours per week. ¹	Establishments.				Employees.			
	Number main- tained.	Number de- creased.	Per cent main- tained.	Per cent de- creased.	Number main- tained.	Number de- creased.	Per cent main- tained.	Per cent de- creased.
48.....	1	1	50.0	50.0	200	12,000	1.6	98.4
49½ and 50.....	5	28	15.2	84.8	2,581	20,478	11.2	88.8
52 and 52½.....	7	6	53.9	46.1	9,140	2,213	80.5	19.5
53.....	1	.....	(?)	(?)	171	.....	(?)	(?)
54.....	6	13	31.6	68.4	5,904	4,991	54.1	45.9
55.....	3	5	37.5	62.5	615	2,899	17.5	82.5
56.....	1	.....	(?)	(?)	1,008	.....	(?)	(?)
Total.....	24	53	.....	.....	19,619	42,581	.....	.....

¹ After reduction of hours.

² Percentages not computed because only 1 establishment is included in this group.

The report shows the following conclusions as to output: First, even under present working conditions, maximum production in the boot and shoe industry can be maintained under a 54-hour week; second, some establishments have maintained production under a 52-hour week, and apparently this could be done by many if high efficiency standards were maintained; third, a 50-hour week is not, under present conditions, an economic work week for the industry as a whole; fourth, a 48-hour week will not maintain production at a maximum under present conditions, nor without radical changes in operating methods.

These conclusions are not wholly satisfactory, since they concern production "under present conditions," and show little as to what might be done if present conditions were changed, although the need of such change is rather clearly implied. For instance, irregular hours of work are said to characterize the industry, and figures are given for four factories showing that while the nominal hours of work were 50 per week the actual hours varied from 30 upward, the best of the four being operated 50 hours for 6 weeks out of 9, the second for 5, the third for 4, and the fourth never once during the 9 weeks' period rising beyond 40 hours. Apparently a change in methods and management which would obviate such irregularities might show very different results as to the output of a 50-hour week. The conclusion as to the practicability of the 48-hour week is based on the experience of two establishments covered by the investigation, and a third case in which, in 1901, a company introduced the 48-hour week, but found it unsuccessful. The experience of three establishments is a narrow basis for such a definite conclusion.

NATIONAL SAFETY COUNCIL. *Safe practices. No. 19. Protection of life against fire. Part I. Exits, fire alarms, and fire drills.* Chicago, 208 South La Salle Street. [1918.] 15 pp. Illustrated. Price, 10 cents.

— *Safe practices. No. 20. Woodworking machinery and equipment.* Chicago. 16 pp. Price, 10 cents.

— *Western Pennsylvania Division. Oxyacetylene welding and cutting. Rules adopted, Nov. 29, 1918. In Safety Engineering, December, 1918, pp. 372-374. New York, 80 Maiden Lane.*

NEW JERSEY STATE CHAMBER OF COMMERCE. *Bureau of State Research. A sound municipal pension act and central supervision of all pension funds, New Jersey. Newark, October, 1918. 8 pp. (In 'New Jersey,' Vol. VI, No. 1.)*

Outline of the main features of the plan, together with the bill now before the State legislature.

— — *Report. Teachers' retirement systems in New Jersey, their fallacies and evolution.* [Newark] December, 1918. 87 pp.

— — *Reorganization of the New Jersey teachers' pension and retirement systems. Report of the Pension and Retirement Fund Commission.* [Newark] January, 1919. 24 pp.

As a result of investigations carried on by the Pension and Retirement Fund Commission and the Bureau of State Research, a bill providing for the establishment of a State teachers' pension and retirement fund is now pending before the State legislature. This bill provides that all new teachers shall be compelled to become members, membership not being obligatory for those already employed. Retirement is optional at the age of 62 years and compulsory at 70 years, and a disability allowance is provided after 10 or more years of service. The amount of allowance in both cases is equal to one-seventieth of the average salary for the five years preceding retirement multiplied by the number of years the teacher has been a member of the fund; for retirement there is no maximum limit but the minimum is fixed at \$400; for disability, the allowance can not exceed nine-tenths of the amount to which the teacher would have been entitled had he remained in the service until he was 62 and it can not be less than 30 per cent of salary or \$300. In case of resignation or dismissal all contributions are returned, with interest compounded annually, and in the event of death the contributions and interest are paid to the estate of the member.

