U. S. DEPARTMENT OF LABOR
JAMES J. DAVIS, Secretary
BUREAU OF LABOR STATISTICS
ETHELBERT STEWART, Commissioner

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Contents.

PROPOSED REWEIGHTING AND OTHER REVISION OF INDEX NUMBERS OF WHOLESALE PRICES COMPUTED BY THE BUREAU OF LABOR STATISTICS.

In 1914 the Bureau of Labor Statistics definitely abandoned its old method of constructing group and general index numbers of wholesale prices by averaging the price ratios of commodities on the 1890–1899 base. A full explanation of the new method adopted was published as an appendix to the 1914 report (Bulletin Whole Number 181, pages 239–256), and has been repeated in condensed form in each subsequent report. In computing the new series of index numbers the plan was followed of weighting the price of each article by the estimated quantity of that article marketed in the last census year, 1909. The plan, as adopted, contemplated a revision of the weighting factors every 10 years as new census data should become available. With the completion of the work of the 1919 census, the revision of the weighting factors to conform to the more recent information has been undertaken by the Bureau and it is expected that the results can shortly be announced.

Besides the substitution of new commodity weights in place of those previously used, a slight rearrangement of the commodities into groups is planned. By the new method a commodity which properly belongs in more than one group will be so treated, care being taken, however, to include it only once in the general index. For example, structural steel, nails, and iron pipe, which hitherto have appeared only in the group of metals and metal products, will in future appear also in the group of building materials, but will be counted only once in the general index. In like manner wheat, corn, and rye will appear as raw materials in the food group, as well as in the group of farm products, while cotton and wool will be treated as textile materials in the clothing group in addition to their inclusion with farm products. Besides these changes, a careful survey is being made to determine what articles should be included in the several groups in addition to those already carried.

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Recommendations of the President on Labor and Agriculture.

THE President's message of December 6, 1921, at the opening of the second session of the Sixty-seventh Congress, contains various statements of special interest to labor. The following extracts are taken from the sections of this document which deal with industrial and agricultural subjects:

Improvement of the Unemployment Situation.

"SENSIBLE of every obligation of humanity, commerce, and finance, linked as they are in the present world condition, it is not to be argued that we need destroy ourselves to be helpful to others. With all my heart I wish restoration to the peoples blighted by the awful World War, but the process of restoration does not lie in our acceptance of like conditions. It were better to remain on firm ground, strive for ample employment and high standards of wage at home, and point the way to balanced budgets, rigid economies, and resolute, efficient work as the necessary remedies to cure disaster."

"We seek to undermine for others no industry by which they subsist; we are obligated to permit the undermining of none of our own which make for employment and maintained activities."

"There have been reassuring signs of a business revival from the deep slump which all the world has been experiencing. Our unemployment, which gave us deep concern only a few weeks ago, has grown encouragingly less, and new assurances and renewed confidence will attend the congressional declaration that American industry will be held secure."

"We have been giving, and are giving now, of our influence and appeals to minimize the likelihood of war, and throw off the crushing burdens of armament. It is all very earnest, with a national soul impelling. But a people unemployed, and gaunt with hunger, face a situation quite as disheartening as war, and our greater obligation to-day is to do the Government's part toward resuming productivity and promoting fortunate and remunerative employment."

Progress Toward the Elimination of Poverty.

"IT HAS been perhaps the proudest claim of our American civilization that in dealing with human relationships it has constantly moved toward such justice in distributing the product of human energy that it has improved continuously the economic status of the mass of people. Ours has been a highly productive social organization. On the way up from the elemental stages of society we have eliminated slavery and serfdom and are now far on the way to the elimination of poverty.

"Through the eradication of illiteracy and the diffusion of education mankind has reached a stage where we may fairly say that in the United States equality of opportunity has been attained, though all are not prepared to embrace it. There is, indeed, a too great divergence between the economic conditions of the most and the least favored classes in the community. But even that divergence has now come to the point where we bracket the very poor and the very rich together as the least fortunate classes. Our efforts may well be directed to improving the status of both.

"While this set of problems is commonly comprehended under the general phrase 'Capital and labor,' it is really vastly broader. It is a question of social and economic organization. Labor has become a large contributor, through its savings, to the stock of capital; while the people who own the largest individual aggregates of capital are themselves often hard and earnest laborers. Very often it is extremely difficult to draw the line of demarcation between the two groups; to determine whether a particular individual is entitled to be set down as laborer or as capitalist. In a very large proportion of cases he is both, and when he is both he is the most useful citizen."

The Right of Labor to Organize.

"THE right of labor to organize is just as fundamental and necessary as is the right of capital to organize. The right of labor to negotiate, to deal with and solve its particular problems in an organized way, through its chosen agents, is just as essential as is the right of capital to organize, to maintain corporations, to limit the liabilities of stockholders. Indeed, we have come to recognize that the limited liability of the citizen as a member of a labor organization closely parallels the limitation of liability of the citizen as a stockholder in a corporation for profit. Along this line of reasoning we shall make the greatest progress toward solution of our problem of capital and labor.

"In the case of the corporation which enjoys the privilege of limited liability of stockholders, particularly when engaged in the public service, it is recognized that the outside public has a large concern which must be protected; and so we provide regulations, restrictions, and in some cases detailed supervision. Likewise in the case of labor organizations, we might well apply similar and equally well-defined principles of regulation and supervision in order to conserve the public's interests as affected by their operations.

"Just as it is not desirable that a corporation shall be allowed to impose undue exactions upon the public, so it is not desirable that a labor organization shall be permitted to exact unfair terms of employment or subject the public to actual distresses in order to enforce its terms."

Measures for the Maintenance of Industrial Peace.

"FINALLY, just as we are earnestly seeking for procedures whereby to adjust and settle political differences between nations without resort to war, so we may well look about for means to settle the differences between organized capital and organized labor without

resort to those forms of warfare which we recognize under the name of strikes, lockouts, boycotts, and the like.

"As we have great bodies of law carefully regulating the organization and operations of industrial and financial corporations, as we have treaties and compacts among nations which look to the settlement of differences without the necessity of conflict in arms, so we might well have plans of conference, of common counsel, of mediation, arbitration, and judicial determination in controversies between labor and capital. To accomplish this would involve the necessity to develop a thoroughgoing code of practice in dealing with such affairs. It might be well to frankly set forth the superior interest of the community as a whole to either the labor group or the capital group. With rights, privileges, immunities, and modes of organization thus carefully defined, it should be possible to set up judicial or quasi judicial tribunals for the consideration and determination of all disputes which menace the public welfare.

"In an industrial society such as ours the strike, the lockout, and the boycott are as much out of place and as disastrous in their results as is war or armed revolution in the domain of politics. The same disposition to reasonableness, to conciliation, to recognition of the other side's point of view, the same provision of fair and recognized tribunals and processes, ought to make it possible to solve the one set of questions as easily as the other. I believe the solution is possible.

"The consideration of such a policy would necessitate the exercise of care and deliberation in the construction of a code and a charter of elemental rights, dealing with the relations of employer and employee. This foundation in the law, dealing with the modern conditions of social and economic life, would hasten the building of the temple of peace in industry which a rejoicing nation would acclaim."

Agricultural Problems.

"SOMETHING more than tariff protection is required by American agriculture. To the farmer has come the earlier and the heavier burdens of readjustment. There is actual depression in our agricultural industry, while agricultural prosperity is absolutely essential to the general prosperity of the country.

"Congress has sought very earnestly to provide relief. It has promptly given such temporary relief as has been possible, but the call is insistent for the permanent solution. It is inevitable that large crops lower the prices and short crops advance them. No legislation can cure that fundamental law. But there must be some economic solution for the excessive variation in returns for agricultural production.

"It is rather shocking to be told, and to have the statement strongly supported, that 9,000,000 bales of cotton, raised on American plantations in a given year, will actually be worth more to the producers than 13,000,000 bales would have been. Equally shocking is the statement that 700,000,000 bushels of wheat, raised by American farmers, would bring them more money than a billion bushels. Yet these are not exaggerated statements. In a world where there are tens of millions who need food and clothing which they can not get,

such a condition is sure to indict the social system which makes it possible.

"In the main the remedy lies in distribution and marketing. Every proper encouragement should be given to the cooperative marketing programs.

"These have proven very helpful to the cooperating communities in Europe. In Russia the cooperative community has become the recognized bulwark of law and order, and saved individualism from engulfment in social paralysis. Ultimately they will be accredited with the salvation of the Russian State.

"There is the appeal for this experiment. Why not try it? No one challenges the right of the farmer to a larger share of the consumer's pay for his product, no one disputes that we can not live without the farmer. He is justified in rebelling against the transportation cost. Given a fair return for his labor, he will have less occasion to appeal for financial aid; and given assurance that his labors shall not be in vain, we reassure all the people of a production sufficient to meet our national requirement and guard against disaster.

"The base of the pyramid of civilization which rests upon the soil is shrinking through the drift of population from farm to city. For a generation we have been expressing more or less concern about this tendency. Economists have warned and statesmen have deplored. We thought for a time that modern conveniences and the more intimate contact would halt the movement, but it has gone steadily on. Perhaps only grim necessity will correct it but we ought to find a less drastic remedy.

"The existing scheme of adjusting freight rates has been favoring the basing points, until industries are attracted to some centers and repelled from others. A great volume of uneconomic and wasteful transportation has attended, and the cost increased accordingly. The grain-milling and meat-packing industries afford ample illustration and the attending concentration is readily apparent. The menaces in concentration are not limited to the retarding influences on agriculture. Manifestly the conditions and terms of railway transportation ought not to be permitted to increase this undesirable tendency. We have a just pride in our great cities, but we shall find a greater pride in the Nation, which has a larger distribution of its population into the country, where comparatively self-sufficient smaller communities may blend agricultural and manufacturing interests in harmonious helpfulness and enhanced good fortune. Such a movement contemplates no destruction of things wrought, of investments made, or wealth involved. It only looks to a general policy of transportation, of distributed industry, and of highway construction, to encourage the spread of our population and restore the proper balance between city and country. The problem may well have your earnest attention."

Disarmament in Industry.[1]

By Hon. James J. Davis, Secretary of Labor.

ALL eyes have been fixed on the conference at Washington for the reduction of armament. Never before has the entire world been so united on a single demand as it is now on the demand for at least some measure of disarmament. "Down with arms!" is the appeal of men and women in every walk of life in every civilized country. The conference at Washington has fired the hopes of the world.

In support of this great effort no element among the people of the world has been more enthusiastic than the thousands of business men and the millions of wage earners in America. With one voice they have spoken. In mass meetings, in their press, through their leaders, the workers have made clear their conviction that the world must disarm. With the same force the demand has come from the level-headed business men, who too are sick of the wastage of war and the burden of tax to maintain it.

Let us by all means put an end to the senseless building of warships and armies. But it is not alone on the field of armed conflict that we need to lay hostilities aside. There is another warfare that must be stopped.

Let us stop the battles and the warfare in industry.

Let us say to employer and employee in their own words, "Disarm." The argument against war is its frightful cost and waste. The same cost and waste constitute the strongest argument against warfare in industry. We can not hope to go on prospering while we have this senseless waste resulting from endless suspicion and strife in our industrial life. In the past the strike may have been the only means men have had to gain just wages and proper working conditions. Now the strike is becoming a back number. The time is coming when it will be regarded as a relic of barbarism. I hate both the strike and the lockout. Both always cause separation, never cooperation. No one ever wins an industrial dispute. Nothing ever results from it but waste and loss to us all. I am vastly mistaken if our people have not already come to hate industrial warfare as bitterly as the bloodier but not more costly conflicts of battle.

Disarmament is not a problem solely for a conference at Washington. It is something that reaches to the very hearthstone in the home of every man and woman in America. It has been said at the Washington conference that the first requisite for peace is "the will to peace." Let us have that will to peace, not once in a while, but every hour of our workaday life.

The great need of the time in all American industry is the spirit of conciliation. Now, when we are striving to construct a new prosperity out of the wreck left by the war, we need this spirit of conciliation as never before. And no one can tell me that it is impossible for us as a people to acquire that spirit. Thousands of our business men, our chambers of commerce, the thousands of union members, and the millions of wage earners generally, have done much to insure

[1] Address delivered at Milwaukee, Wis., Dec. 13, 1921, before a joint meeting of the chamber of commerce and Rotary, Kiwanis, and certain other clubs.

the success of the conference at Washington by surrounding it with the necessary atmosphere of public opinion. The same public opinion must sooner or later rise and put the ban on further strife in industry. I think this is beginning to take place now, and we must do all we can to help it along.

Practical "Disarmament" in Industry.

FOR some time we have had in the Department of Labor a sort of "disarmament conference" in the Division of Conciliation. This division has done a monumental good for the country in seeking to end hostilities in industry and spread the spirit of friendly relations between employers and employees. Since my assumption of office last March, this section of the Labor Department has ended nearly 300 deadlocks, large and small. What it has saved to the country in money by this work is beyond calculation. But far greater than the saving of this money loss is the good this division has done in establishing a feeling of good will among the parties seeking its services.

These conciliators have not simply ended strikes and disputes. In every case they have sought to bring the warring parties into a satisfactory and lasting agreement. Merely to end a strike or deadlock is not enough; the great end to be kept in view is to see that these disputes never occur again. Our great aim, as I have striven to direct it, is to see that this new spirit of friendly action shall bind worker and employer together in good will, and crowd out the old hostilities forever.

Already, I am happy to say, we have accomplished much in this direction; but it is not enough. Complete "disarmament" in industry may be a Utopian dream. We must be content with the utmost that we can achieve. But we must not stop short of that utmost, and to obtain that utmost of understanding and good will in industry, we must proceed in a much more thorough and practical way.

For that purpose I have asked Congress for means to add to our force of conciliators 15 or 20 men with special training and skill. In my experience the fact has become clear that a certain number of our industries are especially liable to disturbance and sometimes open warfare. In these industries dispute has become chronic. That fact is impressed upon us more and more. One other fact is also brought to our attention: That a fair and lasting settlement of these disputes is hard to arrive at because of the highly technical and complicated nature of the industries, and because of our lack of the special technical knowledge necessary to a just and lasting settlement. We have not the exact knowledge of what it is that we must ask these armed forces in industry to "scrap." And we need these men with a special technical training to guide us to a real "disarmament."

Public opinion, after all, decides the issue in these industrial differences, and the public also suffers from the lack of this necessary thorough and technical understanding of the fine points involved. Often the dispute is settled in a way that is haphazard and obscure, only to break out again, because there has been no fully informed public opinion to enforce peace.

As an example of this I have only to cite the recent railroad dispute. The thousand and one operations that cross one another in running a

railroad are complex beyond average public knowledge. Both sides in such a dispute are always playing for public support in their differences, and the dispute runs on unendingly because the public is left uncertain as to what is happening, what is right, and what is just.

Here we see the usefulness of our specially trained men. A group of these would know every point and process in the situation. A public given the full facts by these men would become a just and final judge. So fair a settlement of any dispute would be arrived at that neither side to the dispute would afterward dare to challenge public judgment and risk a strike or lockout. And we should be just so much nearer to lasting peace and "disarmament" in that particular industry.

To gain this end throughout industry in general we need a conciliator in each of the 15 or 20 main industries, each man a specially qualified expert in his particular line. Yet something much more than a mere technical expert is wanted. The type of man I have in mind must have technical training as a matter of course. But much more than that, he must have broad intelligence and high character to give him authority and back his judgments. I want him to be a man to be looked up to. He must be a big man first and a technical expert afterwards. In every case the special man must know his particular industry inside out and from the bottom up. He must be familiar with every technical process in that industry. He must know precisely what is to be expected from every worker in every step of the process of manufacture. He must also know the workers themselves, as men. He must know the business side of the industry, so that he has proper sympathy with the risks and problems of management. He must likewise know the organizations of the workers. Above all he must be able to command the confidence and respect of both these elements. He must be able to pass judgments so searching, so thorough, and so transparently fair that both sides shall welcome his work as arbitrator. It follows as a matter of course that such a man, with such a fund of information, will be able to present complete and unbiased evidence to the public for its final decisions.

This need be in no sense an interference on the part of the Government. Our present conciliators are simply men ready to step in by invitation to help adjust any industrial difference anywhere in the country. They are permitted to offer their services only as disinterested spokesmen for the public. They have no authority by law to do more than consult with the parties in dispute and strive by persuasion and common sense to bring about an agreement. These special men that I want to see added to the force would have no more authority. It would be their special training alone that would make them more effective.

In fact, the usefulness of such special men can hardly be exaggerated. Suppose a dispute occurs in some great line of manufacture. The special man assigned to such an industry will know every phase, process, and personality involved in dispute. He will know the cost of each step, and the demand each step makes on the skill or strength of the worker. He will know the men themselves, whether the manager is "hard-boiled" or humane, whether the owner is harsh or fair, and which of the employees are efficient and which are not. All the countless factors that enter into a dispute and figure in its just settle-

ment, he will have at his fingers' ends. Both sides in every industrial dispute have long been looking for just such a helpful figure, and so far he has seldom been provided. In my opinion, 15 or 20 such men would be a Godsend to the country, as practical leaders to peace in industry.

Their usefulness would go beyond this. As their work goes on, it will be less and less the settlement of strikes that have already occurred, and more and more the prevention of such disputes. As their successes put them more and more into the confidence of manager and worker, they will have advance knowledge of coming differences, so that a timely word of caution will send both sides down the path of righteousness. As every great basic industry now has branches everywhere, these special men would acquire a wide knowledge of the country. Where there is radical activity, where there are Reds and anarchists, these men will know it, and may be able to win over the wrong-headed to right-minded principles.

Even this is but a part of the usefulness of these special conciliators. We want them to have broad general knowledge and play the part of educators. At times when they are not needed in the settlement of differences—and those differences will come farther and farther apart—we should want them to give talks before meetings of workers, civic organizations, to the general public, and even to children in the schools, on economic matters, social topics, the friendly relations between managers and men, and the like. At all times these men would keep the employer reminded of the struggles and trials of the man who toils and the toiler reminded of the worries of the man with the responsibility of a business on his mind. One of the calamities of modern industrial organization is the loss of the old-time personal understanding between employer and his men. These special conciliators would keep first in mind the good effect of restoring the lost personal contact. Disputes are far less likely to break out among men who know and respect each other.

Nor would these special men act alone. In the case of some such general disagreement as the recent national ones we have had, a group of these special men would be needed, each a master of one of the many branches that enter into those complex services. In my estimation such boards of broad, human experts would soon take their place in public confidence because of the quick action they could perform.

Most boards of arbitration are forced to lose valuable time in the collecting of necessary technical information, whereas the supreme need of industry is for speedy action. The public wants prompt decisions. These special men, singly or in boards, will supply the ready knowledge necessary to these prompt and fair judgments. They will displace old and haphazard methods of settlement with methods that are exact and of a scientific character in keeping with the spirit of modern industrial progress. So, by displacing many loose boards of arbitration and much loose individual effort and centering the responsibility of settling and preventing labor disputes in the hands of these special, highly trained men, we shall at once simplify and strengthen, as well as reduce the cost of, the great work of bringing a lasting peace and "disarmament" into American industry.

Better Work and More of It.

KEEPING the peace in industry is only one of the elements absolutely necessary to a return of prosperity. To workers everywhere, whether union or nonunion, I say: Let us all agree, as most now do, to an ideal; that is, to help American employers to increase their business in competition with the world. It can only be done in this day and generation by improving the quality and increasing the quantity of our output.

We are in competition with the workers of every other part of the world, and if we propose to go into this world market—as we certainly must do if we are to do business on any large scale, and nothing less than that will do for American industry—then we must push this national slogan, "Increase the quantity and improve the quality. Better work and more of it."

We American workers who put confidence into our full day's work for an honest day's pay and are accurate, earnest, and enthusiastic in our work must see to it that no shirkers disgrace us. They not only disgrace us, but land themselves on our backs and continually find fault with our employers. Instead of finding fault with our employer, let us all find some way of helping him to put the products of our own country into the markets of the world. To that end we must keep ever in mind our slogan, "Increase the quantity and improve the quality" of the product we put forth to win us prosperity.

There are some who must give up the old fallacy that restricting output helps to keep wages high by keeping prices high. It does nothing of the sort. The one great economic law we all need to learn is that the more we make the more we have. The more goods we turn out the more wealth we create. We can't have wealth unless we make it. And by cutting down output we make ourselves poor as certain as fate.

The truth of this will come home to every worker and hit him squarely in the pocketbook. I was a happy worker in a tin mill. In those days I was inclined to fall in with restricting output. It didn't take me long to learn that if I restricted my output of tin I had to pay higher for the tin pans in my house and for the tin roof on top of it. The ironworker who restricts his output only forces himself to pay more for nails, pails, and everything of iron.

We see the same result from another idea that we have clung to too long. All workmen have not the same ability or skill to produce alike, and the tendency in some places has been to regulate production by the output of the poorest workman, and that creates high prices. But we must remember that the workman himself has to pay them.

We must produce if we want to be rich and prosper. Each man must produce his utmost according to his skill and ability. The one guaranty of the best wages and the ability to buy goods at the right price comes back to this—we must all raise the quantity and raise the quality of our output. But let the business man and employer remember that human strength has its limits, and that the man who toils with his hands can no more work at the top of his bent every day of the year than the professional or business man or the musician. The sturdiest and stolidest iron puddler will have his off days. Allow-

ance must be made for human frailty in the day laborer, who needs a vacation as much as the business man, and rarely gets it. The utmost that a man can do, if he does it conscientiously, is all that can be asked.

But if we do produce our utmost, then for this generous production we have a right to demand a generous wage, so that when old age approaches and the time comes for the final lay off, that lay off is what it should be, the well-earned vacation.

I have always said, and I say again, that I am against the living wage. It is not enough. That is why I am against it.

A mere living wage is a beggarly allowance from a public as rich as ours to a worker as skilled and thrifty as our American wage earner, whose hands have builded so wonderfully to the enrichment of our country.

It is no longer enough for the man who toils merely to exist, merely to be able to meet fluctuations in the cost of living. The President made a most forcible statement of this when he said, "The workman's lowest wage must be enough for comfort, enough to make his house a home, enough to insure that the struggle for existence shall not crowd out the things worth existing for." The time has come when we must forget the living wage and base our calculations on the saving wage.

I know this is an elastic term. One man will manage to save on a wage lower than that received by a man who is chronically in debt. Nevertheless, some average between the two will have to be struck. As a matter of fact, our progressive employers are, and have been, paying the saving wage. And the American workman has been saving it.

The American business man must remember that if he himself is to be prosperous the workman must also prosper. How else is the manufacturer to sell his pianos, phonographs, clothing, house furnishings, electrical fixtures, modern sanitary supplies, and the thousand and one conveniences he makes? The workers are the buying public, and that public must be decently paid to become a ready buyer.

Most of us have failed to notice the important fact that during this unfortunate period of unemployment cases of actual distress have been remarkably few. The Bureau of Labor Statistics has figures to show that the American workman has managed in a surprising manner to pay his way thus far. He has been meeting his bills or has good credit at the grocery store and the butcher shop, for the simple reason that he has had savings to draw upon. It is a pity that hard-earned savings must go in this way, but they have proved a salvation in time of general distress.

If the American workman has learned anything in this time of business slackness, it is the age-old lesson of thrift and saving. In the future he will insist more than ever on saving. And he must be paid a wage that will enable him to save. We can not stop that. We do not want to stop it. We must all remember that when the workman saves it is the country that also saves and benefits accordingly. I believe the saving wage must come, and come to stay.

But the saving wage can not come without increased output. The wage earner has no right to his saving wage if he restricts his output. The American business man will be unable to pay any wage at all

unless our workers give him a product that will permit him to compete in the markets of the world. We all want a return of prosperity. But we must realize that prosperity depends upon the fullest quantity and the best quality of production. If we want prosperity and the saving wage, we must work for it.

At heart the American, whether he is manufacturer, business man, or worker, is honest as a rule and wants to do that which is right. All that is needed now is honest leadership to get us going again—the leadership of enlightened business men, enlightened labor leaders, and, above all, financiers. We want financial leaders to lead, and we want their leading to be in the form of readier loans to business men and manufacturers who have the courage to go on and expand.

But the wisest leadership can get nowhere if it is blocked by any set of men who stand out for big pay and little work. The same leadership will get nowhere if it sticks by the reactionary business man who stands out for big work and little pay. The employer who begrudges decent pay is in the same class with the other restrictionist who demands endless duplication of effort and endless classification and reclassification of workers. Such stultifying of individual effort will never succeed in America.

While human nature remains what it is, the lion and lamb may never lie down together in industry. But we must never give up the struggle to make them better natured. We can have, we must have, more peace in industry. We must have, and can have, so little of open fighting that it will amount to nothing.