The teachers will contribute half of the cost of the scheme, the State the other half, from the beginning of the new system and the State assumes responsibility on account of benefits for prior service, thus making the transition from an almost gratuitous to a contributory pension a gradual one. Teachers now 62 years of age receive their pension entirely at the expense of the State and a small additional annuity derived from contributions to the old fund, while teachers retiring at later dates will have contributed an increasing proportion until in about 50 years the system will have reached the true "half and half" basis.

ORAGE, A. R. *An alphabet of economics.* London, T. Fisher Unwin, Ltd., 1918. 172 pp.

Economic and political terms arranged in alphabetic order with a brief explanation of each, which is the outgrowth of an attempt to compile a glossary of such terms for the use of readers of the *New Age* in general and of students of the system of national guilds in particular, and which developed into a systematic attempt to define economics in terms of the wage system, and to suggest an alternative to it, at the same time. It contains, therefore, notwithstanding its form, a consistent exposition of the economic theory held by the new school of national guildsmen and suggestions towards a social reconstruction. This is the second edition, the first having been printed in 1917.

PATTEE, ALIDA FRANCES. *Practical dietetics with reference to diet in health and disease. Twelfth edition, revised and enlarged. Mount Vernon, N. Y., A. F. Pattee, 1918. 502 pp.*

This book was prepared in response to requests of superintendents of training schools and dietitians for an outline of the various State board requirements in dietetics. The State board requirements and examination questions are printed in the "Supplement" which is given with each copy of "Practical dietetics." The answers to all these questions are in this volume, which has been revised so as to incorporate the latest results of research in dietetics and to include the latest diets.

— *State board requirements in dietetics and State board examination questions. Published in connection with Pattee's "Practical dietetics with reference to diet in health and disease." Mount Vernon, N. Y., A. F. Pattee, 1918. 141 pp.*

PEDDIE, J. TAYLOR. *Economic reconstruction: A further development of "a national system of economics." New York, Longmans, Green & Co., 1918. 242 pp.*

In this volume, which is one of a series, the author considers extensively the liquidation of the national debt. He states that it is the duty of the Government to create the most favorable working conditions for the development of productive industry and to provide remunerative employment for the masses who labor, upon the most humane and scientific principles, and that if effect be given to these two things "productive industry and commerce as a whole shall, in return, liquidate the national debt, subject to certain conditions." In a chapter on the division of labor he states that "in order that exchangeable values may be placed on a true and equitable basis, every man employed in industry should be guaranteed a minimum wage of 25s. [\$6.08] per week."

POSEY, WM. CAMPBELL. *Hygiene of the eye. Philadelphia, J. B. Lippincott Co., 1918. 344 pp. Illustrated.*

A valuable contribution to the subject of the hygiene of the eye, intended for both the physician in general practice and for the general public. The author has endeavored to convey in language as free as possible from technicalities how sight may best be conserved and the relation which the eye bears to the general health. Of special interest to labor is the section devoted to industrial injuries to the eye. According to the author, of 2,000,000 annual nonfatal accidents probably 160,000 are accidents to the eyes. He quotes a statement from the National Association for the Prevention of Blindness to the effect that "the industries providing the greatest number of industrial accidents to eyes are foundries, galvanizing plants, machine factories, metal and woodworking plants, lead and color factories, chemical works, and the dusty and poisonous trades. The classes of workmen showing the largest percentage of eye accidents are smelters and furnacemen, welders, grinders, and machinists, furnace helpers, and railroad workers." Special consideration is also given to methyl or wood alcohol poisoning, lead poisoning, and illumination of workshops.

RECKITT, MAURICE B., AND BECHHOFFER, C. E. *The meaning of national guilds. London, Cecil Palmer & Hayward, 1918. 452 pp.*

A very complete discussion of the social and economic theory of the guild idea and its application to industry. The guild idea is presented as an idea rather than a creed, its essentials being "the recovery of initiative by the ordinary worker, his release from bondage to the base purposes of profit, and his achievement of complete and responsible industrial democracy." "A national guild," it is said, "would be a democratically self-governing association which, consisting of all the workers engaged in any main industry, would be responsible for carrying it on in conjunction with the State." The workers would have the monopoly and control of its working in partnership with the State, which would be the owner of the means of production. "The aim of national guild service is the right conduct of industry in the interests of the community."

RED CROSS INSTITUTE FOR CRIPPLED AND DISABLED MEN. *Employment opportunities for handicapped men in the coppersmithing trade*, by Bert J. Morris. New York City. 48 pp. Illustrated. Publications, series 2, No. 4, December 23, 1918.