We want disarmament in the American factory as much as on the world's battlefields. Drop your grouches and go to it. A wholly new day lies ahead of America. The great victories of the future belong to this country of ours. They are to be the victories of farm production, victories of scientific discovery, victories of commercial expansion and manufacture, with happy homes for all as the fruits of these victories. In peaceful competition of that kind we Americans, with our great business leaders and our millions of skilled and ambitious workers, may well defy the world.

What Is Personnel Research?[1]

By Robert M. Yerkes.

SHALL man be slave or master of the civilization which he has created? This is the central question of the times. For our Personnel Research Federation this question takes the form, Shall the industrial system and its products be treated as ends or as means to human welfare? The fate of existing forms of civilization, mayhap of mankind, hangs on the answer. We look confidently to disinterested research to guide our race to a wise solution of this problem.

To-day we meet as fellow workers for the improvement of human relations to consider the possibilities of progress through one major variety of research. It is known as "personnel research." On the

[1] An address by the temporary chairman at the annual meeting of the Personnel Research Federation, Washington, D. C., Nov. 21, 1921.

chance that we may not be perfectly clear and in accord with respect to the meaning of this new term, the following working definition is proposed. Personnel research is the study, by scientific methods, of man in relation to the trades, arts, and professions. It is concerned with the human, as contrasted with the mechanical, factors in agriculture, industry, commerce, government, education, and other occupational spheres.

Industry, which hereinafter will be used to designate all productive occupations, offers for research two main groups of facts and factors, the nonhuman and the human. The former includes such objects of study as the raw materials of industry, its processes, operations, sources of power, and mechanical aids. The latter includes such essential factors as physique, health, hygiene, intelligence, temperament, interest, contentment, the will to cooperate. These are but examples of those human qualities, traits, and relations which condition industrial activity and achievement. Of the two great assemblages of factors in industry, the nonhuman, or material, factors have been studied much and in some instances exhaustively, to the great advantage of mankind, as witness the contributions of chemistry and the several branches of engineering. The human factors, by contrast, have been neglected. Only recently has attention been directed to the economic significance of research concerning them. We stand on the threshold of a new era in which attention and interest are beginning to shift from the material to the personal; from the things that are worked with, to the worker; from the machinery of industry, to the man who made, owns, or operates it. There is every reason to believe that human engineering will shortly take its place among the important forms of practical endeavor.

As workers in personnel research, we assume that the industrial system should exist solely for the benefit of mankind. It is the result of concerted human action and it seems eminently reasonable to insist that man, its creator, should become also in the truest sense its master, director, and beneficiary. The time was when human labor, skill, and intelligence were obviously the essential factors in production. Then came the era of invention with the resulting mechanization of industry and the replacement of the domestic system by the factory. Naturally enough the idea of increasing efficiency through the mechanization of industrial operations has been carried into the sphere of human labor. Time and motion studies have been made with a view to increasing earnings and industrial output, and there has developed a strong tendency to mechanize the worker himself. Already this tendency has altered the quality and attitude of labor by lessening opportunities and incentives for master workmanship and for satisfying self-expression. The sphere of personal initiative and responsibility has shrunk as that of mechanization and efficiency has grown. The industrial system needs, and always will need and demand, improved processes and mechanical aids, but it also needs equally strength and skill of human muscle and brain. Without brains the system is vacillating and unstable; without brawn it is forceless and hesitating.

As we search history for its lessons to our day and generation we note three principal types of industrial system: Slavery, the wage system, and cooperation. Slavery represents the extreme subordi-

nation of labor to employment or management. It is difficult to find present defenders of this bygone system. In it the worker too often was treated solely as a means to production instead of as a person whose development, self-expression, and self-realization are of greater moment than the products of his labor. Human slavery was surprisingly widespread. It endured for centuries, being finally replaced by the wage system, under which workers are apprenticed or hired for their services. In this system certain of the rights of the worker as a person are recognized, but even the wage system is capable of grave injustices to the individual. In certain places and at various times it has developed so far in the direction of mechanical efficiency, irrespective of justice and human welfare, that the interests of owner, employer, or manager have conflicted sharply with those of wage earner or worker. "Big business," the product of mechanization and efficiency, constantly tends toward abuses of human relations and neglect of justice; toward forms and degrees of exploitation of labor which are as inimical to human welfare as is slavery. The most serious arraignment of the present industrial system is the contention that capital impersonally, more or less unconsciously and unintentionally, and yet inevitably, favors the complete mechanization of production. Labor, in the face of this situation with its obvious narrowness of interest and its injustices, has become increasingly self-conscious and defensive. Consequently, at this time and throughout the world capital and labor face each other with more or less of mutual distrust, suspicion, envy, and dislike. Each points to the wage system as unsatisfactory because of the unreasonableness, selfishness, greed, unfairness, ignorance, or maliciousness of the other. And the great impersonal industrial system meanwhile operates its vast machinery of production as though increased efficiency, greater output, and larger profits were its ideal and only goal.

Emerging slowly from this unprofitable chaos of human misunderstanding, discontent, strife, and suffering is the belief that personnel research—in the form of systematic, disinterested study of the human factors in industry—may point the way or actually lead to a better industrial system or to a wiser, juster utilization of the present system. For the proper unit of industry is the person, not the machine, the farm, or the factory, and the welfare of the person seemingly can be more largely achieved and guaranteed by intelligent cooperation than by domination of labor, of capital, or of any other special group. The human personality in all of its essential aspects and relations must be recognized and wisely utilized in industry, as in all other social relations, if racial advancement and individual satisfaction are to be achieved generally instead of exceptionally. No one of us can engage in any occupation whatsoever without more or less serious injustice and injury to the physical, mental, or spiritual self if treated merely as a part of the machinery of industry. Personnel research should speedily supply the basis for a satisfactory answer to the question, Should the industrial system be adapted to human needs or should the individual be shaped to meet the demands of the system?

The principal aspects of man as an industrial unit are three—physical or bodily, mental or psychological, and moral or spiritual. It is to the study of these that personnel research is directed. Per-

sons differ obviously and extremely in bodily traits—height, weight, skeletal and muscular development, strength, characteristics of features, hair and eye color. They differ quite as much, although this is not so generally recognized, in keenness and range of sight, hearing, and the other senses; in quickness of observation and understanding, in judgment, reasoning power, general educability, special mechanical, mathematical, and linguistic capacity, and even in temperament, character, and moral attitude, spiritual appreciation and understanding. What, then, means the word "equality," of which democracy makes so much? And what significance may be attached to the oft-repeated phrase "All men are born free and equal?" Clearly, it can not mean that they are physically, mentally, or morally equal, for this contradicts daily observation and common sense. It does mean, and it is not evident that it can mean less or more, that in the United States of America, within limits set by age, sex, and race, persons are equal under the law and may claim as their right as citizens like opportunities for human service and responsibility.

Personnel research, if it is to stablize industrial production, further the development of the personality, and increase human satisfaction with life, must study intensively as well as extensively, with all of the methods available to modern science, the physical, mental, and spiritual qualities and relations of the human being. Much already has been accomplished in the study of the relations of the body of the worker to industrial demands. Specifications are being prepared which indicate the ordinary requirements of jobs and occupations and enable the employment manager, in the light of definite knowledge of the worker, to estimate his degree of physical fitness or adequacy for a particular kind of work. The individual may be too large or too small, too strong or too weak, too quick or too slow, too reisistant to fatigue or not sufficiently so, to meet the requirements of a particular task without waste and without personal harm. There is no reason why industry should not know alike and with practical accuracy, occupational requirements and the bodily characteristics and capacity of the worker, so that these two sets of facts may be more satisfactorily related to each other.

Personnel research is concerned also with the hygiene of occupational and personal life, with the health and vitality of the worker, with occupational diseases, with safety and comfort. All of these things concern, first of all bodily welfare, but they also relate, secondarily and importantly, to the mental and spiritual welfare and development of the person.

It has come to be recognized in certain divisions of industry that a perfect occupational fit physically may be a miserable misfit mentally. This is true because, however well the physical requirements of a job are met by the individual, his intelligence may be inadequate or he may be unsuited temperamentally to his occupation. Hence it is essential that personnel research measure the mental qualities of workers as well as the bodily, and at the same time endeavor to ascertain the normal mental requirements of the chief classes of jobs and occupations. Of two men who can handle a razor or scissors with equal skill, measurement may show that the

one has sufficient intelligence and mechanical ability to become a successful mechanician, whereas the other has not. The one may be wasting his talents on barbering, while the other is well fitted to that occupation. To measure mental traits accurately and serviceably is not an easy task, for the psychological make-up of a person is complex and many obviously important traits are difficult to isolate and evaluate. There are in particular two groups of mental measurements which are especially important: First, measurements of intelligence, which indicate the nature and degree of the person's ability to understand, reason, and adapt himself to new situations; and second, measurements of temperament and emotional make-up. Given the same degree of intelligence or mental alertness, two persons may be opposites with respect to a given occupation. The one may be fit for it because he is slow, calm, deliberate, careful, and not easily discouraged; the other may be unfit because he is quick, excitable, hasty, and liable to carelessness and discouragement.

There is nothing more mysterious about mental measurement than there is about measurement of bodily traits, for we actually measure, not the feelings of the individual but their expressions in word or deed. It is what the individual does or is capable of doing on the basis of those mental processes which are termed intelligent or emotional that is measured and in turn used as an indication of what may be expected of him in the day's work. During the war it was discovered in the United States Army, not without surprise, that a reasonably reliable measure of intelligence was the best available single indication of a person's occupational usefulness. The significance of this discovery has not been entirely overlooked by industry. Already it is clear that industrial management is preparing to take advantage of psychological methods of studying the human being. It is highly desirable, nay essential, for human welfare that labor as well as capital, recognize speedily and fully the importance of personnel research and that it be pursued in the interest of all.

Thus far bodily and mental factors have been mentioned. There remain those for which we have no adequate single term. The words "moral," "spiritual," "religious," suggest with varying satisfactoriness the factors in point. Though the bodily and mental constitution of a person be adequately known and exactly fitted to the carefully predetermined requirements of a given occupation, the person may be misplaced or may make sad mistakes in choosing a vocation because of ignorance or neglect of character and moral constitution. For the fact is persons, in all periods of life, are more or less honest, frank, and unselfish, and different occupations demand either different qualities of character or varying degrees of the same. Perfect reliability may be wholly essential to success in one line of work and merely desirable in another. To say that character can be satisfactorily analyzed and measured by scientific methods to-day would be rash. To say that personnel research should devise and develop methods for its measurement is wholly justifitable. The most common criticism made of the psychological service in the United States Army was that it failed to provide measurements of honesty, reliability, and capacity for leadership. Instead it offered only measurements of intelligence or

mental alertness. This criticism, although directed solely toward an omission, is indicative of the urgent demand for methods of measuring other aspects of mind than the intellectual. Industry now has abundant opportunity to develop suitable methods of measuring persons with respect to qualities of character, mind, and body, and to make this information immediately available in connection with placement, vocational choice, and guidance.

In connection with the three groups of human qualities, which have been designated as bodily, mental, and moral, there are two important aspects of each which personnel research must take into account: First, the aspect of nature or heredity, that which is inborn or given as the individual's initial equipment or heritage. Second, the aspect of nurture, acquisition, or achievement, that which results from experience, training, or education. Contradictory though it may seem of many observations and of popular belief, the facts clearly enough indicate that each of us is born with certain kinds and degrees of intellectual capacity, temperamental quality, and moral tendency. The one of two so-called "identical twins" may be stupid, slow to understand and to adapt himself to new situations. The other may be bright and quick to grasp and master new problems. The one may be sympathetic, generous, frank; the other unsympathetic, selfish, and deceitful, and this even from infancy. Neither home nor school training essentially alters the nature of these hereditary dispositions. Education may somewhat modify their expressions, but it does not suffice to render the one child normally intelligent or the other child normally sympathetic. This fact of the importance of inheritance versus acquisition does not necessarily detract from our estimate of the social value of education, for the whole educational process tends to develop and to facilitate particular uses and expressions of any kind and degree of inherited capacity. Whatever may be our desires or prejudices in this matter, the fact remains that a child of feeble intellect is capable of relatively little educational progress and, therefore, may be described correctly as of limited educability; whereas the child of excellent intellect may seemingly profit without limit by educational opportunity.

Knowing that differences bodily, mental, and moral, hereditary or acquired, have profound social and industrial significance, it is our present opportunity and obligation as advocates and directors of personnel research to acquaint ourselves fully with these differences and with their occupational and vocational values. By virtue of differences long ignored by mankind, many of which may now be measured with practical reliability, and all of which may be regarded as possible of measurement, human beings are naturally suited to different occupations and vocations. Wisdom demands that civilization progress toward increasingly adequate knowledge of the human being and of the relation of the individual's traits to industrial and other types of social organization. Progress in this direction should be furthered by wisely directed and wholly disinterested research. It is of the utmost importance that personnel research be popularly and generally supported for the welfare of mankind instead of furthered by capital or labor exclusively for increase in wages or profits.

Whatever our feelings or beliefs concerning the ideal industrial system as involving subordination or coordination of personalities,

it is reasonably clear that it must give large scope to the study of the person as the industrial unit. The fundamental question is one of human value. It is pertinent, therefore, to inquire why so many of us work beyond our mere physical requirements, why we strive persistently for surplus material possessions and for power. The nature and tendencies of the wage system suggest the answer that it is because material advantage is the sole measure of value, and the characteristics and relations of capital and labor indicate that the person is expected to work for what he can get, not for what he can give. This, to be sure, is only partially true. But it is so largely true that it justifies the dogmatic assertion that industry measures progress, not in terms of personality, but in terms of material possession.

As one reflects on the situation it becomes clear that in addition to the material rewards of industrial activity, be they wages or profits, there are the immaterial satisfactions of self-expression and self-realization; the joy in workmanship and especially in work well done; the sense of human helpfulness and service which accompanies awareness of socially useful work. Undeniably there is an innate tendency or complex of tendencies toward creative self-expression. One hears occasionally of the instinct of workmanship. Whether instinct or not it expresses itself in a variety of ways, and the value of the individual life depends largely on the fitness and completeness of expression. There are those, for example, whose chief satisfaction comes from artistic expression; those who live most fully in mechanical expression or invention; those for whom to observe, study intently, and make discoveries concerning natural objects is satisfying. Self-realization, self-development, and creation may be achieved in accordance with the tastes and talents of the person, either manual or intellectual. Whether we work primarily with our hands or with our brains, our personal satisfaction and our social usefulness depend chiefly on our attitude, interest, and degree of success in giving expression to our capacities. Many persons, it is true, work to live. They are relatively unfortunate. Some live to work. To them, creative activity, whether in industry or in art, is a supreme source of satisfaction.

The industrial system must be made to further self-expression and the symmetrical development of each personality, to contribute to human contentment and happiness, while at the same time increasing economic freedom. Idealism in any practical sphere tends to be unpopular. Yet few will dare to deny that the immaterial rewards or values which have been mentioned are incomparably more significant for the individual and the race than are the material. Those who serve most faithfully, diligently, and unselfishly, no matter what their sphere of labor or influence, receive most from their fellow beings, even though their material rewards may be meager. This paradox, seemingly contradictory of certain Christian teachings but actually consistent with them, is worth pondering. It suggests even that civilization might profit indefinitely by reversing the relation of person to possessions, thus making giving instead of getting the principal objective of the industrial system as well as of the individual.

It would appear then that there are at least three essential categories of value as also of personal traits—the material, the mental,

and the spiritual. Justice and righteousness are as essential to industrial stability and progress as they are to individual usefulness and happiness. No industrial system can safely maintain the opposite. Witness the material splendor and even the intellectual achievements of ancient Egypt, Greece, and Rome. Under no one of these great civilizations was the supreme value of personality recognized. In no one of them was the individual worker wisely, justly, and righteously treated by his fellows or by the State. The lesson for our civilization from those which are past is not difficult to read.

What, then, is needed by way of information to make possible the more profitable relating of person to occupation? An attempt has been made to answer this question by indicating that two sorts of information, in addition to adequate knowledge of the physical or mechanical factors which condition occupational efficiency, are essential. These are, first, knowledge of the physical, mental, and moral characteristics of the person, and second, reliable knowledge of what the occupation requires by way of personal traits and capacities. Given practically serviceable specifications for job or occupation and adequate knowledge of the characteristics of the individual worker, it becomes a reasonable task to fit the two together intelligently and effectively. Hitherto jobs have been assigned and vocations chosen on the basis of accidental, irrelevant, or inadequate information. This is notably true of the choice of a life work, which, although the most important decision most individuals have to make, too often turns on the suggestion or wish of parent, guardian, or friend, on convenience or chance opportunity. Of old, persons were bought for jobs and thrown into them as slaves. To-day most of us are assigned to or choose jobs as hirelings or wage earners. To-morrow it may be possible for us to place ourselves on trial in jobs which seemingly require the particular combination of traits which we possess and for which we have been educated in the public schools.

But even were such knowledge available the millennium would not be at hand, for man is too complex, and so are occupational requirements, to enable personnel research or practical directors of employment to supply and utilize all essential information promptly and effectively. However promising the results of personnel research may seem for the improvement of industrial relations, the way of this work is certain to prove slow and hard, for the technical and practical difficulties are bound to be numerous and discouraging. The important thing for personnel research now is to demonstrate its disinterestedness, its value alike for those who have and for those who have not; for those who need help physically, mentally, or morally; and for those who are able and willing to give it. Increasingly intelligent and wise occupational choice and placement are bound to improve the condition of the individual and to stabilize civilization. It may safely be prophesied that within a decade no employer or manager can afford to neglect the products of personnel research and no worker to miss its benefits. Industry has been revolutionized by the invention of machines and by the discovery of new sources of power. It remains for personnel research to effect a still more significant and beneficial revolution or reformation by making available adequate knowledge of man in all his essential aspects and relations, and by bringing into clear relief the supreme value of the person.

INDUSTRIAL RELATIONS AND LABOR CONDITIONS.

Labor Unrest in South America.[1]

By MARTHA DOBBIN.

ALTHOUGH far removed from the scenes of the World War and not actively engaged in the conflict, the countries of South America were, nevertheless, greatly affected by the war. This influence was manifested in various ways—the almost complete stoppage of immigration and the extensive emigration of the nationals of European countries, the falling off of imports and the loss of foreign markets, the influx of foreign agitators, and the depreciation of the currency. All these combined to bring about an unsettled condition characterized by soaring prices, profiteering, strikes, lockouts, boycotts, and revolutionary disturbances, which varied in intensity in the different countries, but were common to most of them.

The labor movement in South America can not be considered apart from the question of race. While Argentina, Uruguay, southern Brazil, and, to a considerable extent, Chile, are distinctly "white man's land," that portion of the continent lying north of the Tropic of Capricorn contains about 40,000,000 Indians (Amerindians) and mixed types, more than two-thirds of the total population. In addition there are several million Negroes and mulattoes, mostly in Brazil. The white population of this region, even if the "near whites" are included, averages not more than 10 per cent, the proportion varying greatly with the different regions. It appears then that taken as a whole "Latin America" is racially not "Latin," but Amerindian or negroid, with a thin Spanish or Portuguese veneer. In tropical and semitropical Latin America there remain few persons of unmixed Spanish or Portuguese descent, most of the so-called "whites" being really "near whites." The "near whites" have thus far kept the supremacy. Below these "near whites" are the hybrid stocks, the mestizos (the cross between the white and Indian), the mulattoes (the cross between white and black), and the zambos (the cross between Indian and Negro). The "Indianista" movement,

[1] In preparing this article the following books and current numbers of periodical publications have been used: Labor Overseas, London; MONTHLY LABOR REVIEW; Monthly Circular of Labor Research Department, London; The Rising Tide of Color Against White World-domination, by Lothrop Stoddard, New York, 1920; Argentina, Boletín del Departamento Nacional del Trabajo, Buenos Aires; Argentina, Crónica Mensual del Departamento Nacional del Trabajo, Buenos Aires; Great Britain, Department of Overseas Trade, Report on the economic and industrial situation of the Argentine Republic for the year 1919, London, 1920; U. S. Bureau of Foreign and Domestic Commerce, The economic position of Argentina during the war, Washington, 1920; Review of the River Plate, Buenos Aires; The Times of Argentina, Buenos Aires; La Nación, Buenos Aires; Por el derecho obrero, Resumen histórico de la gran huelga marítima (febrero 12 de 1920—marzo 10 de 1921), by Fortunato Marinelli, Buenos Aires, 1921; Federación Obrera Regional Argentina, Memoria y balance del consejo federal al undécimo congreso (enero 1919—noviembre 1920), Buenos Aires [1920]; Oficina de Publicaciones de la Asociación del Trabajo, La oficialización de los trabajos portuarios, Buenos Aires, 1921; La Organisación Obrero (órgano oficial de la F. O. R. A.), Buenos Aires; Chili, Boletín de la Oficina del Trabajo, Santiago; Recent colonization in Chile, by Mark Jefferson, New York, 1921; The South Pacific Mail, Valparaiso; The West Coast Leader, Lima; Great Britain, Department of Overseas Trade, Report on the general economic and financial conditions of Brazil for the year 1919, London, 1920; U. S. Bureau of Foreign and Domestic Commerce, Paraguay: A commercial handbook, Washington, 1920; Uruguay, Boletín de la Oficina Nacional del Trabajo, Montevideo; U. S. Bureau of Foreign and Domestic Commerce, Bolivia: A commercial and industrial handbook, Washington, 1921.

which is starting on the west coast, is an indication of the desire of the Indian masses to recover somewhat of their ancient prestige. In Bolivia, for example, there is a general movement among the Indians for the recovery of the lands which have been taken from them. The rural Indian population is held in a condition more or less closely approximating serfdom in the tropical regions of the western coast. In some countries they are bound to the master's estate by chains of debt from which escape seems impossible. In general an improvement in their condition is noted as one goes toward the south.

On the western coast labor organization is just beginning to emerge from the mutual benefit society stage, becoming more advanced and more like real trade-unions in the more southern countries. The fact that there has been comparatively little immigration to these countries also has its influence on the labor movement, as the impulse to organize must therefore come from within.

In Argentina and Uruguay, on the other hand, countries which have had a large foreign immigration, settlers from northern Italy and Spain predominating, the impulse to labor organization came largely from this foreign influence.

From this brief discussion it will be seen that the labor movement in South America differs greatly from that of the United States, because in so many of the countries the great mass of the laboring class is uneducated, unskilled, and of a different race from that of the ruling class. The difference in climate, the rich, undeveloped natural resources open to exploitation, and the fact that manufacturing is only in its infancy are other factors to be considered.

Argentina.

Trade-Union and Other Organizations.

SINCE the first labor federation was organized in 1890 there has been a steady growth and development of trade-unionism until at the present time Argentina is said to have the strongest and best-organized trade-union system in South America. However, the amalgamation of local into national unions has not yet developed very extensively, only the seamen, railway men, flour-mill workers, and printing trades being nationally organized. The Argentine Federation of Labor or Regional Workers' Federation of Argentina (*Federación Obrera Regional Argentina*), commonly known as the F. O. R. A., was organized in 1901. It is the strongest of the three federations of trade-unions and is said to have a nominal membership of 350,000—that is, it can count upon the active support of that number, though its paid-up membership is very much smaller, being reported as about 70,000 at the end of 1920, and estimated at perhaps 88,000 at the present time. At the eleventh congress, held at La Plata January 29 to February 4, 1921, 181 trade-unions and 9 industrial federations were represented.

The Federation of Maritime Workers (*Federación Obrera Marítima*), one of the most important organizations affiliated to the F. O. R. A., dates from 1910. It is one of the most aggressive federations in Argentina and considers itself the champion of the working class, being ready to go on a strike at any time that solidarity of action with other workers is needed. According to its own state-

ment in 1919, it represents all men employed on shipboard, except the officers, who have their own union, and at that time had about 14,000 members.

At a joint congress held in June, 1920, an agreement was arrived at whereby the two railwaymen's unions, La Fraternidad and La Federación Obrera Ferroviaria, were somewhat loosely united in the Amalgamated Railwaymen's Union (*Confraternidad Ferroviaria*) for the purpose, as stated in the constitution, of coordinating their efforts, defending their interests, improving the economic, technical, moral, and social condition of the railway workers, and in general to prepare them for taking over the control of the railroads on the principle that the instruments of work belong to the worker.

The F. O. R. A. has taken no official action to transfer its adherence from the Amsterdam to the Moscow International, but is said to be decidedly sympathetic toward the latter. At its eleventh congress a special committee was appointed to organize a national congress with a view to the unification of all trade-unions for the struggle against such capitalist organizations as the National Labor Association and the Argentine Patriotic League. The new federal council of the F. O. R. A. contains eight "moderates" and seven "extremists."

The second of the three federations of trade-unions was formed by a faction of the F. O. R. A. which broke away and formed what is known as the F. O. R. A. Comunista or the Federación Obrera Regional Argentina del Quinto Congreso, with avowedly communistic principles. In the preface to the rules of the central body, which govern its constituents also, the State is described as "the coercive and tangible expression of the domination exercised by the capitalist class."

The third group of unions is that of the Catholic workers' organizations, which are of a reformist and nationalist character, designed to promote the moral and economic welfare of the working class and peaceful relations between capital and labor. The First Congress of Social Catholics of Latin America, which met at Buenos Aires in May, 1919, repudiated all solidarity with socialist or anarchist labor organizations or those advocating direct action, and demanded social legislation for solving labor problems. The Catholic unions have not become very strong and are isolated rather than closely federated.

In the fall of 1920 there were reported to be 86 employers' organizations. The most important, however, is the National Labor Association (*Asociación Nacional del Trabajo*), whose purpose is to defend the interests of capital, protect nonunion labor, and work for social peace and the open shop. The Overseas Shipping Association (*Centro de Navigación Transátlantica*), consisting of about 50 overseas shipping companies in 1921, and the Coastal and River Shipowners' Association (*Centro de Cabotaje Argentino*) are the leading associations of the shipping interests.

Another organization which should be mentioned here is the Argentine Patriotic League (*Liga Patriótica Argentina*), which came into being almost spontaneously as a result of the maximalist disorders of "tragic week" in January, 1919 (see p. 24), at first as a vigilance committee, and then as a propagandist organization whose object is "to develop the country by democratic action as opposed to violence, and to constitute a force of patriotic, disciplined work-

ingmen all over the country, whose help can be relied on in any emergency." It has been very active in carrying on propaganda work against anarchy, bolshevism, and revolutionary action and has sought to show the average workman that only professional agitators have reaped any benefit from the present labor agitation. Its growth has been very rapid and new brigades are constantly being formed all over the country. In May, 1921, it had 632 brigades and associations in the Federal capital alone. Because of its activities, especially the organizing of "free" labor, it has incurred the active enmity of the labor organizations. The following extract from a petition submitted by the Confraternidad Ferroviaria to the President shows the attitude of organized labor toward the Patriotic League. The dissolution of the league was demanded because it is a disturbing element, promotes conflicts, and is an illegal organization. It tries to take the place of the forces of law and government and is "a civil army with its chiefs and brigades perfectly organized, whose constituents boast of more authority and strength than the State possesses."

The Socialist Party is gaining in strength and now has a majority in the city council of Buenos Aires. At their congress in January, 1921, the Socialists decided by a vote of 5,000 to 3,650 against joining the Third International, but resolved to leave the Second International and be represented at the Vienna (Fourth International) Conference of the Working Union of Socialist Parties in February. Before the extremist element withdrew and joined the Communist Party, the membership was 60,000.

General Industrial Conditions and Causes of Unrest.

Argentina is primarily an agricultural and pastoral country, manufacturing being but little developed, with the exception of meat-packing, flour milling, the dairy industries, and sugar refining. Though the war led to new industries and the growth of those already in existence, the country is still largely dependent on imports for its luxuries and many of its necessaries. The general industrial depression which began in 1920, assumed serious proportions in the last half of that year and first half of 1921, but by August and September, 1921, it was believed the crisis had been passed and conditions were improving.

The seasonal character of most work in Argentina is responsible for a very considerable amount of unemployment at certain times of the year, with its consequent social and economic problems. The need of a vast army of laborers during the harvest season results in a large immigration and emigration, since many laborers from southern Europe find it profitable to emigrate to Argentina for the harvest season, afterward returning to their own country. The war not only stopped most of the immigration but caused many of the European nationals to return home for military and other service, so that by 1918, when industrial labor was more in demand than ever, there was a shortage of labor which placed the workers in an advantageous position for bargaining and led to many strikes. The general state of unrest which followed the war was due to the influence of the radical movement in other countries, and the constant labor agitation in Argentina; the increased cost of living, profiteering, and

depreciation of the paper peso; the development of trusts; and the lack of ameliorative legislation and the failure adequately to enforce such protective legislation as already existed. The immediate cause was most often the demand for wage increases or the "closed shop." Other reasons for the agrarian unrest were said to be the holding of large tracts of land by the few, the exploitation of tenants by the landlords, the high rentals, and short-time leases. The promotion of farm ownership and leases for longer terms were urged as means of securing social stability in the rural districts, and have been embodied in the farm lease law recently enacted, which is expected to facilitate the purchase of farms by tenants, and lead to more progressive agricultural methods and to more diversified farming.

The report of the Argentine Department of Labor on strikes in the Federal capital in 1920, shows that of 206 strikes affecting 134,015 workers, 92 strikes (44.7 per cent) affecting 21,921 strikers (16.4 per cent) were for increased wages, while 82 strikes (39.9 per cent) affecting 84,241 strikers (62.9 per cent) were for reasons of solidarity, recognition of the union, or reinstatement of a dismissed employee.

As to the attitude of the employers toward the demands of labor there appears to be a difference of opinion. In general they seem to have been sympathetic toward demands for wage increases to meet the high cost of living, but were in favor of the "open shop" and absolutely opposed to the employees being allowed any share in the management of the business. In fact, the controversy over the open shop was the chief feature in many of the big strikes, especially in the maritime workers' strike of 1920–21 and the port strike of 1921. Of almost equal importance, however, as a fundamental principle insisted on by organized workers and opposed by the employers, was the unrestricted use of the boycott, a weapon of industrial warfare that was first extensively used in Argentina at the end of 1918 and the beginning of 1919. Whereas in most other countries the boycott is used as a last resort, in Argentina the federated workers, especially the port workers and seamen, used it extensively as a means of attaining their desires and strengthening their control over industrial matters.

In August, 1920, 7.2 per cent of the working population of 2,400,000 were reported unemployed. Since that time unemployment has been on the increase, owing to the business depression which led to the closing of the quebracho factories and many meat-packing establishments and threw thousands out of employment, creating a serious situation, especially in the interior. In September, 1921, from 12,000 to 15,000 men who had been employed in the quebracho works in the north of Santa Fe Province were reported unemployed. Although the construction of projected public works, especially of railroads, has considerably alleviated the situation, a serious condition of unemployment still prevailed in November.

During the war cost of living rose rapidly, and continued to rise after the armistice was signed. This was especially true of imported articles. The increase in 1920 was largely due to the depreciation of the paper peso and the 20 per cent increase in that year of all the fixed values in the import tariff of 1906. Cost of living is reported to have increased 60 per cent during the war, and from January, 1919, to June, 1920, the cost of food and fuel increased

about 50 per cent, food having risen 16 per cent in Buenos Aires and 69 per cent in Tucumán during that period. As compared with 1916, the Argentine Department of Labor index number for food in 1920 was 156, and in May, 1921, as compared with the average for 1920, it was 97. As compared with the average for 1914, the index number of rent in Buenos Aires was 71 in 1916, 129 in 1919, and 170 in 1920. The price of bread, sugar, and meat, of which there was no actual scarcity, rose to such heights in 1920 that the Government had to take a hand to insure an adequate supply at a reasonable price, effecting this by means of prohibition or restriction of the exportation of wheat and sugar, the distribution of sugar and bread at moderate prices, and to some extent the creation of free public markets for the sale of meat directly to the consumer. Though the price of wheat and cattle eventually fell so low as to cause much hardship to the producers, the price of flour and meat decreased only slightly. The United States Department of Commerce Weekly Cable Service of October 1, 1921, reports that except for reduced rents, due to the law of September 19, 1921, fixing the rate in effect January 1, 1920, as the maximum rate, little change in cost of living is expected.

Although not yet established by a Federal law the 8-hour day prevails very generally. The official index number for wages was 133 in 1919 and 162 in 1920, as compared with the average for 1914. No general reduction of wages as yet appears to have occurred.

Manifestations of Labor Unrest.

The year 1919 marks the culmination of a period of strikes which began in 1917 and prepared the way for the conflicts of 1920 and 1921. It is significant because of the great number of strikes, the greatest since Argentina began keeping strike statistics (1907), and the great number of workers affected. Most of the strikes occurred during the first half of the year, which, according to a report of the British Department of Overseas Trade, was characterized by "acute conflicts between capital and labor, pessimistic forebodings of revolutionary disorders, * * * the suspension of export trade by a prolonged port strike and lockout." During the second six months, however, comparatively harmonious relations existed between capital and labor, but the year closed with signs of growing discontent and sporadic disputes, many of which showed an anarchistic trend and were attended with incendiarism, brigandage, and other forms of violence.

Mention should be made of what is still referred to as "red week," "bloody week," or "tragic week," the week of January 9–16, when hundreds were killed and thousands wounded in the rioting, street fighting, and other violence that occurred in Buenos Aires in connection with a 24-hour general strike declared by the F. O. R. A. as a protest against the police massacre of strikers at the Vasena Iron Works. The Workers' Federation of the Fifth Congress followed suit and all business and traffic came to a standstill, including the railroads running into the city. The general explanation of the disturbances is that anarchist and maximalist leaders took advantage of the general strike and the great excitement in labor circles to

carry out a revolutionary plot, but the federal council of the F. O. R. A. discounts this view. Work was slowly but gradually resumed from the 12th, but street fighting continued, and only the arrival of additional military and naval forces and severe, repressive measures by the military authorities finally restored order.

Although there were fewer strikes in 1920 than in the previous year (a decrease of 43.8 per cent in the number of strikes and of 56.6 per cent in the number of strikers in the Federal capital) the number of days lost was greatest since 1910. This was due to the maritime workers' strike which began in February and was still unsettled at the close of the year. The other labor conflicts of the year in question were broadly distributed geographically and covered a variety of industries. They included strikes on railways, tramways, and ferry boats, in sugar factories and quebracho works factories, on mate plantations, and in the sheep-raising districts of the Territory of Santa Cruz. A police strike in Buenos Aires in March was believed to be part of a revolutionary plot and more than 200 "anarchists" were arrested. The strikers were dismissed and their places filled. A general strike in Santa Fe from July 14 to 20, to enforce demands for a reduction in the cost of living, the release of persons arrested for labor troubles, and the immediate settlement of existing disputes, assumed large proportions for a while, but was solved for the time being by the agreement of the Government to withdraw the troops present and, within 8 days, settle all points at issue except the high cost of living problem which was to be dealt with later by the Government. For the latter purpose a decree was issued providing for a provincial labor congress which should study the subject of cost of living and propose plans to relieve the situation.

Buenos Aires port strike of 1919.—When one considers that 85 per cent of the imports and 60 per cent of the exports of Argentina pass through the port of Buenos Aires it will easily be seen how a prolonged tie-up of port activities there would vitally affect the economic well-being of the whole country. River traffic occupies a very important place in the commercial and transport system of the country. For example, the La Plata, Parana, and Uruguay Rivers give direct communication with Montevideo, Rosario, Asunción, and other points in the northern Provinces, and the Republics of Uruguay and Paraguay; and many other rivers are navigable far into the interior. Overseas trade is carried on by ships under foreign flags, but coastwise and river traffic by ships flying the Argentine flag.

A brief consideration of the strike of the workers of the port of Buenos Aires, which occurred during the first three months of 1919, is necessary to a clear understanding of the port situation in 1920 and 1921, because it was during this strike that the "officialization" of port activities and personnel occurred. The strike of the port laborers and stevedores (sections of the F. O. M.) began early in January and completely tied up all shipping in the port. Wage increases were granted and work was partially resumed on February 2, but was followed at once by the refusal of the overseas and coastal shipowners' associations to continue operations, because the F. O. M. persisted in the use of the boycott, which the shipowners maintained was forbidden in the terms of settlement. The question at issue was no longer wages or working conditions but the right of the ship-

owners to choose their crews and to make freight contracts with whom they pleased without being subject to a boycott. By the middle of March the principal obstacle to a settlement was the demand of the workmen that they be paid for the time lost since February 2.

The presidential decree of February 22, "officializing" the port services was designed to solve the port deadlock by providing that upon application of the interested parties the Government would furnish the necessary personnel for manning coastwise vessels, tugs, and lighters, and for loading and unloading operations at the ports of the Republic, from a special register established for this purpose. But this measure proved of little effect, very few workmen enrolling for duty, and work was not resumed. Hence on March 15 a second decree was issued, providing that the customs department of the capital should, as a provisional measure, attend to the loading and unloading of vessels in the port of Buenos Aires. This measure proved partially successful in that the work of loading and unloading overseas vessels was resumed. The crews of the coastwise vessels and private tugs and lighters remained "out" until the presidential decree of March 28 extended Government control to river and coastwise shipping. Work was gradually resumed and by April 16 port conditions were almost normal. Though the port strike of approximately three months' duration was ended, the general feeling was that the trouble was not permanently settled, inasmuch as the big question of the unions' right to boycott was not mentioned in the negotiations and was still unsettled. In fact, the F. O. M. continued the use of the boycott, although the Argentine higher courts had decided the boycott was illegal.

The maritime workers' strike of 1920–21.—This strike is notable not only for its length, but for the intensity of the struggle and the numbers involved. On the one side was the powerful Argentine Navigation Co. (Nícolas Mihanovich) (Ltd.), backed by the National Labor Association; on the other, the Federation of Maritime Workers (F. O. M.), having the moral and financial support of the F. O. R. A. The former was fighting to establish and maintain its right to choose its crews regardless of membership in a union, the latter to compel the employment of federated personnel only, and to make effective the principles of the boycott and class solidarity.

A history of the strike, presenting the matter from the viewpoint of the F. O. M., expresses the belief that because of their activities and successes in promoting the welfare of the laboring class they were singled out by the capitalists for destruction, since the latter believed that if the F. O. M., the backbone of the labor movement, was broken the others could easily be crushed. Therefore, "without asking for any economic betterment, 5,000 workers quit work to defend their organization, knowing in advance that they had to fight a powerful enemy, which * * * was prepared for a resistance of six months." Unity was at all times maintained in the ranks of the organized workers, and this, with the measures taken to supply food to needy strikers and to furnish part-time employment on ships not affected by the strike, enabled the F. O. M. to hold out longer than any one expected.

In the current periodicals of Buenos Aires which expressed the opinions of those outside the ranks of labor, complaint is made that

the officialized port system had not had the promised effect, in that it had not reduced the number of conflicts or put an end to sudden stoppages of work; the significance of a strike in an officialized service is pointed out; and the "official tolerance of such criminal disregard of the responsibilities of public service as that shown by a body of seamen who, under the scheme of officialization applied to national shipping labor, are practically Government employees," is condemned.

The strike began early in February, 1920, with the boycott by the F. O. M. of Argentina of all boats of the Mihanovich Co. flying the Uruguayan flag, because of the refusal of the company to employ only members of the F. O. M. of Uruguay on them. All efforts at mediation failing, the boycott was extended to all boats of the company on February 12. The attempts of the Government to negotiate a settlement began in April and continued throughout the summer and fall without success. In September the Mihanovich Co. sold some of its ships and yards to the newly organized Uruguayan Navigation Co., a transaction which, it was believed, was designed to change the seat of the concern from Argentina to Uruguay.

The situation resulting from the continued paralysis of river service was further aggravated in September by the action of the laborers of the "officialized" port services in joining in the boycott declared by the warehousemen (not officialized). This at once affected overseas shipping and brought a protest from the Overseas Shipping Association, alleging that the customs department was not carrying out the provisions of the acts of May 26 and June 4, 1919. In October a decree was issued authorizing the Government to lease or requisition the steamers necessary to normalize river traffic, but this was never put into effect. Negotiations continued for several months longer, and early in March, 1921, a settlement was reached which either conceded or reserved for future settlement all the striker's demands. The Mihanovich Co. agreed to employ on its vessels under the Argentine flag only members of the F. O. M., to establish a joint tribunal for the settlement of disputes, to retransfer some ships from the Uruguayan to the Argentine register, not to interfere with the unionization of the personnel on its Uruguayan vessels, and to ask the Government of Paraguay to discontinue its officialized river service. The significance of this victory for the F. O. M. is summed up by the secretary-general of that organization as follows: "Concretely the recent victory signifies that the maritime labor unions and the unions of ships' officers have an effective control of everything that relates to work on shipboard and the formation of the crews."

The Buenos Aires port strike of 1921.—The arbitrary use of the boycott by the federated port workers of Buenos Aires and their refusal to handle goods brought by nonunion teamsters or members of the independent teamsters' union precipitated another conflict which resulted in the total paralysis of port activities for two weeks (May 9–23). It resolved itself into a bitter struggle over the question of the employment of nonunion labor in the port, which the National Labor Association had announced its intention of doing, beginning with May 9. On that date the Government absolutely closed the port to the "free" labor recruited by the National Labor Association, and in fact to almost everyone, to avoid trouble between the two groups of workers. As the federated workers refused to work, and

straightway declared a general port strike, there ensued for a fortnight a complete cessation of port activities, except passenger service, and this was soon interfered with because of the difficulty in loading coal and baggage. Many ships were diverted to other ports, especially La Plata, and when the federated port workers there declared a sympathetic strike, the provincial government provided adequate protection for the nonunion laborers who replaced them. The President and minister of finance held countless conferences with the federated port workers in the vain attempt to induce them to work along with nonunion labor.

On May 21 the minister of finance issued a decree providing for the resumption of port activities on the 23d, free access to the port being permitted to "all workers who possess the necessary qualifications for the execution of these services." An explanation of this decree being demanded, the Government declared its intention to open a register at the customs department on which anyone might enroll, union or nonunion, and to protect "free" labor. When the Government actually carried out its decision to protect nonunion labor in the port, both of the F. O. R. A.'s declared a general strike on May 31, but lack of support from within and without the ranks of labor soon caused it to fail, and by June 19 practically normal conditions prevailed in the port, union and nonunion labor working peaceably together.

An official statement concerning the settlement of the strike is as follows: "The syndical action on exceeding the legal course, even to violating principles as sacred as the freedom of labor * * * enunciated by Article 14 of the constitution, compelled a solution which seems destined to establish a new order of things in the most important port of South America." It is further stated that the strike was settled against the workers, not as workers but as a syndical group tending toward sedition.

What effect the decree of September 13, 1921, will have, remains to be seen. This decree completes the officialization of port activities and gives the customs department the sole right to provide personnel for every kind of port work, thus excluding the private contractors authorized to conduct port work under the decree of May 26, 1919. Such action by the Government was entirely unexpected and occasioned forceful protests from the shipping interests and the National Labor Association, since they fear it will reopen the whole question of the employment of "free" and federated labor in the port. The decree was to become effective on September 20, but this was postponed till October 1, and later indefinitely to give the Government time to study the questions raised in the protests.

The case of the boycott of the *Martha Washington*, a United States Shipping Board steamer operated by the Munson Line, should be mentioned in connection with the port strike, for it showed that the federated port workers would not hesitate to boycott a foreign ship, and, according to the Review of the River Plate, was really a "question of whether or not disputes between foreign shipping companies and their crews are to be subjected to the jurisdiction of the two stated local trade-unions," if such disputes arise in Argentine ports. Though arising from a trivial incident, the boycott lasted nearly six weeks, during which time the ship could not be unloaded, and be-

came the subject of diplomatic exchanges between the two countries. Finally the Argentine Government effected a settlement largely favorable to the complaining members of the crew, by itself taking the responsibility for granting these demands.

Strikes in other ports.—Many of the strikes in other ports were declared in sympathy with the Buenos Aires port workers. In general there was a greater tendency on the part of the provincial governments to furnish protection to nonunion labor recruited by the employers.

Unrest in the Rural Districts.

In general the manifestations of unrest in the rural districts were of a violent character, involving destruction of ranch buildings, fences, crops, sheep, and cattle, and frequently the intimidation of those who wished to remain at work. These disturbances were ascribed to the economic conditions already discussed, and to the activities of agitators among the rural workers and tenants who were extremely discontented and rebellious at their hard lot.

The lack of police forces in the Provinces and Territories adequate to protect life and property frequently necessitated the sending of Federal troops to preserve order. In 1920 a system of private mounted police was inaugurated in the Province of Santa Fe, paid and maintained by the interested parties to protect employees and property, but under the control of the Provincial Government. Recent reports from the Territory of Santa Cruz indicate that the Federal Government is about to establish a permanent gendarmerie to police the disturbed regions.

In 1920 and 1921 the principal centers of disturbance were the Territory of Santa Cruz, especially the Rio Gallegos section in the extreme south, the Territory of Rio Negro, and the Province of Santa Fe. According to a report from the governor of the Territory Santa Cruz, the reign of lawlessness which began in that Territory late in 1920, was due to the low wages and manner of payment, bad housing, and generally unsatisfactory working conditions. The situation was aggravated by the fact that the bottom had fallen out of the wool market. Through the mediation of the governor an agreement was signed on February 22, 1921, granting most of the workers' demands. In the meantime, however, the struggle had attained such violence and proportions that it necessitated the sending of Federal troops to quell the uprising in which over 2,000 persons were included. It ended in February, 1921, with the unconditional surrender of 400 armed strikers. About 200 others fled to the hills. A request for Government aid in September, 1921, to end the general strike which had lasted three months, and a report of severe fighting between troops and a force of bandits and strikers the latter part of November, showed that conditions were still extremely unsettled at that time.

Attitude of the Government and of the Public.

Frequent editorial comments in contemporary Argentine periodicals accused the Government of playing politics in its settlement of labor disputes; but when the Government finally yielded to the demands for guaranteeing the "freedom of labor" there was a general approval

of its firm stand on the part of the public. The police tactics of closing local union headquarters and the arrest of labor leaders under the "laws of social defense" were bitterly condemned and strenuously opposed by organized labor.

Although the President and some of the deputies repeatedly urged the enactment of additional social and labor legislation, especially an arbitration and conciliation law, and presented numerous bills, including a labor code which embodies the Washington and Geneva conventions, the congress did almost nothing, the principal legislation of this sort during 1920 and 1921 being the old-age pension law for employees of private companies engaged in public service enterprises, the house rents law, and the farm lease law.

The general apathy of the public in the face of these manifestations of unrest is frequently commented on by the press, but the Patriotic League did much to rouse the people to a realization of the trend of events. The fact that so many of the big enterprises are controlled by foreign interests, which the populace regard as exploiters of their country, inclines them to be sympathetic toward the strikers.

Chile.

Labor and Employers' Organizations and Political Parties.

A DESCRIPTION of the various labor and employers' organizations, and of the political parties is necessary to the full understanding of the situation in Chile.

Labor organizations.—Because of the homogeneous character of the population of Chile and the comparatively small foreign influence, trade-union development has come from within. The increased industrial activity and, consequently, greater demand for labor during the period of the World War made the working classes realize their importance and initiated a period of rapid growth of labor organization, as a result of which the trade-unions became powerful enough to compel large increases in pay and to emanicpate the working classes from the exploitation which they had hitherto suffered. At the present time the majority of the workers are united in one great federation (Gran Federación Obrera de Chile). The introduction of the "redondilla" system (see p. 35) in the ports and the favorable terms forced upon the shippers by the Government in 1919 led to the rapid growth of trade-unionism among the port workers, nitrate workers, and railwaymen of the north. Although the coal-mine workers of the south are organized they lack unity of purpose and action, because of not having a central mine-workers' organization. The railwaymen, the seamen, and the port workers appear to have the strongest organizations. The laboring class of Chile may be divided into two categories, the first of which includes the skilled laborers and artisans, railway workers, and other groups whose members are of a comparatively high order of intelligence. Their leaders are generally actuated by high ideals and an intelligent understanding of the needs of the working class. Many of the leaders of the national federation are of this class. The second consists of the mass of ignorant and improvident laborers in the nitrate fields, coal mines, and stevedore work.

The Industrial Workers of the World have attained considerable strength and influence especially among the port workers. In 1920 the membership was 28,000 in the mines, marine transport, and nitrate fields. Early in 1921 the Chilean courts decided that the I. W. W. is an illicit organization and that the members are liable to the penalties inflicted by the law. In August, however, its members were still allowed to hold public meetings and bear their banners in the streets, and no penalties had been imposed upon them.

Employers' organizations.—The increasing labor unrest led to better organization and cooperation on the part of the employers to defend their interests. As a result of studies made in 1920, concerning employers' associations in other countries, a new employers' association, La Asociación Nacional del Trabajo, was formed at Santiago in 1921, and includes the most important industrial undertakings of the country. Its aims are similar to those of the Asociación Nacional del Trabajo of Argentina.

The continued port strikes and disturbances in Valparaiso led to the organization of the General Association of Merchants (*Asociación General de Comerciantes*) by the leading business firms of that city to protect their interests in the struggle with the port workers and seamen.

Political parties.—In the 1920 elections the Liberal Alliance (*Alianza Liberal*), which advocates a very advanced program of social reform, for the first time elected its presidential candidate, and secured a majority in the lower house. The conservative party (*Unión*) still maintained its control of the Senate. Of the numerous minor parties mention should be made of the Socialists, whose strength is growing, as is evidenced by the fact that in March, 1921, the first two Socialist deputies were elected, both from the north. On December 31, 1920, the Socialist Party voted its adherence to the Third (Moscow) International.