— *Principles of design and construction of artificial legs*, by Capt. Philip Wilson. New York City. 58 pp. Publications, series 2, No. 2, July 10, 1918.

RENARD, GEORGES. *Les Répercussions Économiques de la Guerre Actuelle sur la France*. Paris, 1917. 516 pp.

This volume is a social and economic history of France from August 1, 1914, to May 15, 1917, as affecting commerce, production—industrial and agricultural—and consumption. The following subtitles appear under production: Basic industries; industries for the preparation of articles of food; various industries; volume of employment; cooking conditions; and employment of women in industry, commerce, etc.

ROCKEFELLER FOUNDATION. *Annual report, 1917*. New York, 61 Broadway [1918]. 379 pp. Illustrated.

Contains, besides reports of the president and secretary, reports of the work of the International Health Board, which is divided into two general parts, the first dealing with the control of hookworm disease and the second with other activities of the board; of the work of the China Medical Board; of the Rockefeller Institute for Medical Research—special war activities; and of the treasurer of the Rockefeller Foundation.

ROUET, H., AND COTTO, F. *Le Controle technique a l'usine a l'usage des contremaitres, controleurs et ouvriers*. Metaux. Paris, H. Dunod et E. Pinat, 1918. 101 pp.

Being convinced through a large experience that strong suspicion often exists between the workman and examiner in metallurgical works, the author has prepared the present manual on shop technique for the use of overseers, foremen, and workmen in metal works, with the hope that it will dissipate this mutual suspicion and will show the workman and the examiner how their functions, instead of being opposite and antagonistic, really lead toward the same end and that their best interests would be furthered by cooperation.

RUBINOW, I. M. *Dependency index of New York City, 1914-1917*. Reprinted from the *American Economic Review*, December, 1918, vol. 8, No. 4.

The construction of an "index of dependency" for New York City was undertaken, according to its author, for two very practical purposes: To facilitate an adjustment of the relief work of any community to its needs and to indicate general economic conditions. In preparing this index it was intended to measure the fluctuations in the total amount of existing dependency and of relief given, and the fluctuations of demand for such relief rather than the total amount of existing dependency or of relief given. The statistical information presented dates back to January, 1914, thus covering the entire period of the war.

SCHOFIELD, H., AND DRIVER, J. F. *Engineering for munition workers*. Second edition. London, Simpkin, Marshall, Hamilton Kent & Co. (Ltd.), 1916. 96 pp. Illustrated.

Brief explanations of various processes in manufacturing munitions, which can be performed by semiskilled workers.

SMITH, E. J. *Race regeneration*. London, P. S. King & Son (Ltd.), 1918. 223 pp. Illustrated.

Contains chapters on Our duty to our soldiers, The declining birthrate, Housing, Standards of family life, Racial poison, Endowment of motherhood, A clean milk supply, A ministry of health, The national balance sheet, "Lighthouses in the stormtossed seas," The Bradford scheme, and The aftermath. An appendix gives statistics on the birth rate in England and Wales, 1841-1915 (in five-year periods) and birth rates and infant mortality in social classes, England and Wales, 1911.

LA SOLIDARITÉ DES CLASSES SOCIALES PAR L'ENTENTE ET L'UNION ENTRE LES EMPLOYEURS ET LES SALARIÉS. *Les œuvres de reconnaissance et de paix sociale.* Paris, 7, Rue de l'Isly [1918]. 24 pp.

Circular matter relating to the decreasing birth rate in France, with statistics and propositions of law looking toward the solution of the problem.

TAFT, OREN B. *A way to bring about harmony between the public, capital, and labor. The Government a factor through national boards and commerce court. Residuary profits and day labor incorporated.* Chicago, 1919. 7 pp.

This plan for "Fundamental reconstruction in relation to capital, labor, and the public, together with proposed corporations," is based upon the ground that "The public has the right to a Government protection from uncontrolled strife and disputes between labor and capital. Capital has the right to a similar protection in a full and just return for its use. Labor has the right of a like assurance to a living wage and to a share in the profits." The plan includes a suggestion for two corporations which the author believes would help to meet these fundamental requirements—a corporation where capital and labor share the "residuary profit," and one in which day labor can enter into contract bargaining.

TUFTS, JAMES H. *The ethics of cooperation.* New York, Houghton Mifflin Co., 1918. 73 pp.