Industrial and Economic Conditions.

Northern Chile is arid and produces nitrates (the chief export), copper, iron, and some other metals. It is entirely dependent upon the south for foodstuffs. The south is a virgin forest with abundant rainfall and produces coal and food supplies. Only about one-third of the country is capable of cultivation. Both for this reason and on account of the cheapness of labor, agriculture is carried on very intensively. The land is held in large estates by the governing class and farmed by tenants (*inquilinos*). For their services the latter receive a small money wage, the use of an acre or two of land, a wretched hut, and medical care in case of illness. The nitrate workers in the north and the factory workers in the cities are largely recruited from the inquilinos.

In the past there have been numerous instances of eviction of poor Chileans who, as renters from the Government or as squatters, had cleared little holdings, in order to sell the lands to the wealthy. According to an American Geographical Society research bulletin by Mark Jefferson, "nothing has done more to prepare Chile for the work of the Socialists and anarchists that are in evidence to-day than these evictions of poor Chileans in the interest of the rich people of the cities."

The sudden signing of the armistice caught the nitrate dealers with large stocks on hand for which there was no market. An acute situation ensued, not only for the industry but for the Government, since it was deprived of its chief source of revenue, the export tax on nitrate. This, with the lower rate of exchange, caused a financial crisis. Following the general shutdown in 1919, the nitrate "oficinas" gradually reopened during the latter part of 1919 and early in 1920. The second period of stagnation began late in 1920. The closing of most of the "oficinas" and also of the iron and copper mines produced a serious condition of unemployment in the north, where large numbers of the unemployed congregated in Iquique and Antofagasta. In January, 1921, 20,000 persons were reported out of work and the number was rapidly increasing. The Government, and in some cases the employers, furnished transportation to those who would go south. Some were employed temporarily in the harvest fields, but most of them gathered in Santiago and Valparaiso, causing a serious situation there. The President's message in June, 1921, states that there were then nine shelters in Santiago, with some 10,000 people in them, and that the National Labor Office had already placed 30,444 workmen in employment that year. The Government was obliged to embark upon a system of public works to supply employment, 20,000 men being so engaged in March. By June unemployment had assumed "stupendous proportions."

Causes of Unrest and Demands of Labor.

The general causes of unrest in Chile are both economic and political. Low wages, high cost of living, and the very great depreciation of the peso combine to fix a very low standard of living for the working people. In the nitrate fields of the north it appears that the disturbances have usually followed closely upon a sudden depreciation in the purchasing power of the workmen's wages. As the price of copper or nitrate fell in 1919 and the first part of 1920, wages were reduced considerably, but by August, 1920, there was a labor shortage in Tarapacá, which with the system in vogue of recruiting labor and the bidding against each other for labor by the employers, made the laborers very independent and led to far-reaching demands and many strikes. The Government commission on the social and economic problem of the north (Tarapacá and Antofagasta) in 1919, reported wretched housing conditions and in general a most unsatisfactory state of affairs. In the coal districts the causes of agitation were largely local, and were concerned with wages, hours, recognition of the union, arbitration boards, and reinstatement of discharged employees.

There is also a political basis for the existing unrest, because the labor Government, which came into power as a result of the 1920 election, has not redeemed its campaign pledges to labor to the extent that its supporters expected. The hopes of the laboring classes have been disappointed and political difficulties are feared if the Government should be forced to take a strong stand against labor.

The questions of the recognition of the unions and of the "open shop" were also frequently the cause of strikes. There is some revolutionary agitation in the north, especially in the nitrate ports, and in Punta Arenas in the extreme south

A bill to regulate the relations between labor and capital in industrial enterprises submitted to the President by the federation of labor in February, 1921, indicates some of the things labor desires: Profit sharing, representation of labor on the boards of management of "socialized" concerns, and arbitration courts. The code of labor proposed by the President and not yet acted upon includes legislation on invalidity and old-age pensions, conciliation and arbitration courts, a revision of the workmen's compensation law, and the creation of a department of labor to supplant the present bureau, which has little more than advisory powers.

Manifestations of Unrest.

The coal strikes and the port strikes and lockouts are the outstanding features of the industrial unrest manifested in 1920 and 1921. Aside from these there were scattered strikes involving comparatively small numbers. Official figures are available for only the first half of 1920. During this period 38 strikes occurred of which 23 were for wage increases, 11 for reasons of solidarity, and 4 for other reasons. Of the total number 1 was won by the strikers, 20 were settled by compromise, 16 were lost, and 1 was settled by an arbitral award granting some of the strikers' demands. Punta Arenas in the Territory of Magellanes was the center of considerable disturbance. Resentment at the alleged unpatriotic attitude of the federation led to the destruction of the headquarters of the Federación Obrera de Magellanes on July 27, 1920, during an encounter between some of the workmen and the White Guard, an organization which had originated during a recent patriotic movement. This resulted in the declaration of a general strike as a protest, the arrest of the labor leaders, and the suppression of their paper by the authorities. Acts of violence similar to those in the adjoining Argentine territory were committed by the camp laborers and others employed in the sheep and wool industry.

On October 3, 1921, Punta Arenas was reported as being still entirely cut off from the rest of the Republic by the general strike which had been declared some time before and which, by preventing the export of wool, was creating a desperate situation in the Territory.

Coal strikes.—The strikes in the coal-mining regions of the south in 1920 are significant not only for the gains to labor in improved working conditions, wages, and hours, but also for the effects on the economic and industrial life of the whole nation. Chile is largely dependent on her domestic coal supply for the State railways, manufacturing industries, and light and power, only about one-fourth of the amount used ordinarily being imported. Moreover, because of the rate of exchange in 1920 the price of imported coal was almost prohibitive, and the miners had prevented the building up of adequate reserves. It should be recalled, too, that the nitrate regions are entirely dependent upon the south for food and other supplies. Therefore a serious situation resulted from the greatly reduced production of 1920. At times freight service was entirely suspended and passenger service badly crippled. The cost of living was greatly increased and the general unrest augmented.

The first strike began on February 23, 1920, and lasted 79 days. In April it was reported to have affected between 6,000 and 10,000 men and to have cut production about 65 per cent. The men demanded an increase of wages, the eight-hour day, recognition of the union, and the creation of a permanent commission to present their claims. The company refused to arbitrate the matter until the men returned to work, and a deadlock ensued until the latter part of April when the Government succeeded in arranging a basis of arbitration. The arbitrator's decision granted wage increases and the permanent commission, but merely "advised" an eight-hour day; under this decision unions were permitted to exist, but the companies were not compelled to recognize them, nor to pay wages for the strike period.

The report of a commission appointed by the Government on March 19, 1920, throws considerable light on conditions in the coal fields. This report, dated May 10, shows 14 mines employing ordinarily about 11,000 men, at an average daily wage of 5.61 pesos ($2.05 par). It points out that while the price of coal increased 876 per cent in the period 1909 to 1920, wages increased only 58 per cent, and that in the 10-year period (1911–1919, inclusive) the cost of living had risen about 63 per cent. The conditions prevailing in the coal regions are reflected in the following conclusions of the commission, that—(1) wages are too low to meet the cost of living; (2) wages should be paid at least every two weeks; (3) hours are too long; (4) strict compliance with the workmen's compensation law should be required. Other conclusions concerned housing, company stores, medical and hospital service, and conciliation and arbitration tribunals in the coal industry.

The stocks of coal that had accumulated at the mines during the period of overproduction that had preceded the strike were by this time depleted, and the companies upon resuming work found it impossible to bring production up to normal. The men were dissatisfied because the 8-hour day had not been imposed, and having become conscious of their power, worked irregularly, thereby reducing the output and rendering it impossible to lay up a reserve. In some places they enforced the 8-hour day, but worked only about six hours. By July many industries were closed or running half time, light and power service was crippled, and the railroads were unable to transport perishable products. In fact, such a serious condition prevailed that the minister of industry visited the colliery districts and arranged the following terms: The reinstatement of discharged miners; a 10-hour day, but only eight hours of actual work; and a reduction of idle time through the abolition of extra holidays.

For a time production was slightly improved, but new disagreements arose over the settlement of the old grievances and the agitation continued. A strike was averted by a new settlement effected on October 15 through the mediation of a Government representative. The agreements entered into between the companies and their men provided for three 8-hour shifts beginning January 1, 1921, a system of accident insurance to be arranged by the companies, a pension fund under joint management, a permanent conciliation commission, representation of the miners on the board of directors, and agreement on the part of the men not to strike without previous

warning. The previous wage awards remained unchanged. These agreements were to be binding until December 31, 1921.

This settlement proved not entirely satisfactory and a new strike began November 13, with no definite demands. However, on the 17th the miners decided to continue the strike until the permanent conciliation tribunal was established. A desperate situation prevailed throughout the country because of the coal shortage, the strikers were losing the sympathy of the working classes, and the Government was handicapped in its efforts to settle the matter by the fact that the administration was about to change. However, on November 29, the strike was ended through the personal intercession of President-elect Alessandri, who promised a sympathetic consideration of the strikers' demands and agreed to use his influence to have favorable legislation passed. During 1921 comparatively peaceful relations existed between the companies and the miners.

Port strikes.—The port strikes in Chile were in general similar in purpose to those in Argentina except that the federations of Chilean port workers and seamen, being newer and weaker organizations, were unable to hold such complete control in the ports as did their Argentine comrades. Even so, they were able to cause serious loss and interruption to the nation's commerce. Sudden strikes with little or no provocation were characteristic, especially in the case of the seamen, dock laborers, and stevedores. Effective use of the boycott was sometimes made.

A fertile source of trouble in the ports was the "redondilla," or rotary system, whereby port laborers were organized into gangs, each gang taking its turn in the work in the order of the arrival of the steamers. When the port workers' federation requested the introduction of this system in 1919 on the ground that it would more evenly distribute the port work during slack periods, neither Government nor employers realized the effect it would have. Under it the employers were unable to choose their men or dismiss them for inefficient work, damage to the cargo, or pilfering. The employers of Antofagasta and other ports repeatedly besought the Government to repeal the law establishing the system, and this was recently done (decree of Oct. 24, 1921).

Three of the nitrate ports—Antofagasta, Iquique, and Mejillones—and Valparaiso were principal points of disturbance. In the port of Antofagasta six strikes occurred in 1920, and four had occurred in 1921 up to August 30. The strike in the nitrate ports in June and July, 1920, seriously affected the cost of living in those places by hindering the importation of foodstuffs. At Iquique, where the strike started, one of the objects was to force all the workers to join the federation. The strike in Valparaiso at about the same time collapsed after the arrest of its I. W. W. leaders early in August. A permanent employers' committee arranged terms of settlement in which the men agreed to give 30 days' notice before striking again, and repudiated the I. W. W. The maritime governor was to draw up a register of all port workers. No worker not on this register was to be employed by the contracting parties. Wages were to be readjusted by a joint committee.

A strike of seamen and port workers in January, an arbitral award in February which proved unacceptable to the General Association

of Merchants, constant disputes as to the interpretation of this award, and a settlement somewhat favorable to the employers effected by the minister of the interior in March in order to avert the threatened lockout on March 28, are the principal features of the Valparaiso port situation in the first part of 1921. Meanwhile such a chronic state of strike had come to prevail among the bay laborers at Antofagasta that in March foreign shipowners were threatening to omit the port from their itinerary. The situation in Antofagasta and other nitrate ports was aggravated by the fact that the strikes in Valparaiso had made it almost impossible to send provisions, and food prices increased greatly. The unemployment caused by the closing of the nitrate plants added to the seriousness of the problem.

In the latter part of September, 1921, the leaders of the labor federation in Antofagasta were reported to be forming a port corporation consisting of all the port workers for the purpose of eliminating the middleman and ending stoppages of work. Business interests were somewhat apprehensive that this might result in a monopoly or, as some called it, a "port soviet."

The settlement of Valparaiso port difficulties in March, 1921, proved to be only temporary, for by August the increasing power of the I. W. W. among the bay workers and their extravagant demands led the General Association of Merchants to decide on a general lockout of bay workers on August 18. A week's notice was given, a register and a labor exchange were opened, and in a few days over 2,000 men enrolled. I. W. W. members were barred. Work was partially resumed on the 25th with the wages and hours as fixed in previous agreements, but the lockout against the I. W. W. continued. The latter therefore declared a general strike on the 30th, but it proved futile. The latest available reports show that port work in Valparaiso is now proceeding smoothly.

Peru.

Labor Organization.

THE transformation from mutual benefit societies to real trade-unions seems to have started rather recently in Peru. Labor Overseas (London) reports that what is said to be the first Peruvian trade-union was formed by the railwaymen in December, 1919. There are three important labor organizations: The Centro Progreso de Propaganda y Solidaridad, the Partido Obrero de Perú, and the Centro Internacional Obrero del Peru. The last mentioned is affiliated to the Second (Amsterdam) International and in December, 1920, had 25,000 members. The fact that the laboring classes of Peru are largely Indians and mestizos, or mixed-bloods, makes the work of organization more difficult.

Industrial and Economic Situation.

The general industrial depression of 1920 and 1921 seems to have been felt perhaps less in Peru than in some other South American countries. However, the mining industry was seriously affected; in August, 1921, 42 of the 50 leading copper mines were reported idle. The mines and smelters were closed and all the employees

except watchmen and caretakers were discharged. Textile mills, too, were affected. Some wage reductions were reported in the latter part of 1921.

In order to concentrate action for reducing the cost of living the Bureau of Supplies (*Dirección General de Subsistencias*) was created by the decree of September 3, 1919. In the following March a decree was issued limiting and regulating retail prices of articles of prime necessity and fixing the rental rates in effect on March 15, 1920, as the maximum. The cost of living index number was 188 in 1919, 209 in 1920, and 204 for the first half of 1921 (1913=100).

Causes and Manifestations of Unrest.

In his message of July, 1920, President Leguia refers to "the increasing number of strikes and general strikes, together with the disorders which, thanks to the anarchistic propaganda that (in the majority of cases) is incidental thereto, caused the creation of the labor bureau in the ministry of development (*fomento*)" to effect peaceful settlements of such conflicts through arbitration as provided in the "fundamental law." Another measure designed to prevent or control strikes was the compulsory arbitration decree of May 12, 1920, which provided drastic measures for repressing labor disorders and punishing professional agitators.

The enactment of this measure led to a general strike in Callao and Lima on May 24. Besides demanding the abolishment of compulsory arbitration the strikers asked for a 50 per cent increase in wages, a 50 per cent decrease in rents, a decrease in the cost of living, and hygienic conditions and facilities for first-aid treatment in factories and workshops. The strike proved only partially effective and did not last long. The determined attitude of the Government and the declaration that if need be the decree of May 12 would be enforced were said to have helped to end the strike quickly. A decree was issued on May 24 authorizing the organization of a foreign mercantile urban guard regiment, to protect business property.

Strikes of dock workers in Callao in September and December, 1920, crippled port operations for a time. The former was settled by an agreement between the stevedores' union and the representatives of the shipping interests, in which the men agreed to work the full 8 hours and the companies agreed to an overtime rate of time-and-a-half. No special disturbances in the ports are reported for 1921.

A two-months' strike of cotton-mill workers, two strikes on the Central Railway in 1920, and a general strike of eight days on the same line in August, 1921, were some of the more important industrial disputes. One of the claims put forward in the last-mentioned strike was that no member of the union should be discharged without the consent and approval of the railway workers' federation. This strike was ended through the intervention of the Government and the arrest of some of the leaders, claimed to be professional agitators.

Desire for increased wages, reduction of cost of living and rents, and reinstatement of discharged employees appeared to be most frequently the reasons for the strikes. As the 8-hour day was prescribed by law in 1919, hours were not usually a matter of dispute, except when the 44-hour week was demanded. Among other social

and labor legislation in Peru are the accident insurance law of 1911, the obligatory rest law of 1919, and the woman and child labor law of 1918 (amended 1921).

Other Countries.[2]

Brazil.

IN Brazil the population is chiefly agricultural and the labor and socialist movement is not very extensive. Labor organization was begun by the German and Italian immigrants in Rio de Janeiro, Bahia, and Sao Paulo. The sentiment of Brazilian labor is reflected in the declaration of sympathy with the Third (Moscow) International, made in 1920 by the third congress of workers, which claimed to represent nearly a half million persons. A Socialist Party was formed in 1916 and a Communist Party in 1919. The latter is affiliated to the Third (Moscow) International. The stevedores at Santos and Rio de Janeiro have been often engaged in strikes during the last two years. Foreign agitators were blamed for some of the disturbances and this resulted in numerous arrests and some deportations. The general strike attempted on September 18, 1920, proved almost completely unsuccessful by the middle of October. Serious unemployment was reported in June, 1921, and conditions were still bad in October as evidenced by the return of over 1,000 Portuguese to Portugal because they had been unable to find enough work to make a living.

According to a report of the British Department of Overseas Trade, "not only has living always been dear in Brazil, but the standard of life, especially in Rio Janeiro, has been very expensive. These conditions obtained long before the war, but they have been aggravated during the last five years." High import duties are said to be the principal reason for this condition. In 1919 Government statistics showed that cost of living had increased 306 per cent over 1893, and since 1919 there has been a further increase.

Uruguay.

The growth of trade-unions in Uruguay has been greatly influenced and actively promoted by Argentine organized labor, especially by the more extreme elements. In fact, one of the questions at issue in the big maritime workers' strike in Argentina was the right of the Uruguayan crews to become federated. Close cooperation was established at this time between the Federación Obrera Marítima Argentina and the Federación Obrera Marítima Uruguaya. The latter has not yet attained the strength and influence of the Argentine F. O. M. The central organization is the Uruguayan Federation of Trade Unions (*Federación Regional Obrera Uruguaya*). Both these organizations made effective use of the boycott.

The September, 1920, congress of the Socialist Party voted 1,297 to 175 for immediate and unconditional adherence to the Third (Moscow) International, and the April, 1921, congress confirmed this step by a similar majority. The Socialist Party is numerically weak,

[2] Lack of available information prevents a more extended treatment of the labor movement and industrial unrest in these countries.

and has but two seats in the Chamber of Deputies, because the majority withdrew to form the Communist Party.

At the beginning of 1920 from 20 to 30 per cent of the workers were unemployed and since then unemployment has increased to such an extent that in May, 1921, the National Labor Office was moved to present a bill to establish departmental employment offices because of the grave proportions which unemployment had reached.

Uruguay is said to have the most advanced social legislation of any Latin-American country. She has on her statute books laws providing for the prevention of industrial accidents (1914), an 8-hour day (1915), pensions for public service employees (1919), old-age pensions (1919), a compulsory rest day (1920), and workmen's compensation (1920). The house-rents law of June 20, 1921, fixes the rate on December 31, 1919, as the legal maximum for a period of three years from the date of promulgation of the law, and encourages house building by making certain tax exemptions. In May, 1921, two new sections were added to the National Labor Office—the industrial accident and the woman and child labor divisions.

Figures are not available to show the exact increase in cost of living at the present time. The official index number for food articles in 1918 was 126 and in 1919, 170 (1913 = 100).

The latest available official figures on strikes show that 42 strikes and 3 lockouts, affecting 11,615 workers, occurred during the first six months of 1920. There were frequent strikes during the remainder of 1920 and in 1921, much of the port trouble being in connection with the strike of maritime workers of 1920–21 in Argentina.

Paraguay.

The following excerpt from a commercial handbook on Paraguay, published by the United States Department of Commerce, (p. 128) shows the progress of labor organization in Paraguay in 1920:

> Paraguayan labor is rapidly becoming organized. Many of the trades now have their unions, and the tendency to organize is beginning to spread among the more unskilled class of workmen. The employees of stores are organized in an association known as the Sociedad de Empleados de Comercio. In 1915 a combination of several unions was formed as the Federación Obrera del Paraguay, or Workmen's Federation of Paraguay. The federation now has over 2,000 members, divided among 16 unions. The Centro Obrero Regional del Paraguay, a kind of workmen's central committee, was organized for the declared purpose of combating the increased cost of living.
>
> The work of organizing the laborers is largely done by the foreign element among them, as the natives, when left to themselves, are slow to organize. The most strongly organized and independent class of labor is that employed on the river steamers and as port workers.

The more extreme unions of Argentina have been active in directing the organization of Paraguayan workers. In this country, too, the F. O. M. of Argentina was able to secure the cooperation of the port workers in their long contest with the Mihanovich Co.

The greatly increased cost of prime necessaries, especially of wheat and wheat flour, the great shortage of houses, and the enormous increase of rents, combined with a serious state of unemployment resulting from the business depression, created an almost intolerable situation for the working class and the middle-class salaried employees, and led to many strikes to obtain wage increases.

During the greater part of 1920 Paraguay was seriously isolated from the outside world because its principal means of communication with the seacoast (aside from one railway line) was cut off on account of the maritime workers' strike. This strike, it will be recalled, lasted 13 months and compelled the Mihanovich Co., which had practically a monopoly of the service on the La Plata, Parana, and Paraguay Rivers, to lay up its vessels for most of the period. Because of the cessation of this service and the sympathetic strike movement among the port workers of Asuncion, the Government undertook the moving of produce on national and requisitioned ships with the aid of "officialized" crews. This led to frequent violent encounters between the federated port workers and sailors and the "officialized" crews.

In Asuncion a strike of tramway employees, which began on May 2, 1921, for the purpose of obtaining higher wages and the reinstatement of an employee, led to the declaration of a sympathetic general strike by the Workers' Federation on May 16 to compel the tramway company to accede to its employees' demands and to obtain the release of those workers whom the police had imprisoned. An adequate supply of "free" labor and adequate police protection reduced the effectiveness of the strike. On May 27, the granting of from 10 to 20 per cent wage advances ended the tramway strike and the next day all the unions resumed work.

Bolivia.

Bolivian labor is either Indian or half-breed, very few whites being found among the working class because of their caste prejudice against manual labor. Though both are slow workers the half-breed is more progressive and adaptable and more capable of becoming a skilled mechanic. The Indian, on the other hand, is more amenable to control and discipline, and more generally dependable. The Indians comprise the great mass of unskilled labor in the cities, on the farms, and in the mines. The native labor supply is small, this condition being somewhat aggravated by the migration of Bolivian workmen to the Chilean nitrate fields.

Labor is not highly organized. In only a few lines are there unions or associations of workmen, though there is at present a marked tendency in that direction, especially among the skilled workmen. Probably the strongest association is that of the employees of the Bolivia Railway, partly because of their close connections with their fellow workmen on the Chilean section of the through line from Antofagasta. Until recently strikes were unknown, but since 1919 they have been of more frequent occurrence. In order to settle labor disputes a decree was issued on September 29, 1920, requiring that from five to eight days' notice be given the public authorities if a strike or lockout is intended, and making provision for conciliation and arbitration in the settlement of disputes.

That greater interest is being taken in labor matters in Bolivia is evident from the establishment of a commission of social reforms to serve for four years beginning January 1, 1921, and make a thorough study of all matters connected with the labor and the Indian problems. The investigations and studies made by this commission are to serve as a basis for legislative reforms.

Ecuador.

The Ecuadorian Federation of Labor (*Confederación Obrera Ecuadoriana*) is of recent origin (October 9, 1920). Its object, as expressed in its constitution, is the moral, intellectual, economic, and material betterment of the working classes of Ecuador, through the better schools, adequate labor legislation, and department of labor, which they hope to secure. The workmen's compensation law passed September 30, 1921, may be to some extent due to this concerted demand for social legislation.

The emancipation of the peons by legislative decree in the latter part of 1919, was a very important legislative advance. All laws dealing with the peons were amended to afford them full protection. They may now work for whomever they please, and are no longer bound to the soil. All debts owing to their employers up to the date of their freedom were canceled.

Colombia.

The strike movement of 1919 led to the enactment of a conciliation and arbitration law, intended to prevent cessation of work or employment during arbitration proceedings. This was amended in October, 1920, to provide definitely for the three successive steps in the settlement of industrial disputes, i. e., direct settlement, conciliation, and arbitration. Until these provisions have been complied with, no stoppage of work may occur.

One of the problems yet to be solved is that of the Indian laborers.

The law of August 31, 1921, requiring the establishment of adequate hygienic measures to safeguard the health and well-being of the workmen employed by the petroleum companies, is evidence of increasing interest in the welfare of the working classes.

Conclusion.

IT IS difficult to draw general conclusions concerning the labor movement and unrest in South America, because of the diversity of conditions existing there. In general, however, it may be said that during the period under discussion considerable progress was made in the development of real trade-unions and the membership of labor organizations greatly increased. Labor is inclined to be somewhat radical, as is shown by the votes of adherence to, or at least sympathy with, radical international organizations. Ultraradical and revolutionary tendencies, in evidence in several countries, have led to the organization of "patriotic leagues," as in Argentina, Brazil, and Bolivia. Employers' associations increased greatly in numbers and strength as a result of the frequent contests with labor. Wage increases and better working conditions were quite general. Considerable progress was made along the lines of social and labor legislation. In several countries definite steps were taken by the Governments to regulate prices and reduce the cost of living. The desire to settle industrial disputes before they develop into strikes and lockouts led to the demand for conciliation and arbitration laws in many countries and to the enactment of several such laws.

Negro Migrations and Migrants.

TWO studies of changing conditions among Negroes have recently appeared which to some extent supplement each other, one [1] dealing with the intrastate migrations in Georgia which preceded the great northward movement of 1916–1918, and with some of the conditions which caused the latter, while the second [2] takes up a group of immigrants in a northern city, studies the conditions under which they live, and considers the question of their adaptability to the new environment.

The first study devotes much space to the status of the Negro in the agricultural regions of Georgia. After the Civil War many planters tried to continue raising cotton on something resembling the slave system, hiring their laborers, it is true, but working them in gangs under discipline and supervision approximating those of the ante bellum days. This was distasteful to the Negroes, and the more enterprising tried to establish themselves independently. The most successful became owners. Next were the cash renters, who paid a fixed money rent and worked their places as they pleased. Below these were various classes of tenants, working the ground on shares with varying degrees of independence, according to what portion of the initial expenses they bore, and at the bottom were the laborers with no stake in the soil. Up to 1910 there had been, on the whole, a gradual increase in the number of Negro landowners, and the thesis is worked out at some length that for the colored population the system of farm tenancy provided a step in the upward course, laborers rising to the status of share tenants, then to cash renters and finally to ownership.

From the standpoint of the large cotton raiser the best arrangement was that of working a plantation with hired hands, though cultivation by share tenants whose work could be directed and closely supervised was nearly as satisfactory. From the standpoint of the Negro by far the best arrangement was ownership, but to obtain this it was necessary that landholders should be willing to sell in comparatively small parcels to those anxious to buy, and to let on favorable terms to those not yet prepared to buy. Evidently, there was a conflict between the desires of the landholders and of the Negroes, and this conflict, the writer thinks, was an important cause of the migrations which preceded the northward movement.

> In a region of static agricultural conditions, where plantations continue to follow as closely as possible the old way, it is evident that young Negroes, as they grow up, must move off the farm. There is no opportunity for them except as their parents die. In many sections, however, the movement has gone so far as to cause an actual decrease in the acreage cultivated. The planters have insisted on conditions so unfavorable to the farm population that their labor supply has gradually dwindled, or they have worn out their lands with exhaustive cotton culture, and prefer to let them lie idle. The Negroes from these sections have moved into the sections where agricultural opportunities are better, and many of them have become detached from the soil and have gone to the city.

The rural migrations were largely of the laborer and the share tenant classes, and when the invasion of the boll weevil interfered

[1] Negro migration. Changes in rural organization and population of the cotton belt, by Thomas Jackson Woofter, jr. New York, 1920. 195 pp.
[2] The standard of living among 100 Negro migrant families in Philadelphia, by Sadie Tanner Mossell, Annals of the American Academy of Political and Social Science, November, 1921, pp. 173–218.

with cotton raising these two classes had nothing to restrain them from turning northward. The renters and owners, on the other hand, remained and constituted the stable class. After the northward movement had once started, however, its character changed considerably, owing partly to the amount of discussion it generated among the Negroes themselves.

This discussion has emphasized the social grievances of Negroes in the South, and since a distinct public opinion has been created, even among the masses of Negroes, the social causes have been playing a part in the migration.

They are, briefly: Injustice in the courts, lynching, denial of suffrage, discrimination in public conveyances, and inequalities in educational advantages. These are causes which may be expected to become more and more influential in the future.

Some attention is given to the effects of the migration upon the race, and to the conditions under which the migrants now live. The trend to the city has been much increased, a large proportion of the migrants going into the industrial cities of the North. The number of Negroes industrially employed has been increased by some 140,000 since 1916. The majority of these, it is pointed out, are in unskilled pursuits, though this seems to be a matter of labor policy rather than of the capacity of the workers.

Some plants have the deliberate policy of not admitting colored men except in the capacity of unskilled laborers, while others employ as many in skilled trades as apply qualified for the job, but state that the large majority are not qualified for skilled positions. Still others hold that there is no job in their shop which Negroes can not fill after a reasonable apprenticeship.

The author considers at some length the charge of strike breaking often raised against Negroes. The colored worker has some justification, he thinks, for feeling little responsibility for the outcome of a labor dispute in view of the attitude organized labor has generally taken toward him. There are very few locals which admit Negroes, most of the exceptions being in such groups as the hod carriers, the teamsters, and the paving men, where the number of Negroes is so large that the union is likely to be ineffective if they are not organized. The longshoremen and the packing-house employees are well organized, but their unionization was accomplished almost wholly under the War Labor Board rather than under peace-time labor leadership. Barring the colored man from the union often means using the whole strength of the union to keep him out of the trade, so that a strike may be his only chance for entrance.

When white union men strike it means that by doing so they give the colored laborer the first opportunity which he has had to fill a job for which he is trained, but from which he has been previously barred by the very union which accuses him of being a scab. In other words, in case of a strike, the Negro is presented with the alternative of being loyal to an organization which has discriminated against him or of exercising his first and perhaps only opportunity to employ his full degree of skill.

Where, however, Negroes have been admitted to unions freely and permitted to work at whatever their skill was equal to, they have usually proved loyal to their organization. Even in such cases, strike breakers are sometimes found among them, just as they are among the white workers. How to reach this class, the author admits, is a difficult problem, and one to which the experience of the white labor organizations with members of their own race does not hold out the hope of a speedy solution. Meanwhile, it is desirable to avoid racial friction where possible, and to move discreetly.

In general, in both industrial and social relations, the author feels that the effect of the migrations has been good. The diminution of the labor supply is tending to make the South pay more attention to improved methods of agriculture, to try diversified crops instead of depending entirely on cotton, and to increase the use of farm machinery. For the Negroes who have merely migrated from the Black Belt to other parts of the South, the effect is good, because they are more interspersed with a white population, "they have more chance to observe progressive farming and industrial methods and attain a higher standard of living, and they are in a position to benefit by the better roads and public works of the areas which have a larger proportion of white people in the population, and a higher per capita wealth." For those who have gone to the North and crowded into the industrial cities, there is often a period of aggravated racial prejudice, but even here they are apt to find better institutions and a fuller participation in the community life.

The second study approaches the question from the standpoint of the Negroes already in the North who found themselves almost overwhelmed by the influx of their own race, coming mainly from agricultural regions and unused to city conditions. Philadelphia, it is estimated, received 40,000 immigrants during the period 1916–1918, the majority being unskilled laborers who came, or were brought, to work on the Pennsylvania Railroad or in the great steel and munitions plants. The migration began in the spring of 1916, and from that time onward the normal rate of influx was 150 a week, until the spring of 1918, when there was a rapid increase. "Eight to ten thousand arrived during the months of April, May, and June alone. After this time, however, the migration dropped back to its normal numbers." With the signing of the armistice the demand for unskilled labor slackened, and the migration diminished accordingly.

An influx of such size was not easily assimilated, and difficulties of many kinds were met. Housing was a tremendous problem. So was education, and the provision of proper recreation for the newcomers, and the safeguarding of their health, subjected to a double strain by the change from a southern to a northern climate and from country to urban conditions. The churches, the benevolent societies, social workers, and representatives of large industrial interests, all pressed a vigorous campaign for looking after the newcomers, providing suitable quarters for them, and enabling them to adapt themselves to the life of the city. Much was done, but along with this movement ran another of active hostility.

Their voluntary and cheerful efforts must not, however, be taken as an indication of the manner in which the Philadelphia public, white and colored, received the migrant. If we may judge the attitude of the whites by their efforts to segregate him, it would seem that he was highly unwelcome. The housing problem was itself a result of the determination on the part of the white people that the migrant should live only in that part of the city in which Negroes had previously lived. Vacant houses in other sections of the city were not for rent or sale to Negroes. The increase in Negro population greatly stimulated the movement, already on foot, to segregate Negro children in the schools. In numerous other occurrences the colored people of every class received harsh treatment at the hands of the white people. This was virtually unknown to the Philadelphia Negro, for the city had long possessed a relatively small population of Negroes of culture, education, and some financial means. They had always enjoyed the same social and educational facilities as the whites and

courteous treatment from them. But, with the increase in population by a group of generally uneducated and untrained persons, these privileges were withdrawn.

This led to a split among the Negroes themselves. One party felt that the migrants threatened to submerge the established population, and that they were a danger to be eliminated, if possible, while the other felt that the arrival of these newcomers gave an unexpected opportunity for spreading the benefits of the education and culture the old inhabitants possessed, and for raising materially the level of a large group of their race. This study was designed as a contribution toward a settlement of this difference.

Was the migrant to Philadelphia able to adapt himself to the environment of an industrial economy, and did his presence help or hinder the racial condition in that city? Believing that the standard of living maintained by a people is an index of the extent to which they have adapted themselves to a given environment, we have undertaken to analyze the incomes and expenditures of a group of migrant families in order to ascertain the character of their standards of living and thereby to judge of the degree of adaption obtained by them.

The district selected for study was one which before the migration had been occupied solely by whites and which had been given over entirely to the colored newcomers. A personal investigation was made of 100 families, dealing with income and expenditure in great detail. The investigation was made during the period October to December, inclusive, 1919. In tabulating the material obtained, income groups were arranged, as follows:

DISTRIBUTION BY SIZE AND INCOME OF FAMILIES STUDIED.

Income group.	Number of families.	Average number of persons per family.	Average income per family.
$767 to $1,067	6	4.5	$936.78
$1,068 to $1,368	22	3.5	1,253.00
$1,369 to $1,669	25	3.7	1,511.67
$1,670 to $1,970	22	3.0	1,866.98
$1,971 to $2,271	9	3.8	2,055.97
$2,272 to $2,572	4	2.2	2,459.27
$2,573 to $2,873	6	4.3	2,755.33
$2,874 to $3,174	2	4.0	2,922.50
$3,476 to $3,776	1	3.0	3,749.00
$4,078 to $4,378	1	9.0	4,189.00
$5,282 to $5,582	2	7.0	5,572.80

One hundred families, the author admits, is too small a number to justify definite conclusions. In the main, the father was the chief support, though 67 of the families had other sources of income. The families consisted of 371 persons, of whom 161 were wage earners; 96 of the 98 fathers, 52 of the 100 mothers, and 13, or 8 per cent, of the 173 children were gainfully employed. Twenty-seven of the wage earners were in semiskilled, skilled, or professional occupations, while the remaining 134 were laborers or domestics. In 33 families the father was the only wage earner, and all these families fell below the $1,971 income group. In only 9 families were children at work; 24 families added to their income by taking lodgers.

To test the expenditures, the families were all brought to their theoretic equivalents in adult males, and the amount expended per adult male for each purpose was compared with the amount called

for by the standard budget prepared by the Philadelphia Bureau of Municipal Research. Food was, of course, the primary item of expenditure. According to the standard budget, $3.71 per week was needed at that time and place to feed properly an adult male. In 75 per cent of the families this expenditure was reached or exceeded, and an examination of the food bought showed that in general the money was being reasonably spent, the choice and variety of food being good. Naturally, the failure to spend a sufficient amount on food was closely related to small incomes and large families. In the group with incomes falling below $1,068, just two-thirds of the families were insufficiently fed; in the group whose incomes ranged from that figure to $1,368, nearly one-third (31.8 per cent), and in the next income group, 24 per cent, were insufficiently fed. The manner of buying, however, left something to be desired, as 81 families were running accounts which were settled either weekly or every two weeks, 9 were buying for cash in small quantities, and only 10 were buying in quantity for cash, and getting the benefit of the economies which this method of purchase makes possible. The 81 who ran accounts did so partly because of the convenience of the method, and partly because "some families felt that it added to their prestige to be able to run a bill; everybody was not trusted to such an extent by the grocer."

Other items were not so easily measured as food, but they are carefully considered. In general, families consisting of more than three persons were found not to be spending for clothing the amount deemed necessary by the framers of the standard budget. Housing was very unsatisfactory, the complaints being not so much against the rents, though these were often too high, as against the condition of the houses and the difficulty of obtaining them at all. Less than half (45) of the families rented houses; 26 of these occupied the whole house, while the others subletted a part. Renting rooms was more expensive, considering the space obtained, but for 55 families it was a matter of necessity. Overcrowding was common, and was greatest, of course, in the low income groups.

Fuel and light, amusement, church, insurance, furniture and all the other items of a family budget are taken up in detail. In several of these the expenditures fell below what a standard budget would require, though sometimes there were modifying circumstances. Thus the average amount spent for amusement is phenomenally low, but the amount given to the church is relatively large, and investigation proved that these families were supplying through the active church life some of the social needs usually met by amusement enterprises.

All but two of the families carried insurance for at least one member, industrial insurance being the commonest form. Sixty families had made savings, the amount varying from $8 to $981 in the year. Nineteen showed a deficit; all of these were in the three income groups below $1,700, and in these groups the larger the family the greater the likelihood of a deficit.

Summing up, the author points out that in 64 families the income derived from all sources was sufficient to maintain a fair standard of living, but there were only 41 families in which the earnings of the father alone were adequate for this purpose.

Thus we see that the wage earners of about two-thirds of the families included in the study were able to enter the various fields of work afforded by an industrial city and to obtain incomes that were sufficient to provide a fair standard of living for their families, and that in nearly one-half of the families the chief breadwinner alone was able to secure such an income. When we recall that these families came chiefly from the agricultural districts of southern towns and counties it becomes apparent that the procuring of a fair living wage by so large a proportion is of particular significance.

The comparison of the actual expenditure of this income with the expenditures indicated by the standard budget seems to show that the migrants exercised good judgment in the matter of disbursements. Food, clothing, and rent are the leading items in any budget. The expenditure for rent was modified by the restrictions of race prejudice, so that in this item the discretion of the migrants had little room for exercise, but in regard to the other two the expenditures came very close to those of the ideal budget. Fifty-eight per per cent of the families spent almost exactly the amount set down for food, while 28 spent only $3 over this amount. The expenditure for clothing was singularly close to the budget amount, and the minor expenditures, except where racial discrimination interfered, showed few important variations.

It would seem, therefore, that over 50 per cent of the families whose budgets are included in this discussion, met all the provisions of the "Suggested budget," with the exceptions of insurance, recreation, housing, and consequently fuel and light. Furthermore, although the incomes of only 64 per cent of the families referred to were sufficient to secure them a fair standard of living, nevertheless such a standard was obtained by from 50 to 60 per cent of the families, or by from 78 to 93 per cent of those families whose income made its procuring possible.

The investigation reveals, the author thinks, three principal obstacles to the maintenance of a fair standard of living among the families studied, and as these obstacles are common to most migrants, they are discussed at some length. The first is the size of the family.

One of the most salient of the impediments was the large number of children to be cared for by a workingman. One hundred per cent of the families of a greater size than six were underfed, and less than one family in ten was underfed in families of two or three persons.

The proportion of families insufficiently clothed, overcrowded, insufficiently provided with medical care, recreation and other adjuncts to wholesome living was noticeably greater as the number in the family increased.

These facts seem to indicate conclusively that failure to maintain a fair standard of living was, in many cases, due to the large size of the family, and that a migrant was unable to provide such a standard if his family consisted of more than five persons.

The second obstacle noted is ignorance, resulting in unwise spending. The extent to which groceries were bought on credit and in small quantities is noted as due to this cause. In many instances, too much was paid for rent, and though this was largely due to the congested housing conditions, the author thinks that better terms could have been made had the migrants been more alive to the possibilities of the situation. Also, the types of insurance bought by most of the families "were expensive for the service they rendered, and ill fitted for protecting the insured. Better policies could have

been obtained, but the policyholders were usually ignorant of the fact."

A final hindrance to the obtaining of a fair standard of living, not only by the migrant families but by all the Negro families in Philadelphia, was racial prejudice. This made impossible the securing of many items which are requisite to such a standard. The newly built modern house was not for rent or for sale to Negroes. The houses most frequently obtained by them were in poor condition, old, and discarded by their former white tenants. This was true of all the dwellings in the neighborhood inhabited by the families whose budgets are included in the study. Yet the rental charges for such houses were maintained at a high figure. The most favorable types of insurance could not and can not be bought by a Negro workingman. Recreation appeared seldom in his budget, for the Negro was admitted to few places where it was offered. With such social conditions existing, money income has a depreciated significance in relation to the character of the standard of living maintained by a Negro family.

To meet these difficulties, the author urges that the Negro church should undertake a campaign to train Negroes in the art of living in its full sense; that they should put their funds into good housing rather than into expensive churches; that Negro business men should devote themselves to catering to their own race in the matters of housing, insurance, and recreation, taking special care to see that their own employees are paid full living wages; and that the city of Philadelphia should recognize its obligation to see that at least adequate housing is available to the colored people, who form over 100,000 of its population. By the adoption of these and similar measures, the author believes, the Negro migration may be turned into an unmixed advantage.

With the Negro church educating its legions of members as to the use and need of commodities which the Negro business man produces, and the municipality seeing that the necessary articles which the individual can not provide are secured, the most impeding dynamic influences which offset the obtaining of a fair standard of living by the Negro migrant will be overcome. By adopting such means to train the migrant and to remove racial handicaps, it is believed that generations hence will pronounce the migration of 1917–1918 to Philadelphia not the cause of the fall of the culture of the talented tenth, but the beginning of the spread of that culture to the Negro masses.

First Meeting of the Personnel Research Federation.

THE Personnel Research Federation, organized in March, 1921, under the auspices of the Engineering Foundation and the National Research Council [1] for the purpose of considering the practicability and possibility of securing cooperation among the many bodies investigating the personnel side of industry and commerce, held its first annual meeting November 21, 1921, at the headquarters of the National Research Council, Washington, D. C.

The morning program opened with an address [2] by Robert M. Yerkes, of the National Research Council, chairman of the federation, dealing with the elements entering into the human factors in industry and the relative importance of these elements. Alfred D. Flinn, of the Engineering Foundation, followed with a statement regarding the "Present status and plans of the Personnel Research Federation." At the initial meeting of the federation in 1920, which was attended

[1] MONTHLY LABOR REVIEW, February, 1919, pp. 71–78.
[2] This address is reproduced on pp. 11–18 of this number of the MONTHLY LABOR REVIEW.

by representatives of 40 organizations of manufacturers, labor, employment managers, engineers, physicians, education, economists, and social workers, the United States Bureau of Labor Statistics was requested to make a survey of existing agencies whose activities include studies and investigations concerning the relation of the worker to his job. This survey had in the meantime been made by J. David Thompson and published as Bulletin No. 299 under the title: "Personnel research agencies." Mr. Thompson spoke briefly on the results of the survey, expressing the hope that the bulletin, which is arranged in the form of a handbook for ready reference, would serve as a guide to organized research in employment management, industrial relations, training, and working conditions.

Reports of other studies by member organizations, made during the morning session included: "Basic experiments in vocational guidance," by C. S. Yoakum, director, bureau of personnel research, Carnegie Institute of Technology, Pittsburgh, Pa.; "An experimental study on retardation in relation to satisfaction on the job in a metal manufacturing plant," by Joseph W. Hayes, the Scott Co., Philadelphia, Pa.; "Intelligence examinations in the selection of engineering students," by L. L. Thurstone, Carnegie Institute of Technology, Pittsburgh, Pa.; and "Difficulties encountered in a cause of leaving research," by Anna Bezanson, Wharton School, University of Pennsylvania. Since vocational guidance is intended to direct persons to suitable occupations and to advise concerning necessary preparation for these occupations, Mr. Yoakum assumed that in order to actually carry out this program a knowledge of the nature of occupations and of human capacity must first be had. Basic experiments must therefore be made regarding the nature of the various occupations and the variations in human capacity. The first would involve research on the method of job analysis, degrees of responsibility, lines of promotion, and methods of training; the second, on the existence of human differences as shown in original and acquired traits, and on the relation of human differences to occupations. The importance of cooperative personnel research as the only means of "supplying the tools needed by the vocational adviser" was emphasized.

With a series of intelligence tests which were actually made in a metallurgical works, and from which he warned that sweeping deductions should not be made, since conditions in the various shops affected the results, Mr. Hayes discussed the relation, as found with the limitations mentioned, between mental alertness and status at leaving public school, and stability of work. He showed that a man's intelligence as measured by his ability to get on at school frequently determines whether or not he will be satisfied with certain occupations or work in certain departments. In his discussion of the intelligence examinations given by the Carnegie Institute of Technology in the selection of engineering students, Dr. Thurstone said that the entrance tests given by the institute showed that twelve times as many of the students in the lowest quarter of the entrance test dropped their work as from the highest quarter. He expressed the conviction that intelligence tests of this character should measure things other than mere intelligence. They should be a real service to the community in that they furnish the best available information for vocational

guidance through what they indicate of students' special fitness for certain occupations.

Two of the principal difficulties encountered by the Wharton School, University of Pennsylvania, in its cause of leaving research were, according to Miss Bezanson, the lack of understanding of just what information was needed and the fact that since the war very many employment managers had lost their jobs, thus eliminating the most direct and reliable source of information. Miss Bezanson emphasized the particular need of an occupational index.

The afternoon session was devoted to reports from different organizations on special lines of research now being pursued. Among these of special interest to labor, Ethelbert Stewart, Commissioner of Labor Statistics, speaking for the Bureau of Labor Statistics, all of whose work may be said to be along research lines, reported three studies at present under way, viz.: "A fair day's work"; "How cost of living figures are used in wage adjustment"; and "Shop committees." To these there has since been added a study of working conditions among agricultural wage earners in various countries. The Bureau of Industrial Research, according to a report made by Robert Bruère, is at present investigating: "The influence of mine conditions upon miners"; "Special problems of groups of workers in coal fields"; "Administration of the compensation law of Pennsylvania," and other subjects of interest to labor and industry. Mr. Flinn, of the Engineering Foundation, reported a study on "Vocational training;" Miss Hurt, of the Bureau for Vocational Information, a study on "Women in chemistry"; Mr. Wyckenden, of the American Telephone & Telegraph Co., a statistical series dealing with wages, training, and education of workers; Dr. Thompson, of the Public Health Service, a study on the "Effect of posture on health." Mr. Woll, representing Mr. Gompers and the American Federation of Labor, read Mr. Gompers' paper on "Personal research and organized labor," scheduled for the morning session, in which attention was called to two problems that Mr. Gompers had previously suggested as vital in the industrial field. One of these problems was the study of the relation between hours and output in continuous process industries and the other, an attempt to secure uniformity in job terminology in order to facilitate the work of an employment service. In addition, particular attention was called to the wage investigation now being conducted by the Federation. Owing to the opposition of the Federation to wages being fixed upon a cost-of-living basis, it is at present conducting an investigation into the principles of wage determination in all their aspects. Miss Boone, of the economic department of Bryn Mawr College, reported a study upon "Women in trade unions in Philadelphia," and said the department also hoped to make a study of the wage-payment system in the textile industry in Philadelphia in the near future. Carnegie Institute of Technology reported studies on "Job analyses of managers," "Interest analyses," and "Selection, training, and supervision of salesmen." Dr. R. R. Sayers, U. S. Bureau of Mines, described tests for detecting carbon monoxide in the blood and its effect upon the worker.

Bulletin on Personnel Research Agencies.

"PERSONNEL Research Agencies" is the title of a bulletin (No. 299) just issued by the United States Department of Labor, through its Bureau of Labor Statistics. It is intended to serve as a guide to organized research in employment management, industrial relations, training, and working conditions.

About a year ago a conference was held in Washington, D. C., under the auspices of the Engineering Foundation and National Research Council to consider the practicability of bringing about cooperation among the many bodies conducting research relating to persons employed in industry and commerce, from management to unskilled labor. This conference, which was attended by 40 representatives of organizations of labor, manufacturers, employment managers, engineers, physicians, educators, economists, and social workers, requested the Bureau of Labor Statistics to undertake a survey of existing agencies whose activities include studies and investigations relating to the employee and his job. The above bulletin contains the results of this survey arranged in the form of a handbook for ready reference. It describes the research activities of about 300 bureaus, associations, foundations, laboratories, and university departments, which deal with the problems of an employment manager's office, vocational psychology, wage systems, cost of living and budgets, employee representation, training of managers, foremen and workmen, whether in educational institutions or in the factory, the relation of hours of labor, fatigue, lighting, ventilation, food, etc., to output and health of workers, occupational diseases and health hazards in the various industries, safety codes and appliances for the prevention of accidents, and the special problems connected with the employment of women and young persons, immigrants, colored workers, the handicapped or disabled, and the mentally deficient or unstable.

The industrial engineer, the employment manager, the trade-union official, the educational director in retail store or factory, the vocational counselor in the public schools, the industrial physician, and the social worker will all find information useful to them in this compendium.