This essay, first delivered at the University of California for the Weinstock Foundation, is one of a series "by representative scholars and men of affairs dealing with the various phases of the moral law in its bearing on business life under the new economic order."

VALLAT, G. *Accidents du travail des ouvriers des usines et établissements de la guerre.* Paris, Masson et Cie., Éditeurs, 1918. 112 pp. Collection horizon.

Statement of the purpose of the French Consulting Medical Commission in the study of labor accidents, both in general industrial establishments and in war works. The plan of the commission is summed up as follows: To give a brief account of general labor accidents and the law of 1898 concerning them, with a comparison of that law with that of 1831 regarding military pensions and the decrees of February 13, 1906, and March 24, 1915, regarding retirement benefits; to examine conditions of the application of the 1898 law to workmen in establishments on war work according to the military regulations involved; and to study the various disabilities resulting from labor accidents.

WOEHLKE, WALTER V. *Union labor in peace and war.* San Francisco, Sunset Publishing House, 1918. 141 pp.

WOOD, CHARLES W. *The great change.* New York, Boni and Liveright, 1918. 214 pp.

Contains chapters on Coddling labor, Woman's new position, Democracy in production, Business as unusual, Housing the workers, The Government close up, etc.

WOOLF, L. S. *International government; two reports prepared for the Fabian Research Department, together with a project by a Fabian committee for a supernational authority that will prevent war.* London, Fabian Society, 1916. 259 pp.

Part II discusses among other topics International labor legislation, The internationalization of administration, including industry and commerce, and the Internationalization of commerce, industry, and labor.

WORKERS' EDUCATIONAL ASSOCIATION OF SOUTH AUSTRALIA. *Trade-unionism in Australia. Lectures Nos. 23, 24, 24a, 24b, and 24c, by Herbert Heaton, director of Tutorial Classes.* Adelaide, South Australia, 1918.

According to the author, labor has controlled to a very large extent the direction of politics in Australia; at the same time it is doubtful if the general run of economic conditions—the standard of living primarily—has been very greatly or fundamentally shaped by labor. Twenty years of wage regulation by Government action have had their effect upon (1) sweating, (2) industrial peace, and (3) the wage level.

The worst forms of sweating have disappeared. Industrial peace under compulsion was secured to as late as 1910, but since that time industrial unrest has greatly increased. Real wages since 1911 do not appear to have been appreciably affected, and during the war the cost of living has increased much in excess of the nominal wage level. The employer has profited correspondingly more than the wage earner. "Wage regulation has been in operation in a period of scarcity of labor and of rising prices. It is open to debate whether the scarcity of labor might not have enabled workers to get just as large an increase of wages without any compulsory machinery. * * * It is now a moot point whether any regulation of wages can be of permanent value unless there is some accompanying control over prices."

ZIMMERN, ALFRED E. *Nationality and government, with other war-time essays.* London, Chatto & Windus, 1918. 364 pp.

This book is a collection of articles and lectures all of which, except the essay on "Education, social and national," have been written since the outbreak of the war. The central motive running all through the book is that of liberalism as opposed to socialism. The author undertakes in a dispassionate way in these essays to point out the fundamental differences in these two schools of thought in national and governmental matters and the spirit in which liberalism must meet the imperial, domestic, and international tasks which come before the world as a result of the war.

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.]

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.

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.

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.

Wages and Hours of Labor—Concluded.

- Bul. 143. Union scale of wages and hours of labor, May 15, 1913.
- Bul. 146. Wages and regularity of employment 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. 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 and steel industry in the United States, 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. 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. [In press.]
- Bul. 252. Wages and hours of labor in slaughtering and meat-packing industry. [In press.]

Employment and Unemployment.

- Bul. 109. Statistics of unemployment and the work of employment offices in the United States.
- 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.
- 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 Employment Managers' Conference, Rochester, N. Y., May 9-11, 1918. [In press.]

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. 223. Employment of women and juveniles in Great Britain during the war.
- Bul. 253. Women in the lead industry. [In press.]

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. [In press.]

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 danger in the use of lead in the painting of buildings.
- 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. [In press.]
- Bul. 256. Accidents and accident prevention in machine building. (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.
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- 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. [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.

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.
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- 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. [In press.]
- Bul. 255. Joint standing industrial councils in Great Britain. [In press.]

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. [In press.]
- Bul. 254. International standardization of protective labor legislation. [In press.]