International Labor Conference at Geneva.[1]

THE Third International Labor Conference was held at Geneva, Switzerland, October 25 to November 19, 1921, with representation from nearly 40 Governments. Some 400 delegates and technical advisers were in attendance.

Lord Burnham, of Great Britain, the proprietor of the London Daily Telegraph, was elected president. Cincinato Da Silva Braga, one of the Government delegates from Brazil; Johannes Sigfrid, employees' delegate from Sweden; and Leon Jouhaux, workers' delegate from France, were elected vice presidents.

One of the early actions of the conference was to eliminate from the agenda the item on the adaptation to agricultural labor of the Wash-

[1] Sources: Mimeographed material from office of the American correspondent of the International Labor Office, Washington, D. C., and current numbers of the Daily Intelligence, Geneva, Switzerland.

ington conference's decisions relative to the regulation of hours of work. About the end of October committees were organized to consider the different propositions for discussion and to submit the result of their deliberations to the conference in plenary session. The items on the amended agenda are given below in italics. Under each subject is a brief résumé of some of the important provisions adopted in connection with that subject. An adopted convention does not come into force until the ratifications of two members of the International Labor Organization have been signed by the secretary general, and such convention is not binding upon any other individual member until that member's ratification is registered with the secretariat. In most of the conventions it is agreed that certain provisions thereof will be brought into operation by ratifying members not later than January 1, 1924.

Reform of Constitution of the Governing Body of the International Labor Office.

A decision was reached by the committee of selection, to which this subject was assigned, to refer the matter to the next conference, as the reform of constitution would involve a revision of some of the articles of the peace treaty. It was also decided to call upon the governing body of the International Labor Office to study and report to the next international conference on certain questions connected with the proposed alteration of such treaty.

Adaptation to agricultural labor of the Washington conference's decisions.

(*a*) *Measures for the prevention of unemployment.*

A draft recommendation was adopted that each member of the International Labor Organization should consider measures to prevent or provide against unemployment amongst agricultural workers, such measures to be suitable to the agricultural and economic conditions of each member's country. It is also recommended that with such suitableness in mind, each member should examine the advisability—

(1) of adopting modern technical methods to bring into cultivation land which is at present not worked or only partially developed, but which could by such means be made to yield an adequate return;

(2) of encouraging the adoption of improved systems of cultivation and the more intensive use of the land;

(3) of providing facilities for settlement on the land;

(4) of taking steps rendering work of a temporary nature accessible to unemployed agricultural workers by means of the provision of transport facilities;

(5) of developing industries and supplementary forms of employment which would provide occupation for agricultural workers who suffer from seasonal unemployment, provided steps be taken to insure that such work is carried on under equitable conditions;

(6) of taking steps to encourage the creation of agricultural workers' cooperative societies for the working and purchase or renting of land; and of taking steps to this end to increase agricultural credit especially in favor of cooperative agricultural associations of land workers established for the purpose of agricultural production.

(b) Protection of women and children.

A draft convention was adopted to prohibit the employment of children under the age of 14 years in public or private agricultural undertakings or branches thereof except "outside of hours fixed for school attendance." Such employment shall not be of a character prejudicial to school attendance. To facilitate practical vocational instruction school attendance hours may be so arranged as to allow "the employment of children on light agricultural work and in particular on light work connected with the harvest, provided that such employment shall not reduce the total annual period of school attendance to less than eight months."

The foregoing shall not be applicable to the work of children in technical schools "provided such work is approved and supervised by public authority."

A recommendation was adopted that members of the International Labor Organization take measures to regulate night work in agriculture for children and young persons so that those under 14 years of age shall be insured of a rest period of not less than 10 consecutive hours, and between the ages of 14 and 18 years a rest period of not less than nine consecutive hours.

A recommendation was adopted that each member of the International Labor Organization take steps for the regulation of women wage earners' employment in agricultural undertakings at night, so as to insure such workers a rest period of not less than nine hours. When possible such hours shall be consecutive.

A recommendation was adopted that the members of the International Labor Organization take steps to insure protection before and after childbirth to women wage earners in agriculture, such protection to be similar to that provided for women in industry and commerce by the Washington convention.

Special measures for the protection of agricultural workers.

(a) Technical agricultural education.

The following recommendation was adopted:

That each member of the International Labor Organization endeavor to develop vocational agricultural education and in particular to make such education available to agricultural wage earners on the same conditions as to other persons engaged in agriculture.

That a report be sent to the International Labor Office at regular intervals containing as full information as possible as to the administration of the laws, the sums expended, and the measures taken in order to develop vocational agricultural education.

(b) Living-in conditions of agricultural workers.

A recommendation was adopted that each member of the International Labor Organization, not having already done so, should take steps for the regulation of living-in conditions of agricultural workers, due consideration to be given to the special circumstances affecting agricultural labor in the country involved. Existing organizations of employers and workers concerned in such regulations are to be consulted. Provisions include heated rooms, unless climatic conditions make heating unnecessary; in accommodating groups of workers, a

separate bed for each worker; facilities requisite for personal cleanliness; separation of sexes; and, in the case of families, adequate accommodation for children. It is also recommended that "stables, cowhouses and open sheds should not be used for sleeping quarters."

(c) Guaranty of the rights of association and combination.

A draft convention was adopted providing that each member ratifying such convention shall endeavor to secure the same rights of association and combination to those engaged in agriculture as are accorded industrial workers, and to repeal any provisions "restricting such rights in the case of those engaged in agriculture."

(d) Protection against accident, sickness, invalidity, and old age.

A draft convention was adopted providing that each member of the International Labor Organization ratifying such convention undertake the extension to agricultural wage earners of the member's laws and regulations providing "compensation for personal injury arising out of or in the course of their employment."

A draft recommendation was adopted that each member of the International Labor Organization should extend to agricultural wage earners the member's laws and regulations providing insurance against sickness, invalidity, old age, and other social hazards of a similar character.

Disinfection of wool infected with anthrax spores.

A resolution was adopted to the effect that the economic and humanitarian aspects of the question of universal compulsory disinfection of wool and hair infected with anthrax have not yet been studied adequately enough to warrant the conclusion of an international convention. The conference therefore requested the governing body to appoint an advisory committee to study the question and report to the governing body in advance of the International Labor Conference of 1923. The conference was of the opinion that the cooperation of the United States should be invited. Such committee was also requested to make a separate report on the eradication of anthrax among animals, which the conference looked upon as "the ultimate solution of the problem."

Record was made in this resolution of the seriousness of the hazards to workers of infection by anthrax from skins, hides, and other materials and of the advisability of carefully studying this subject.

Prohibition of the Use of White Lead in Paint.

A draft convention was adopted providing that each ratifying member undertake the prohibition (artistic printing or fine lining exempted) of "the use of white lead and sulphate of lead and of all products containing these pigments in the internal painting of buildings," except where the use of such materials is regarded as necessary for railroad stations or industrial establishments, "by the competent authority after consultation with the employers' and workers' organizations concerned." No males under 18 and

no females shall be allowed in industrial painting work "involving the use of white lead or sulphate of lead or other products containing these pigments." For the education of apprentices in their trade exceptions may be made under certain conditions.

Prohibition shall take effect six years from the date of adjournment of the Third International Labor Conference.

Statistics as to both morbidity and mortality from lead poisoning among painters shall be secured.

This draft convention also includes the principles for regulating the use of white lead, sulphate of lead, and of all products containing such pigments in operations in which their use is permitted.

Weekly Rest Day in Industrial and Commercial Employment.

A draft convention was adopted providing that the entire staff in any public or private industrial undertaking or in any branch of such undertaking shall, with certain exceptions, enjoy in every 7 days a rest period of at least 24 consecutive hours. Wherever possible such period of rest "shall be granted simultaneously to the whole staff of each undertaking," but shall be fixed wherever possible to coincide with the traditional or customary rest days of individual countries or districts.

Persons employed in an industrial undertaking in which members of only one family are engaged are excepted from this weekly rest provision. The convention also provides for other exemptions.

A recommendation was also passed providing that measures be taken for the granting of a weekly rest day in commercial establishments.

Prohibition of Employment of Persons Under Age of 18 as Trimmers or Stokers.

A draft convention was adopted fixing the minimum age at which young persons may be employed on vessels as trimmers and stokers at 18 years. War ships are excluded from the term vessel. Exception is also made to school ships or training ships when the children's work is under public supervision and approval, to vessels "mainly propelled by other means than steam," and to work under certain other specified circumstances.

Medical Examination of Children Employed on Vessels

A draft convention was adopted providing that the "employment of any child or young person on any vessel other than vessels upon which members of the same family are employed, shall be conditional on the production of a medical certificate attesting fitness for such work, signed by a doctor approved by competent authority." War ships are excluded from this provision.

When young persons under 18 years of age are continued in employment at sea, they shall be subject to medical examinations at intervals not exceeding one year. Medical certificates attesting fitness for such work must also be presented as a result. Should the date of the expiration of a medical certificate arrive in the course of a voyage such certificate shall remain in force until the close of said voyage.

Resolution in re International Inquiry on Unemployment.

TOWARD the end of the conference there was considerable discussion on the world-wide tragedy of unemployment, and a resolution was passed instructing the International Labor Office to make an inquiry into the national and international aspects of the situation and to call into collaboration the financial and economic section of the League of Nations.

An amendment to the resolution was carried empowering the governing body of the International Labor Office to take the necessary steps "for the convocation of an international conference which would study the remedies of an international character likely to put an end to the unemployment crisis."

Close of the Sessions.

BEFORE the final adjournment of the conference on November 19, the president paid a high tribute to the work of the International Labor Office and urged organized publicity to make known in all parts of the world what is being done along international labor lines to carry out the "mandate of the Peace Conference."

PRICES AND COST OF LIVING.

Retail Prices of Food in the United States.

THE following tables are based on figures which have been received by the Bureau of Labor Statistics from retail dealers through monthly reports of actual selling prices.[1]

Table 1 shows for the United States retail prices of food on November 15, 1920, and on October 15 and November 15, 1921, as well as the percentage changes in the year and in the month. For example, the price of flour was 7.3 cents per pound on November 15, 1920; 5.4 cents per pound on October 15, 1921; and 5.1 cents per pound on November 15, 1921. These figures show a decrease of 30 per cent in the year and 6 per cent in the month.

The cost of the various articles of food,[2] combined, showed a decrease of 22 per cent in November, 1921, as compared with November, 1920, and a decrease of 1 per cent in November, 1921, as compared with October, 1921.

TABLE 1.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE NOV. 15, 1921, COMPARED WITH OCT. 15, 1921, AND NOV. 15, 1920.

[Percentage changes of five-tenths of 1 per cent and over are given in whole numbers.]

Article.	Unit.	Average retail price on—			Per cent of increase (+) or decrease (−) Nov. 15, 1921, compared with—	
		Nov. 15, 1920.	Oct. 15, 1921.	Nov. 15, 1921.	Nov. 15, 1920.	Oct. 15, 1921.
		Cents.	*Cents.*	*Cents.*		
Sirloin steak	Pound	43.5	37.4	35.7	−18	− 5
Round steak	do	39.6	32.9	31.0	−22	− 6
Rib roast	do	32.6	27.6	26.8	−18	− 3
Chuck roast	do	25.3	19.9	19.2	−24	− 4
Plate beef	do	17.7	13.2	12.8	−28	− 3
Pork chops	do	44.1	36.0	32.0	−27	−11
Bacon	do	53.0	41.2	39.7	−25	− 4
Ham	do	57.1	48.3	45.7	−20	− 5
Lamb, leg of	do	37.1	30.1	30.6	−18	+ 2
Hens	do	42.9	37.2	35.8	−17	− 4
Salmon, canned	do	38.7	33.3	32.7	−16	− 2
Milk, fresh	Quart	17.3	14.2	14.3	−17	+ 1
Milk, evaporated	15-16-oz. can	15.1	13.4	13.3	−12	− 1
Butter	Pound	69.4	53.2	53.1	−23	− 0.2
Oleomargarine	do	41.0	30.2	30.1	−27	− 0.3
Nut margarine	do	35.3	28.3	28.7	−19	+ 1
Cheese	do	39.8	32.9	33.3	−16	+ 1
Lard	do	28.9	17.2	16.6	−43	− 3
Crisco	do	31.4	21.5	21.5	−32	0

[1] In addition to monthly retail prices of food and coal, the bureau secures prices of gas and dry goods from each of 51 cities. Previous to 1921 prices of gas were published only in the June issue, but beginning in 1921 they appear in the July and November issues. Dry goods prices appear regularly in the April, July, October, and December issues of the MONTHLY LABOR REVIEW.

[2] The following 22 articles, weighted according to the consumption of the average family, have been used from January, 1913, to December, 1920: Sirloin steak, round steak, rib roast, chuck roast, plate beef, pork chops, bacon, ham, lard, hens, flour, corn meal, eggs, butter, milk, bread, potatoes, sugar, cheese, rice, coffee, and tea. The remainder of the 43 articles shown in Tables 1 and 2 have been included in the weighted agregates for each month, beginning with January, 1921.

TABLE 1.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE NOV. 15, 1921, COMPARED WITH OCT. 15, 1921, AND NOV. 15, 1920—Concluded.

Article.	Unit.	Average retail price on—			Per cent of increase (+) or decrease (−) Nov. 15, 1921, compared with—	
		Nov. 15, 1920.	Oct. 15, 1921.	Nov. 15, 1921.	Nov. 15, 1920.	Oct. 15, 1921.
		Cents.	*Cents.*	*Cents.*		
Eggs, strictly fresh	Dozen	86.1	58.9	69.5	−19	+18
Eggs, storage	do	66.2	44.1	46.4	−30	+ 5
Bread	Pound	11.6	9.5	9.3	−20	− 2
Flour	do	7.3	5.4	5.1	−30	− 6
Corn meal	do	5.9	4.3	4.2	−29	− 2
Rolled oats	do	11.5	9.8	9.7	−16	− 1
Corn flakes	8-oz. package	14.3	12.0	11.9	−17	− 1
Cream of Wheat	28-oz. package	30.4	29.7	29.7	− 2	0
Macaroni	Pound	22.0	20.4	20.4	− 7	0
Rice	do	14.2	9.3	9.4	−34	+ 1
Beans, navy	do	10.1	8.2	8.2	−19	0
Potatoes	do	3.3	3.5	3.2	− 3	− 9
Onions	do	4.3	6.5	7.5	+74	+15
Cabbage	do	3.5	4.8	4.6	+31	− 4
Beans, baked	No. 2 can	16.5	14.0	13.9	−16	− 1
Corn, canned	do	18.3	16.1	16.1	−12	0
Peas, canned	do	19.0	17.9	17.8	− 6	− 1
Tomatoes, canned	do	13.7	12.9	13.0	− 5	+ 1
Sugar, granulated	Pound	12.8	6.9	6.7	−48	− 3
Tea	do	73.6	69.1	69.1	− 6	0
Coffee	do	41.3	35.6	35.5	−14	− 0.3
Prunes	do	27.1	19.1	18.9	−30	− 1
Raisins	do	32.3	27.3	26.1	−19	− 4
Bananas	Dozen	46.6	38.8	37.8	−19	− 3
Oranges	do	67.4	56.6	52.8	−22	− 7
All articles [1] combined					−22	− 1

[1] See footnote 2, p. 57.

Table 2 shows for the United States average retail prices of specified food articles on November 15, 1913 and 1914, and on November 15 of each year from 1917 to 1921, together with the percentage changes in November of each of these specified years compared with November, 1913. For example, the price per pound of bread in November, 1913, was 5.6 cents; in November, 1914, 6.4 cents; in November, 1917, 9.9 cents; in November, 1918, 9.8 cents; in November, 1919, 10.2 cents; in November, 1920, 11.6 cents; and in November, 1921, 9.3 cents. As compared with the average price in November, 1913, these figures show the following percentage increases: 14 per cent in November, 1914; 77 per cent in November, 1917; 75 per cent in November, 1918; 82 per cent in November, 1919; 107 per cent in November, 1920; and 66 per cent in November, 1921.

The cost of the various articles of food, combined, showed an increase of 45 per cent in November, 1921, as compared with November, 1913.

TABLE 2.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE NOV. 15 OF CERTAIN SPECIFIED YEARS COMPARED WITH NOV. 15, 1913.

[Percentage changes of five-tenths of 1 per cent and over are given in whole numbers.]

Article.	Unit.	Average retail price Nov. 15—							Per cent of increase (+) or decrease (−) Nov. 15 of each specified year compared with Nov. 15, 1913.					
		1913	1914	1917	1918	1919	1920	1921	1914	1917	1918	1919	1920	1921
		Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*						
Sirloin steak	Pound	25.4	25.5	31.6	40.5	39.3	43.5	35.7	+0.4	+ 24	+ 59	+ 55	+ 71	+ 41
Round steak	do	22.8	23.4	29.7	38.5	36.2	39.6	31.0	+ 3	+ 30	+ 69	+ 59	+ 74	+ 36
Rib roast	do	19.8	20.3	25.1	32.0	30.2	32.6	26.8	+ 3	+ 27	+ 62	+ 53	+ 65	+ 35
Chuck roast	do	16.3	16.7	21.1	27.5	24.2	25.3	19.2	+ 2	+ 29	+ 69	+ 48	+ 55	+ 18
Plate beef	do	12.4	12.7	16.2	21.2	17.3	17.7	12.8	+ 2	+ 31	+ 71	+ 40	+ 43	+ 3
Pork chops	do	21.5	21.8	34.6	43.3	42.1	44.1	32.0	+ 1	+ 61	+101	+ 96	+105	+ 53
Bacon	do	27.2	28.2	48.4	58.3	51.0	53.0	39.7	+ 4	+ 78	+114	+ 88	+ 95	+ 46
Ham	do	26.9	27.4	42.6	52.4	50.5	57.1	45.7	+ 2	+ 58	+ 95	+ 88	+112	+ 70
Lamb	do	18.5	19.2	30.1	35.1	33.4	37.1	30.6	+ 4	+ 63	+ 90	+ 81	+101	+ 65
Hens	do	20.6	20.6	29.4	39.3	39.2	42.9	35.8	0	+ 43	+ 91	+ 90	+108	+ 74
Salmon (canned)	do	.....	.....	28.7	31.3	35.7	38.7	32.7	.....	.....	.....	.....	.....	.....
Milk, fresh	Quart	9.1	9.0	12.8	15.4	16.4	17.3	14.3	− 1	+ 41	+ 69	+ 80	+ 90	+ 57
Milk, evaporated	15–16 oz. can.	.....	.....	.....	.....	16.8	15.1	13.3	.....	.....	.....	.....	.....	.....
Butter	Pound	38.7	39.3	52.7	66.8	75.4	69.4	53.1	+ 2	+ 36	+ 73	+ 95	+ 79	+ 37
Oleomargarine	do	.....	.....	.....	.....	43.0	41.0	30.1	.....	.....	.....	.....	.....	.....
Nut margarine	do	.....	.....	.....	.....	35.8	35.3	28.7	.....	.....	.....	.....	.....	.....
Cheese	do	22.5	23.0	34.5	40.6	43.0	39.8	33.3	+ 2	+ 53	+ 80	+ 91	+ 77	+ 48
Lard	do	15.9	15.6	32.7	34.2	36.5	28.9	16.6	− 2	+106	+115	+130	+ 82	+ 4
Crisco	do	.....	.....	.....	.....	37.8	31.4	21.5	.....	.....	.....	.....	.....	.....
Eggs, strictly fresh	Dozen	49.7	45.1	58.1	74.1	81.0	86.1	69.5	− 9	+ 17	+ 49	+ 63	+ 73	+ 40
Eggs, storage	do	34.3	31.3	44.7	54.1	61.8	66.2	46.4	− 9	+ 30	+ 58	+ 80	+ 93	+ 35
Bread	Pound	5.6	6.4	9.9	9.8	10.2	11.6	9.3	+ 14	+ 77	+ 75	+ 82	+107	+ 66
Flour	do	3.3	3.7	6.9	6.7	7.4	7.3	5.1	+ 12	+109	+103	+124	+121	+ 55
Corn meal	do	3.1	3.3	7.1	6.5	6.6	5.9	4.2	+ 6	+ 29	+110	+113	+ 90	+ 35
Rolled oats	do	.....	.....	.....	.....	9.2	11.5	9.7	.....	.....	.....	.....	.....	.....
Corn flakes	8-oz. pkg.	.....	.....	.....	.....	14.1	14.3	11.9	.....	.....	.....	.....	.....	.....
Cream of Wheat	28-oz. pkg.	.....	.....	.....	.....	25.2	30.4	29.7	.....	.....	.....	.....	.....	.....
Macaroni	Pound	.....	.....	.....	.....	19.6	22.0	20.4	.....	.....	.....	.....	.....	.....
Rice	do	8.7	8.8	11.4	14.0	17.6	14.2	9.4	+ 1	+ 31	+ 61	+102	+ 63	+ 8
Beans, navy	do	.....	.....	18.9	16.1	12.3	10.1	8.2	.....	.....	.....	.....	.....	.....
Potatoes	do	1.8	1.4	3.1	3.3	3.9	3.3	3.2	− 22	+ 72	+ 83	+117	+ 83	+ 78
Onions	do	.....	.....	5.8	4.0	6.9	4.3	7.5	.....	.....	.....	.....	.....	.....
Cabbage	do	.....	.....	.....	.....	4.5	3.5	4.6	.....	.....	.....	.....	.....	.....
Beans, baked	No. 2 can	.....	.....	.....	.....	17.0	16.5	13.9	.....	.....	.....	.....	.....	.....
Corn, canned	do	.....	.....	.....	.....	18.9	18.3	16.1	.....	.....	.....	.....	.....	.....
Peas, canned	do	.....	.....	.....	.....	19.1	19.0	17.8	.....	.....	.....	.....	.....	.....
Tomatoes, canned	do	.....	.....	.....	.....	16.1	13.7	13.0	.....	.....	.....	.....	.....	.....
Sugar, granulated	Pound	5.4	6.2	9.6	10.8	12.5	12.8	6.7	+ 15	+ 78	+100	+131	+137	+ 24
Tea	do	54.5	54.7	61.8	67.9	71.3	73.6	69.1	+0.4	+ 13	+ 25	+ 31	+ 35	+ 27
Coffee	do	29.8	29.6	30.3	30.8	48.9	41.3	35.5	− 1	+ 2	+ 3	+ 64	+ 39	+ 19
Prunes	do	.....	.....	16.6	18.4	30.2	27.1	18.9	.....	.....	.....	.....	.....	.....
Raisins	do	.....	.....	14.8	15.8	22.7	32.3	26.1	.....	.....	.....	.....	.....	.....
Bananas	Dozen	.....	.....	.....	.....	39.9	46.6	37.8	.....	.....	.....	.....	.....	.....
Oranges	do	.....	.....	.....	.....	54.2	67.4	52.8	.....	.....	.....	.....	.....	.....
All articles combined[1]		.....	.....	.....	.....	.....	.....	.....	+0.4	+ 48	+ 75	+ 83	+ 84	+ 45

[1] See footnote 2, p. 57.

Table 3 shows the changes in the retail price of each of 22 articles of food [3] as well as the changes in the amounts of these articles that could be purchased for $1, each year, 1913 to 1920, and in November, 1921.

TABLE 3.—AVERAGE RETAIL PRICES OF SPECIFIED ARTICLES OF FOOD AND AMOUNT PURCHASABLE FOR $1, IN EACH YEAR, 1913 TO 1920, AND IN NOVEMBER, 1921.

Year.	Sirloin steak.		Round steak.		Rib roast.		Chuck roast.		Plate beef.		Pork chops.	
	Average retail price.	Amt. for $1.	Average retail price.	Amt. for $1.	Average retail price.	Amt. for $1.	Average retail price.	Amt. for $1.	Average retail price.	Amt. for $1.	Average retail price.	Amt. for $1.
	Per lb.	*Lbs.*	*Per lb.*	*Lbs.*	*Per lb.*	*Lbs.*	*Per lb.*	*Lbs.*	*Per lb.*	*Lbs.*	*Per lb.*	*Lbs.*
1913	$0.254	3.9	$0.223	4.5	$0.198	5.1	$0.160	6.3	$0.121	8.3	$0.210	4.8
1914	.259	3.9	.236	4.2	.204	4.9	.167	6.0	.126	7.9	.220	4.5
1915	.257	3.9	.230	4.3	.201	5.0	.161	6.2	.121	8.3	.203	4.9
1916	.273	3.7	.245	4.1	.212	4.7	.171	5.8	.128	7.8	.227	4.4
1917	.315	3.2	.290	3.4	.249	4.0	.209	4.8	.157	6.4	.319	3.1
1918	.389	2.6	.369	2.7	.307	3.3	.266	3.8	.206	4.9	.390	2.6
1919	.417	2.4	.389	2.6	.325	3.1	.270	3.7	.202	5.0	.423	2.4
1920	.437	2.3	.395	2.5	.332	3.0	.262	3.8	.183	5.5	.423	2.4
1921: November	.357	2.8	.310	3.2	.268	3.7	.192	5.2	.128	7.8	.320	3.1

Year.	Bacon.		Ham.		Lard.		Hens.		Eggs.		Butter.	
	Per lb.	*Lbs.*	*Per lb.*	*Lbs.*	*Per lb.*	*Lbs.*	*Per lb.*	*Lbs.*	*Per doz.*	*Doz.*	*Per lb.*	*Lbs.*
1913	$0.270	3.7	$0.269	3.7	$0.158	6.3	$0.213	4.7	$0.345	2.9	$0.383	2.6
1914	.275	3.6	.273	3.7	.156	6.4	.218	4.6	.353	2.8	.362	2.8
1915	.269	3.7	.261	3.8	.148	6.8	.208	4.8	.341	2.9	.358	2.8
1916	.287	3.5	.294	3.4	.175	5.7	.236	4.2	.375	2.7	.394	2.5
1917	.410	2.4	.382	2.6	.276	3.6	.286	3.5	.481	2.1	.487	2.1
1918	.529	1.9	.479	2.1	.333	3.0	.377	2.7	.569	1.8	.577	1.7
1919	.554	1.8	.534	1.9	.369	2.7	.411	2.4	.628	1.6	.678	1.5
1920	.523	1.9	.555	1.8	.295	3.4	.447	2.2	.681	1.5	.701	1.4
1921: November	.397	2.5	.457	2.2	.166	6.0	.358	2.8	.695	1.4	.531	1.9

Year.	Cheese.		Milk.		Bread.		Flour.		Corn meal.		Rice.	
	Per lb.	*Lbs.*	*Per qt.*	*Qts.*	*Per lb.*	*Lbs.*	*Per lb.*	*Lbs.*	*Per lb.*	*Lbs.*	*Per lb.*	*Lbs.*
1913	$0.221	4.5	$0.089	11.2	$0.056	17.9	$0.033	30.3	$0.030	33.3	$0.087	11.5
1914	.229	4.4	.089	11.2	.063	15.9	.034	29.4	.032	31.3	.088	11.4
1915	.232	4.3	.088	11.4	.070	14.3	.042	23.8	.033	30.3	.091	11.0
1916	.258	3.9	.091	11.0	.073	13.7	.044	22.7	.034	29.4	.091	11.0
1917	.332	3.0	.112	9.0	.092	10.9	.070	14.3	.058	17.2	.104	9.6
1918	.359	2.8	.139	7.2	.098	10.2	.067	14.9	.068	14.7	.129	7.8
1919	.426	2.3	.155	6.5	.100	10.0	.072	13.9	.064	15.6	.151	6.6
1920	.416	2.4	.167	6.0	.115	8.7	.081	12.3	.065	15.4	.174	5.7
1921: November	.333	3.0	.143	7.0	.093	10.8	.051	19.6	.042	23.8	.094	10.6

Year.	Potatoes.		Sugar.		Coffee.		Tea.					
	Per lb.	*Lbs.*	*Per lb.*	*Lbs.*	*Per lb.*	*Lbs.*	*Per lb.*	*Lbs.*				
1913	$0.017	58.8	$0.055	18.2	$0.298	3.4	$0.544	1.8				
1914	.018	55.6	.059	16.9	.297	3.4	.546	1.8				
1915	.015	66.7	.066	15.2	.300	3.3	.545	1.8				
1916	.027	37.0	.080	12.5	.299	3.3	.546	1.8				
1917	.043	23.3	.093	10.8	.302	3.3	.582	1.7				
1918	.032	31.3	.097	10.3	.305	3.3	.648	1.5				
1919	.038	26.3	.113	8.8	.433	2.3	.701	1.4				
1920	.063	15.9	.194	5.2	.470	2.1	.733	1.4				
1921: November	.032	31.3	.067	14.9	.355	2.8	.691	1.4				

[3] Although monthly prices of 43 food articles have been secured since January, 1919, prices of only 22 of these articles have been secured each month since 1913.

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

IN TABLE 4 index numbers are given which show the changes in the retail prices of each of 22 food articles,[4] by years from 9 0 7 to 1920, and by months for 1920 and 1921.[5] These index numbers, or relative prices, are based on the year 1913 as 100, and are computed by dividing the average price of each commodity for each month and each year by the average price of that commodity for 1913. These figures must be used with caution. For example, the relative price of rib roast for the year 1920 was 168, which means that the average money price for the year 1920 was 68 per cent higher than the average money price for the year 1913. The relative price of bacon for the year 1919 was 205 and for the year 1920, 194, which figures show a drop of 11 points but a decrease of only 5 per cent in the year.

In the last column of Table 4 are given index numbers showing the changes in the retail cost of all articles of food combined. From January, 1913, to December, 1920, 22 articles have been included in the index, and beginning with January, 1921, 43 articles have been used.[4] For an explanation of the method used in making the link between the cost of the market basket of 22 articles, weighted according to the average family consumption in 1901, and the cost of the market basket based on 43 articles and weighted according to the consumption in 1918, see MONTHLY LABOR REVIEW for March, 1921 (p. 25).

The curve shown in the chart on page 63 pictures more readily to the eye the changes in the cost of the family market basket and the trend in the cost of the food budget than do the index numbers given in the table. The retail cost of the food articles included in the index has decreased since July, 1920, until the curve is brought down in November, 1921, to approximately where it was in June, 1917. The chart has been drawn on the logarithmic scale,[6] because the percentages of increase or decrease are more accurately shown than on the arithmetic scale.

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[4] See footnote 2, p. 57.

[5] For index numbers of each month, January, 1913, to December, 1920, see MONTHLY LABOR REVIEW for February, 1921, pp. 19–21.

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

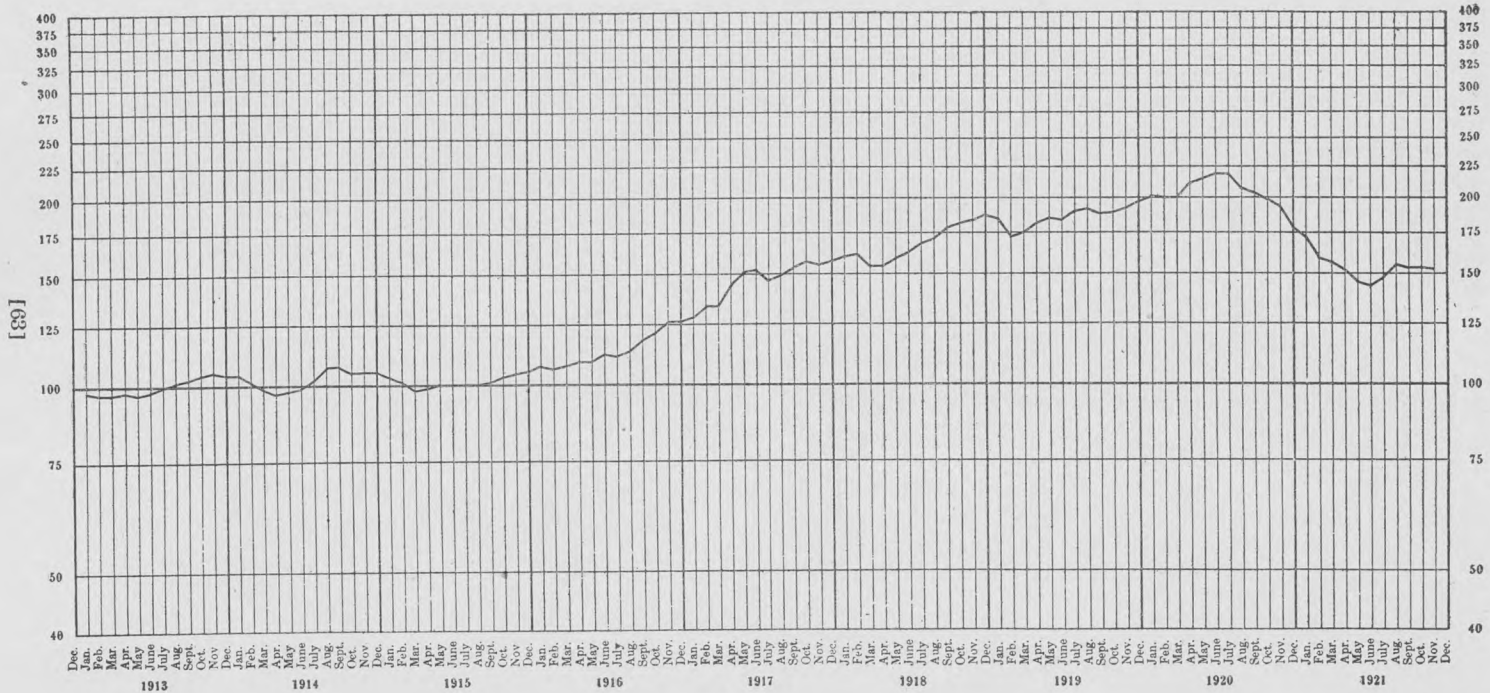
TABLE 4.—INDEX NUMBERS SHOWING CHANGES IN THE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN THE UNITED STATES BY YEARS, 1907 TO 1920, AND BY MONTHS FOR 1920 AND 1921.

[Average for year 1913=100.]

Year and month.	Sirloin steak.	Round steak.	Rib roast.	Chuck roast.	Plate beef.	Pork chops.	Bacon.	Ham.	Lard.	Hens.	Eggs.	Butter.	Cheese.	Milk.	Bread.	Flour.	Corn meal.	Rice.	Potatoes.	Sugar.	Coffee.	Tea.	All articles combined.
1907	71	68	76	.....	.....	74	74	76	81	81	84	85	.....	87	.....	95	88	.....	105	105	.....	.....	82
1908	73	71	78	.....	.....	76	77	78	80	83	86	86	.....	90	.....	102	92	.....	111	108	.....	.....	84
1909	77	74	81	.....	.....	83	83	82	90	89	93	90	.....	91	.....	109	94	.....	112	107	.....	.....	89
1910	80	78	85	.....	.....	92	95	91	104	94	98	94	.....	95	.....	108	95	.....	101	109	.....	.....	93
1911	81	79	85	.....	.....	85	91	89	88	91	94	88	.....	96	.....	102	94	.....	130	117	.....	.....	92
1912	91	89	94	.....	.....	91	91	91	94	93	99	98	.....	97	.....	105	102	.....	135	115	.....	.....	98
1913	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
1914	102	106	103	104	104	105	102	102	99	102	102	94	104	100	113	104	105	101	108	108	100	100	102
1915	101	103	101	101	100	96	100	97	93	97	99	93	105	99	125	126	108	104	89	120	101	100	101
1916	108	110	107	107	106	108	106	109	111	111	109	103	117	102	130	135	113	105	159	146	100	100	114
1917	124	130	126	131	130	152	152	142	175	134	139	127	150	125	164	211	192	119	253	169	101	107	146
1918	153	165	155	166	170	186	196	178	211	177	165	151	162	156	175	203	227	148	188	176	102	119	168
1919	164	174	164	169	167	201	205	199	234	193	182	177	193	174	179	218	213	174	224	205	145	129	186
1920: Av. for year	**172**	**177**	**168**	**164**	**151**	**201**	**194**	**206**	**187**	**210**	**197**	**183**	**188**	**188**	**205**	**245**	**217**	**200**	**371**	**353**	**158**	**135**	**203**
January	159	166	159	158	152	178	186	187	215	197	240	194	187	195	196	245	220	208	318	324	165	132	201
February	160	167	159	157	152	180	186	188	204	210	199	190	196	188	198	245	217	210	353	342	165	131	200
March	161	168	161	157	150	186	186	190	192	215	161	196	194	187	200	242	217	211	400	340	165	135	200
April	170	179	169	166	157	206	191	199	191	224	153	199	194	183	200	245	217	214	535	367	165	135	211
May	171	179	169	166	155	202	195	206	189	221	153	187	194	182	205	264	223	215	565	462	165	136	215
June	182	191	176	174	157	194	200	215	185	216	155	175	189	182	211	267	230	215	606	485	165	136	219
July	192	202	181	179	158	208	203	222	184	211	166	177	186	188	213	264	233	214	524	482	165	137	219
August	186	196	176	172	154	219	203	223	177	212	184	175	183	191	213	255	230	210	294	416	162	137	207
September	185	193	175	170	152	238	202	225	177	214	206	179	184	193	213	252	227	202	229	333	153	137	203
October	177	188	168	162	147	238	202	222	185	207	234	180	184	194	211	236	213	185	200	253	146	133	198
November	171	178	165	158	146	210	196	212	183	201	250	181	180	194	207	221	197	163	194	235	139	135	193
December	156	160	152	145	136	157	176	186	162	189	268	162	176	189	193	200	183	152	188	171	133	133	178
1921:																							
January	159	163	157	148	140	171	171	180	141	200	229	159	175	183	193	203	173	176	176	176	129	133	172
February	151	153	148	138	129	156	166	179	131	201	139	148	174	173	189	197	167	121	153	162	126	131	158
March	154	157	152	141	130	168	155	181	124	203	121	150	176	171	188	194	160	113	147	176	125	131	156
April	157	160	154	140	127	177	164	183	116	202	99	145	169	167	184	179	153	106	135	176	123	129	152
May	158	160	153	138	124	167	161	181	106	194	97	111	143	162	177	173	150	101	129	153	121	129	145
June	157	160	151	135	117	162	159	182	103	181	101	105	133	160	175	179	150	101	159	142	120	126	144
July	158	161	148	129	109	163	160	190	106	182	122	122	133	157	173	176	147	100	200	129	120	127	148
August	157	160	147	130	112	181	162	197	115	183	138	134	148	161	173	173	150	101	247	136	119	127	155
September	153	154	144	128	110	179	159	191	113	179	146	132	148	158	171	170	147	103	235	133	119	127	153
October	147	148	139	124	109	171	153	180	109	175	171	139	149	160	170	164	143	107	206	125	119	127	153
November	141	139	135	120	106	152	147	170	105	168	201	139	151	161	166	155	140	108	188	122	119	127	152

TREND IN THE RETAIL COST OF ALL ARTICLES OF FOOD, COMBINED, FOR THE UNITED STATES, BY MONTHS, JANUARY, 1913, TO NOVEMBER, 1921.

[Average cost for 1913=100.]



Retail Prices of Food in

AVERAGE retail food prices are shown in Table 5 for 39 cities and November 15, 1921. For 12 other cities prices are shown cities were not scheduled by the bureau until after 1913.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES

[The prices shown in this table are computed from reports sent monthly to the bureau by retail dealers.

Article.	Unit.	Atlanta, Ga.				Baltimore, Md.				Birmingham, Ala.			
		Nov. 15—		Oct. 15, 1921.	Nov. 15, 1921.	Nov. 15—		Oct. 15, 1921.	Nov. 15, 1921.	Nov. 15—		Oct. 15, 1921.	Nov. 15, 1921.
		1913	1920			1913	1920			1913	1920		
		Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
Sirloin steak	Pound	24.2	38.2	34.2	32.9	22.8	42.0	36.3	34.6	28.0	42.9	37.0	34.6
Round steak	do	21.3	35.3	31.5	29.6	21.3	40.2	33.4	30.6	23.0	39.1	32.5	30.8
Rib roast	do	19.0	31.4	26.9	24.9	17.5	32.3	28.6	27.0	19.4	31.7	26.9	25.7
Chuck roast	do	15.8	23.6	20.0	17.7	15.0	25.9	19.7	18.9	16.5	25.7	20.7	19.9
Plate beef	do	9.9	17.0	12.7	11.7	12.2	17.5	13.8	13.1	10.0	17.0	13.0	12.3
Pork chops	do	25.0	40.6	33.5	32.1	18.2	43.1	33.5	29.8	23.0	41.1	32.0	30.9
Bacon	do	31.1	54.3	41.7	40.1	21.5	46.6	34.8	32.9	34.0	58.3	44.4	42.8
Ham	do	30.8	56.4	48.3	46.7	27.5	61.1	51.1	47.8	32.0	58.3	51.0	47.3
Lamb	do	20.2	39.4	34.6	31.2	18.0	39.4	32.3	30.8	21.9	44.5	36.2	35.4
Hens	do	21.0	39.3	35.7	34.0	20.2	43.5	39.0	36.9	19.3	38.8	35.7	33.1
Salmon, canned	do		26.8	20.2	19.6		35.1	29.5	28.3		40.1	35.4	34.2
Milk, fresh	Quart	10.6	25.0	17.8	17.8	8.7	16.0	12.0	12.0	10.0	25.0	20.0	20.0
Milk, evaporated	15-16 oz. can		16.5	14.7	14.7		14.6	12.8	12.6		16.0	14.7	14.4
Butter	Pound	39.8	73.8	52.5	52.3	38.4	73.4	57.2	58.6	41.7	73.1	52.4	52.5
Oleomargarine	do		44.0	32.5	33.3		41.0	28.7	28.2		42.2	36.3	36.3
Nut margarine	do		39.5	29.2	29.6		34.8	27.2	28.1		40.1	32.8	32.9
Cheese	do	25.0	38.9	32.4	32.7	23.3	40.4	33.2	33.3	23.0	39.4	32.0	31.9
Lard	do	15.3	29.7	18.4	16.9	15.0	28.3	17.0	16.4	15.1	28.8	17.6	16.9
Crisco	do		30.4	20.3	20.0		28.3	19.7	19.8		33.1	24.2	23.5
Eggs, strictly fresh	Dozen	40.0	75.4	48.1	54.0	45.9	87.1	57.2	73.0	39.0	73.9	46.7	59.3
Eggs, storage	do		67.5			33.1	63.6	43.5	44.4	32.5	65.0	41.7	47.9
Bread	Pound	5.6	12.3	10.9	9.9	5.5	10.8	8.6	8.6	5.4	11.4	9.5	9.3
Flour	do	3.5	7.8	5.7	5.6	3.1	7.2	5.3	4.9	3.6	8.2	6.1	5.9
Corn meal	do	2.6	4.8	3.1	2.9	2.6	4.9	3.4	3.1	2.5	4.6	3.2	3.0
Rolled oats	do		13.6	11.2	11.4		11.5	9.3	9.4		14.3	11.2	10.8
Corn flakes	8-oz. pkg		15.0	13.1	12.8		13.6	10.3	10.5		14.9	12.8	12.2
Cream of Wheat	28-oz. pkg		31.6	31.1	30.4		29.1	27.9	28.2		33.1	30.9	30.9
Macaroni	Pound		23.2	21.7	21.9		21.4	20.2	20.5		23.1	20.6	20.4
Rice	do	8.6	11.9	9.1	8.9	9.0	13.6	9.3	9.5	8.2	14.1	9.1	9.3
Beans, navy	do		12.8	9.6	9.6		9.8	7.9	8.0		12.2	9.5	9.5
Potatoes	do	2.3	4.3	4.6	4.3	1.8	3.0	3.6	3.4	2.2	4.5	4.8	4.5
Onions	do		6.0	8.1	8.9		4.1	6.2	7.9		5.4	7.7	8.6
Cabbage	do		4.6	5.9	5.5		2.6	4.0	4.2		5.2	6.3	5.9
Beans, baked	No. 2 can		16.4	13.9	14.0		14.8	12.7	12.7		18.2	16.0	15.6
Corn, canned	do		19.8	16.2	16.3		18.1	16.0	15.6		18.9	17.9	17.9
Peas, canned	do		19.8	18.1	18.1		18.2	16.8	16.9		21.0	20.6	20.5
Tomatoes, canned	do		13.4	13.1	13.2		12.2	11.3	11.3		11.6	12.3	12.8
Sugar, granulated	Pound	5.7	13.7	7.3	7.1	4.8	12.9	6.3	6.2	5.4	13.2	7.1	6.9
Tea	do	60.0	92.5	89.8	89.8	56.0	69.0	64.8	65.5	61.3	86.8	82.7	82.9
Coffee	do	32.0	41.5	35.3	35.5	24.4	38.4	30.7	30.8	28.8	44.8	36.3	37.0
Prunes	do		29.5	19.8	19.4		24.9	18.0	18.0		29.3	22.0	20.8
Raisins	do		31.5	27.2	26.2		33.1	25.4	24.3		32.8	30.0	27.2
Bananas	Dozen		33.8	27.6	24.7		32.3	28.0	26.8		46.3	36.8	36.3
Oranges	do		40.3	49.3	34.2		66.2	63.8	52.2		47.8	48.2	39.2

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

51 Cities on Specified Dates.

for November 15, 1913, for November 15, 1920, and for October 15 for the same dates with the exception of November, 1913, as these

OF FOOD FOR 51 CITIES ON CERTAIN SPECIFIED DATES.

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

Boston, Mass.				Bridgeport, Conn.			Buffalo, N. Y.				Butte, Mont.			Charleston, S. C.			
Nov. 15—		Oct. 15, 1921.	Nov. 15, 1921.	Nov. 15, 1920.	Oct. 15, 1921.	Nov. 15, 1921.	Nov. 15—		Oct. 15, 1921.	Nov. 15, 1921.	Nov. 15, 1920.	Oct. 15, 1921.	Nov. 15, 1921.	Nov. 15—		Oct. 15, 1921.	Nov. 15, 1921.
1913	1920						1913	1920						1913	1920		
Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
[1] 34.0	[1] 67.4	[1] 58.0	[1] 55.5	51.2	42.9	40.8	22.2	39.7	35.4	32.6	33.9	28.7	27.7	21.4	40.3	35.7	33.9
35.0	62.9	51.7	48.0	48.2	39.2	35.8	19.4	35.8	30.6	27.2	29.8	24.8	23.7	20.8	40.6	34.0	32.3
23.9	42.9	33.5	34.0	37.3	32.9	31.5	16.4	31.0	26.9	26.0	26.3	22.9	21.8	20.0	33.3	29.3	29.3
16.2	33.6	23.6	22.8	29.2	21.7	22.1	15.2	25.5	19.8	19.0	20.7	16.5	15.8	15.0	25.0	22.3	21.3
.....	.....	14.5	15.1	13.9	9.9	10.1	11.7	17.6	12.2	11.8	15.3	11.8	11.1	12.0	20.4	15.2	15.5
22.4	50.4	41.8	36.3	46.2	36.6	31.6	19.8	46.5	38.3	30.6	48.0	35.0	34.0	25.0	47.3	36.5	35.2
24.6	50.5	38.2	36.8	58.5	43.1	41.8	21.2	44.7	33.0	31.4	63.0	50.4	49.6	26.6	54.0	39.2	38.5
31.0	66.6	56.0	53.0	70.1	57.3	54.2	26.3	56.3	47.5	45.0	64.1	56.3	54.6	27.5	55.6	47.6	47.6
20.5	42.3	33.4	33.5	40.4	30.1	30.5	15.6	31.9	24.4	23.3	28.1	27.5	25.3	22.5	45.5	38.3	37.5
24.3	49.7	43.7	42.9	46.0	41.1	41.9	20.0	41.8	36.0	34.5	39.3	31.6	29.8	21.5	48.5	44.0	42.6
.....	39.4	34.2	34.0	40.6	37.1	37.1	.....	36.1	30.0	29.5	45.4	41.1	41.2	.....	36.7	30.4	29.6
8.9	18.4	15.4	15.4	18.0	15.0	15.0	8.0	17.0	15.0	15.0	15.8	14.3	14.3	12.0	23.3	18.7	18.7
.....	15.7	13.7	13.7	15.0	13.4	13.2	.....	14.1	12.3	12.2	16.2	13.7	13.5	.....	14.9	12.9	12.8
38.2	68.3	53.6	53.8	66.3	51.0	52.6	38.1	69.7	54.3	54.3	67.4	54.0	51.5	37.8	67.6	48.8	49.8
.....	44.1	29.0	30.7	40.6	28.3	28.3	.....	39.6	28.7	28.3	40.0	32.5	35.0	.....	43.3	28.9	29.3
.....	35.9	27.6	28.0	35.5	24.3	25.7	.....	33.5	28.2	28.6	39.0	32.9	33.3	.....	37.0	29.0	29.0
23.4	40.5	33.0	33.2	40.0	33.4	33.4	21.5	38.2	32.1	32.3	42.4	37.7	37.0	21.0	37.7	29.8	30.0
15.8	29.2	17.4	17.3	27.8	16.2	16.0	14.2	27.3	16.8	16.1	34.5	21.4	21.2	15.0	28.9	19.0	17.6
.....	31.7	21.9	21.7	30.0	20.1	20.1	.....	29.2	20.1	20.1	40.8	24.9	25.0	.....	31.1	20.8	20.9
60.6	119.6	85.6	98.2	109.5	77.3	88.9	48.5	91.2	66.9	77.7	93.9	58.8	67.7	40.0	69.7	41.0	42.0
35.2	69.2	47.5	52.1	69.1	45.1	47.9	30.6	63.1	42.8	43.8	68.5	48.3	46.9	33.5	60.1	38.4	39.3
6.0	11.4	9.9	9.9	12.7	10.6	10.5	5.6	11.5	8.7	8.7	12.1	9.6	9.6	6.4	12.9	10.8	10.8
3.6	8.0	6.2	5.9	7.4	5.6	5.1	3.0	6.3	4.6	4.4	7.8	6.0	5.8	3.7	8.5	6.2	6.1
3.5	7.5	5.4	5.1	9.1	7.8	7.8	2.6	5.8	4.2	3.9	7.5	4.8	4.7	2.6	4.5	3.0	3.1
.....	10.3	9.1	8.9	11.8	9.7	9.6	.....	9.4	8.6	8.4	10.1	8.6	8.5	.....	12.7	10.7	10.4
.....	14.3	11.6	11.8	13.8	11.1	10.8	.....	13.1	10.6	10.6	15.4	13.7	13.6	.....	14.8	12.0	12.2
.....	30.4	29.7	29.8	28.9	28.9	28.6	.....	28.4	28.1	28.1	34.1	33.9	33.6	.....	30.3	30.3	30.3
.....	25.6	24.2	24.1	24.9	24.5	24.6	.....	23.2	22.0	21.9	22.1	22.6	22.6	.....	22.8	21.2	20.7
9.4	15.8	10.2	10.1	14.9	9.7	9.7	9.3	14.8	9.2	9.1	14.8	9.3	9.2	5.6	10.0	6.7	6.8
.....	9.7	7.9	7.8	11.0	8.8	8.9	.....	10.1	8.0	8.0	10.8	8.8	8.7	.....	13.5	9.6	9.4
1.7	3.4	2.8	2.9	3.3	3.1	3.0	1.8	2.8	2.6	2.5	2.4	1.9	1.8	2.2	3.7	3.6	3.5
.....	4.2	7.0	8.3	4.1	6.4	7.7	.....	4.0	6.5	8.3	4.2	6.4	7.4	.....	4.8	6.9	8.9
.....	4.4	5.6	5.3	3.6	5.2	4.8	.....	1.4	3.5	3.4	3.5	4.7	4.8	.....	4.6	5.7	5.1
.....	18.0	15.5	15.1	15.1	12.6	12.6	.....	14.0	11.4	11.5	22.2	19.2	19.5	.....	14.5	11.6	11.6
.....	20.3	19.4	19.5	21.2	19.0	19.4	.....	17.7	16.3	16.0	18.6	17.5	17.8	.....	18.3	14.9	14.5
.....	22.3	20.6	21.0	22.0	20.6	20.2	.....	17.3	17.2	17.1	18.6	17.4	17.2	.....	21.3	18.5	18.5
.....	13.7	13.1	13.1	13.6	13.0	12.8	.....	14.4	12.6	12.9	16.6	14.6	15.0	.....	13.0	11.6	11.5
5.4	12.2	6.5	6.4	13.3	6.5	6.5	5.3	13.2	6.6	6.4	14.9	9.0	8.7	5.0	13.2	6.1	6.1
58.6	69.1	66.5	67.2	64.5	58.9	58.9	45.0	66.6	61.2	60.3	78.2	76.2	76.2	50.0	79.1	74.9	74.9
33.0	46.0	41.4	41.3	41.2	35.3	34.9	29.3	40.8	33.4	33.7	56.9	46.3	46.1	26.8	40.6	32.1	32.1
.....	27.2	18.9	19.1	24.9	20.9	18.9	.....	26.5	18.9	18.6	28.3	19.5	19.7	.....	26.4	19.4	18.8
.....	32.8	25.9	24.5	31.7	28.8	28.0	.....	31.8	25.5	23.3	32.9	30.3	29.6	.....	33.6	26.9	25.9
.....	59.2	45.7	46.8	43.9	38.8	36.3	.....	50.7	44.8	44.4	[2] 18.3	[2] 12.8	[2] 15.2	.....	50.0	37.0	38.0
.....	71.0	67.3	57.6	80.0	58.9	54.8	.....	76.8	61.1	58.4	62.3	51.9	55.9	.....	47.9	45.8	35.9

[2] Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES

Article.	Unit.	Chicago, Ill.				Cincinnati, Ohio.				Cleveland, Ohio.			
		Nov. 15—		Oct. 15, 1921.	Nov. 15, 1921.	Nov. 15—		Oct. 15, 1921.	Nov. 15, 1921.	Nov. 15—		Oct. 15, 1921.	Nov. 15, 1921.
		1913	1920			1913	1920			1913	1920		
		Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
Sirloin steak	Pound	24.7	44.8	37.9	36.9	22.7	36.9	32.2	29.6	25.0	43.7	33.6	31.5
Round steak	do	21.4	37.2	30.9	29.7	20.7	34.6	29.9	27.1	22.4	38.7	28.3	26.0
Rib roast	do	19.5	34.2	29.5	28.5	19.2	31.1	27.5	25.4	18.6	30.5	24.0	22.0
Chuck roast	do	15.9	25.6	20.3	20.0	16.1	22.5	18.0	16.4	17.0	26.5	18.9	17.6
Plate beef	do	12.0	17.3	12.0	12.1	11.5	18.6	13.8	12.9	12.6	17.8	11.8	11.3
Pork chops	do	19.3	39.3	33.4	27.3	19.8	41.2	36.0	27.6	21.6	43.1	36.0	29.0
Bacon	do	32.4	57.2	47.5	46.2	24.6	48.5	33.8	31.8	28.1	54.1	39.1	37.1
Ham	do	32.3	58.4	49.3	46.7	28.5	60.8	49.2	45.8	35.7	60.8	49.4	45.4
Lamb	do	19.3	38.7	30.6	30.7	17.5	34.9	30.3	28.6	18.1	37.0	28.7	27.1
Hens	do	17.4	37.3	33.0	32.5	20.2	43.7	36.8	32.9	19.9	43.6	34.8	33.3
Salmon, canned	do	.....	38.4	35.0	35.2	.....	37.1	31.6	29.0	.....	38.6	33.2	33.8
Milk, fresh	Quart	8.0	15.0	12.0	12.0	8.0	15.0	13.0	13.0	8.0	15.0	13.0	13.0
Milk, evaporated	15–16 oz. can	.....	13.7	12.3	12.3	.....	14.6	12.7	12.2	.....	15.0	12.8	12.6
Butter	Pound	36.5	68.0	51.8	50.9	38.2	69.2	52.4	51.0	40.7	73.7	56.4	55.9
Oleomargarine	do	.....	35.9	25.5	26.0	.....	38.2	29.1	29.5	.....	42.3	30.3	30.5
Nut margarine	do	.....	31.2	24.9	24.9	.....	34.1	27.0	28.2	.....	34.9	27.6	27.8
Cheese	do	25.3	39.9	36.2	36.5	21.0	42.3	34.1	34.2	24.0	40.1	31.7	32.0
Lard	do	15.0	27.1	16.8	16.5	14.2	26.8	15.2	14.1	16.3	30.4	18.1	17.1
Crisco	do	.....	30.2	21.2	21.3	.....	29.6	20.4	20.7	.....	31.5	21.6	21.6
Eggs, strictly fresh	Dozen	39.8	81.4	55.2	66.6	44.3	82.8	55.2	69.9	50.0	88.9	60.3	74.5
Eggs, storage	do	30.3	63.2	43.6	46.0	33.6	63.9	45.8	46.5	35.7	67.6	43.8	50.3
Bread	Pound	6.1	12.4	9.8	9.8	4.8	11.5	9.3	8.6	5.6	11.8	9.0	8.9
Flour	do	2.9	6.2	4.9	4.5	3.3	7.4	5.4	5.0	3.2	7.3	5.4	5.1
Corn meal	do	2.9	6.8	6.0	6.1	2.8	4.9	3.3	3.2	3.0	6.1	4.3	4.1
Rolled oats	do	.....	10.2	9.2	9.0	.....	11.6	9.7	9.7	.....	12.4	10.1	9.7
Corn flakes	8-oz. pkg	.....	13.7	11.0	10.9	.....	14.2	11.4	11.3	.....	15.2	12.4	12.8
Cream of Wheat	28-oz. pkg	.....	28.7	28.0	27.8	.....	30.4	29.3	29.1	.....	30.5	28.5	28.9
Macaroni	Pound	.....	20.7	18.4	18.1	.....	19.8	18.7	18.3	.....	23.3	21.0	20.8
Rice	do	9.0	14.4	9.6	9.7	8.8	14.2	9.4	9.3	9.0	15.0	9.5	9.6
Beans, navy	do	.....	9.9	7.5	7.8	.....	8.6	6.9	6.9	.....	9.3	7.5	7.5
Potatoes	do	1.7	3.2	3.3	2.9	1.9	3.8	4.1	3.5	2.0	3.5	3.4	3.3
Onions	do	.....	4.1	5.5	6.5	.....	4.5	6.8	7.5	.....	4.4	6.6	7.7
Cabbage	do	.....	2.7	4.3	4.9	.....	3.6	5.1	4.9	.....	3.4	4.7	4.6
Beans, baked	No. 2 can	.....	15.9	13.3	12.9	.....	15.5	12.6	11.9	.....	16.2	13.2	13.0
Corn, canned	do	.....	16.4	15.0	15.3	.....	17.3	15.2	14.9	.....	19.8	17.8	17.6
Peas, canned	do	.....	16.4	15.8	15.6	.....	18.1	17.6	16.5	.....	20.7	17.9	17.9
Tomatoes, canned	do	.....	13.9	13.0	13.3	.....	14.0	12.6	12.2	.....	14.8	13.1	13.8
Sugar, granulated	Pound	5.1	11.2	6.4	6.3	5.3	12.1	6.9	6.6	5.4	13.1	6.9	6.8
Tea	do	55.0	69.6	66.1	66.3	60.0	76.2	70.0	70.9	50.0	76.2	65.2	65.5
Coffee	do	30.7	38.6	33.5	33.5	25.6	34.1	30.4	30.5	26.5	45.0	36.5	35.6
Prunes	do	.....	28.0	20.0	19.9	.....	30.0	21.0	19.9	.....	28.8	18.6	18.2
Raisins	do	.....	31.1	26.9	26.7	.....	33.6	26.2	24.2	.....	31.2	25.5	24.4
Bananas	Dozen	.....	43.5	38.2	37.1	.....	48.9	39.1	40.0	.....	55.3	45.3	45.3
Oranges	do	.....	73.1	59.1	55.4	.....	49.9	49.6	45.4	.....	71.7	54.3	51.7

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

OF FOOD FOR 51 CITIES ON CERTAIN SPECIFIED DATES—Continued.

Columbus, Ohio.			Dallas, Tex.				Denver, Colo.				Detroit, Mich.				Fall River, Mass.			
Nov. 15, 1920.	Oct. 15, 1921.	Nov. 15, 1921.	Nov. 15—		Oct. 15, 1921.	Nov. 15, 1921.	Nov. 15—		Oct. 15, 1921.	Nov. 15, 1921.	Nov. 15—		Oct. 15, 1921.	Nov. 15, 1921.	Nov. 15—		Oct. 15, 1921.	Nov. 15, 1921.
			1913	1920			1913	1920			1913	1920			1913	1920		
Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
38.2	33.9	32.2	23.6	39.3	34.3	31.8	22.9	35.8	29.8	28.0	25.6	41.6	35.2	31.5	[1]34.3	[1]68.3	[1]54.9	[1]52.7
35.0	28.8	27.9	21.0	37.5	32.5	30.2	20.3	30.8	25.4	24.0	20.6	36.2	28.1	25.1	27.3	53.9	43.8	39.6
31.0	27.0	25.1	20.1	31.9	27.1	26.1	16.7	26.6	23.1	21.8	20.0	32.3	26.3	24.7	23.3	35.6	28.2	26.7
26.1	21.0	19.5	16.4	26.3	21.6	20.5	15.3	21.0	16.8	16.4	15.2	24.3	18.7	17.1	18.3	27.9	20.8	19.7
18.6	13.4	13.7	15.0	21.3	17.4	16.7	9.9	14.1	9.8	9.5	11.4	17.3	11.6	11.1	.....	.....	12.8	12.4
36.7	31.6	26.0	21.8	43.6	36.1	33.6	20.4	43.2	35.8	31.7	19.4	43.7	36.6	29.3	23.3	46.3	36.6	33.9
51.1	38.1	37.1	37.5	57.4	47.1	45.1	28.0	55.8	44.8	41.3	22.3	49.3	39.0	36.7	25.7	50.9	42.1	41.4
58.0	46.3	42.8	31.6	58.8	53.5	51.1	29.2	62.5	54.1	51.1	27.0	59.4	51.3	48.1	30.4	59.7	51.8	47.7
26.7	35.8	35.0	22.5	41.4	36.0	36.0	15.2	30.5	29.7	28.8	15.1	37.2	29.3	27.0	19.3	38.6	34.7	34.3
39.4	34.0	34.5	18.4	36.0	30.7	30.5	18.5	38.7	30.7	30.1	19.2	39.7	34.6	32.6	24.6	49.1	47.6	46.8
36.4	31.6	32.4	.....	37.5	30.7	30.4	.....	40.7	36.8	35.4	.....	39.1	31.6	31.8	.....	38.4	34.3	33.3
15.0	12.0	12.0	10.8	19.7	15.0	15.0	8.4	12.8	10.8	10.8	9.0	16.0	13.0	13.0	9.0	17.0	13.0	15.0
14.9	13.5	13.1	.....	15.7	14.8	14.8	.....	14.5	13.1	12.5	.....	15.1	12.7	12.5	.....	16.7	14.9	15.0
72.5	53.9	53.1	40.0	66.9	51.5	50.4	35.0	66.0	49.3	49.4	37.1	71.7	53.9	52.6	36.0	65.9	50.8	51.3
39.3	27.7	27.9	.....	36.3	27.0	27.0	.....	42.6	31.3	30.7	.....	42.2	28.6	28.8	.....	42.7	32.3	32.3
35.0	26.3	27.1	.....	37.0	30.3	30.4	.....	35.2	29.4	29.8	.....	34.1	27.5	27.4	.....	37.5	31.7	31.7
38.5	30.4	30.7	20.0	39.9	32.8	33.9	26.1	42.5	35.3	35.5	22.3	40.4	33.0	33.0	23.6	40.7	33.0	33.2
26.0	14.3	13.8	16.8	31.0	21.0	21.4	16.0	31.4	18.9	18.7	16.4	29.6	17.1	16.4	15.3	27.8	16.6	16.5
30.6	21.7	22.0	.....	30.4	20.3	20.6	.....	32.0	22.3	23.2	.....	30.7	20.5	20.6	.....	33.7	22.3	21.2
84.0	59.5	69.5	40.0	74.1	46.1	53.6	45.0	81.1	53.1	62.8	41.0	90.2	58.0	71.3	58.8	114.5	84.2	99.6
64.7	45.0	45.2	35.0	65.7	38.3	44.8	33.0	66.7	41.1	45.7	32.2	65.9	44.7	47.1	34.6	65.3	49.4	48.4
11.9	9.4	9.3	5.3	12.1	10.1	10.1	5.5	11.4	10.0	10.0	5.6	12.1	9.4	9.4	6.2	12.0	10.5	10.3
7.3	5.3	5.1	3.3	7.4	5.0	4.8	2.5	5.7	3.9	3.9	3.1	7.0	5.3	4.9	3.3	7.6	5.6	5.3
4.8	3.2	3.2	3.6	5.8	4.0	3.6	2.6	4.8	3.4	3.3	2.9	6.5	4.9	4.7	3.6	8.5	7.6	7.0
13.0	10.9	10.2	.....	14.0	11.5	11.3	.....	10.8	9.7	9.5	.....	12.3	10.3	10.4	.....	12.5	11.0	10.8
14.2	11.4	11.3	.....	14.6	12.8	12.9	.....	14.7	12.9	12.9	.....	14.0	11.2	11.2	.....	15.0	13.6	13.3
29.9	30.1	30.1	.....	31.5	31.6	31.6	.....	30.3	29.8	29.4	.....	29.7	29.8	29.4	.....	29.3	29.9	29.9
20.7	21.1	20.4	.....	21.6	21.5	21.4	.....	20.5	20.8	21.4	.....	20.3	19.3	19.3	.....	25.9	25.3	24.9
14.4	10.3	10.4	9.3	13.8	9.8	10.4	8.6	14.8	9.6	9.4	8.4	14.6	8.6	9.0	10.0	17.0	9.8	9.8
8.6	7.4	7.4	.....	10.1	9.2	9.2	.....	11.2	8.8	9.1	.....	8.8	7.1	7.1	.....	10.4	8.1	8.1
3.4	3.8	3.1	2.3	4.3	4.7	4.4	1.6	2.9	3.1	2.8	1.7	2.7	2.8	2.6	1.8	3.3	3.0	3.1
4.5	7.5	7.9	.....	6.1	7.0	7.8	.....	3.9	5.6	6.4	.....	4.0	5.9	6.7	.....	4.7	6.7	8.4
3.7	6.1	5.5	.....	5.9	6.1	6.4	.....	2.2	3.2	3.3	.....	2.6	3.8	4.0	.....	3.2	5.1	4.8
15.4	13.8	13.6	.....	18.5	15.9	16.1	.....	17.7	16.4	16.1	.....	15.3	12.1	12.1	.....	16.3	14.2	14.0
15.2	13.8	13.8	.....	20.5	17.9	17.0	.....	18.5	15.1	15.1	.....	19.6	15.6	15.7	.....	19.3	16.8	16.6
15.5	15.8	15.8	.....	23.4	22.2	22.1	.....	18.5	17.4	17.6	.....	18.9	16.9	17.0	.....	19.7	18.8	18.2
13.1	12.3	12.5	.....	15.0	14.1	14.1	.....	15.1	12.8	12.9	.....	13.1	12.9	12.9	.....	14.3	12.7	13.4
13.3	7.0	6.8	5.6	12.7	7.7	7.3	5.1	13.3	7.5	7.4	5.2	12.5	6.6	6.6	5.3	13.3	6.9	6.9
86.4	82.5	83.2	66.7	87.6	87.6	87.6	52.8	74.3	70.9	70.9	43.3	68.2	62.5	61.4	44.2	59.8	57.3	57.3
40.9	34.7	34.0	36.7	44.8	38.2	38.3	29.4	42.8	35.7	35.4	29.3	40.5	35.2	34.7	33.0	47.1	39.4	39.0
29.8	19.2	18.6	.....	28.6	22.6	21.8	.....	27.9	19.2	19.3	.....	28.0	18.4	19.2	.....	25.7	18.5	17.8
33.2	23.9	24.2	.....	33.2	27.6	27.1	.....	31.9	27.3	26.1	.....	31.0	25.7	25.1	.....	32.8	28.3	27.1
50.0	40.0	38.2	.....	45.0	36.3	35.0	.....	[2]15.6	[2]13.4	[2]13.7	.....	39.1	34.4	33.6	.....	46.1	41.0	36.7
66.6	63.7	58.7	.....	61.2	56.6	58.4	.....	75.7	55.7	54.8	.....	70.5	58.4	53.9	.....	62.4	58.8	51.7

[2] Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES

Article.	Unit.	Houston, Tex.			Indianapolis, Ind.				Jacksonville, Fla.			
		Nov. 15, 1920.	Oct. 15, 1921.	Nov. 15, 1921.	Nov. 15—		Oct. 15, 1921.	Nov. 15, 1921.	Nov. 15—		Oct. 15, 1921.	Nov. 15, 1921.
					1913	1920			1913	1920		
		Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
Sirloin steak	Pound	35.7	30.7	29.6	26.0	37.9	35.0	32.8	25.6	40.0	35.4	35.0
Round steak	do	35.0	29.6	28.6	24.7	36.3	33.7	30.8	21.2	36.3	30.3	29.9
Rib roast	do	30.2	24.5	24.6	17.8	28.2	26.0	24.1	21.6	29.1	25.2	26.1
Chuck roast	do	26.8	21.2	20.5	16.3	25.1	21.5	20.3	14.4	23.2	16.7	17.3
Plate beef	do	21.3	16.0	15.5	12.9	18.0	14.8	14.3	11.2	15.8	10.0	10.1
Pork chops	do	43.8	34.2	33.9	21.5	38.8	33.8	29.7	24.0	41.8	33.8	34.2
Bacon	do	61.5	50.8	50.1	29.2	50.0	39.7	38.2	30.9	52.1	38.3	39.0
Ham	do	60.4	52.7	50.8	30.3	58.8	50.5	47.1	30.2	56.4	47.5	45.9
Lamb	do	42.0	33.8	33.0	19.0	38.2	33.5	33.1	21.6	35.8	33.8	33.8
Hens	do	41.3	31.6	31.0	19.8	38.6	32.9	31.8	24.6	43.2	39.6	35.9
Salmon, canned	do	37.4	30.2	30.0	.....	32.4	25.4	25.2	.....	32.1	26.5	23.8
Milk, fresh	Quart	20.5	15.5	16.0	8.0	14.0	11.7	11.3	12.3	25.0	20.0	20.0
Milk, evaporated	15-16 oz. can.	15.3	13.9	13.6	.....	15.0	13.3	13.2	.....	15.1	14.8	13.9
Butter	Pound	64.7	49.5	49.7	37.5	68.5	50.4	49.8	39.0	70.7	51.0	52.7
Oleomargarine	do	41.4	32.8	32.8	.....	40.3	29.6	29.8	.....	40.6	30.0	30.0
Nut margarine	do	36.6	29.8	30.3	.....	34.6	28.6	28.5	.....	38.2	29.6	30.5
Cheese	do	38.1	29.8	30.5	21.3	40.2	34.2	33.5	22.5	38.1	30.2	31.6
Lard	do	27.5	18.3	17.7	15.0	26.9	14.3	13.9	15.7	30.5	18.4	18.1
Crisco	do	30.1	21.7	21.9	.....	31.0	21.3	21.5	.....	30.2	21.2	21.4
Eggs, strictly fresh	Dozen	74.8	41.1	51.8	43.5	81.2	52.8	65.5	45.0	78.8	61.1	67.5
Eggs, storage	do	64.4	48.0	42.6	35.8	63.8	45.0	46.9	40.0	68.1	44.8	46.8
Bread	Pound	10.2	8.5	8.5	5.1	11.6	8.6	8.6	6.2	12.2	10.4	10.4
Flour	do	8.0	5.5	5.4	3.2	7.0	5.1	4.8	3.7	8.4	6.0	5.9
Corn meal	do	4.8	4.0	3.7	2.6	4.9	3.1	3.0	2.9	4.7	3.2	3.2
Rolled oats	do	13.3	10.5	10.6	.....	11.8	9.4	9.1	.....	13.0	11.1	11.0
Corn flakes	8-oz. pkg	14.6	12.4	12.5	.....	14.5	11.9	11.7	.....	15.0	12.4	12.4
Cream of Wheat	28-oz. pkg	29.9	29.6	29.6	.....	33.1	31.7	31.9	.....	30.8	30.1	30.9
Macaroni	Pound	21.4	20.1	20.3	.....	22.8	20.1	20.1	.....	22.7	20.4	21.1
Rice	do	10.9	8.0	8.1	9.2	15.6	10.0	9.9	6.8	11.9	8.8	8.8
Beans, navy	do	10.4	9.0	8.8	.....	8.1	7.6	7.6	.....	12.0	9.4	9.4
Potatoes	do	4.7	4.7	4.5	1.7	3.2	3.5	2.9	2.5	4.0	4.3	4.1
Onions	do	5.5	6.6	7.1	.....	4.2	6.9	7.5	.....	5.9	7.8	8.8
Cabbage	do	5.3	5.7	5.9	.....	3.5	5.0	4.8	.....	4.9	6.3	6.1
Beans, baked	No. 2 can	17.0	13.4	13.5	.....	16.4	14.2	14.0	.....	16.0	13.2	13.2
Corn, canned	do	15.4	14.1	13.9	.....	16.0	15.0	14.7	.....	18.6	16.6	17.3
Peas, canned	do	20.2	17.7	17.4	.....	16.2	15.9	15.3	.....	22.1	18.9	19.3
Tomatoes, canned	do	13.0	13.1	13.3	.....	14.0	14.2	14.4	.....	12.7	12.0	11.9
Sugar, granulated	Pound	12.4	6.4	6.3	5.7	12.5	7.4	7.1	5.9	14.1	6.9	6.8
Tea	do	74.9	71.8	71.8	60.0	86.4	81.9	81.2	60.0	90.3	85.2	85.2
Coffee	do	35.9	31.1	30.8	30.0	44.1	37.7	37.7	34.5	42.2	37.9	38.1
Prunes	do	26.1	18.1	18.0	.....	28.8	19.6	19.9	.....	26.5	18.7	18.2
Raisins	do	32.7	26.5	25.5	.....	35.3	29.9	29.2	.....	34.9	28.8	27.2
Bananas	Dozen	43.6	31.6	31.3	.....	31.8	30.3	29.7	.....	42.9	32.5	33.1
Oranges	do	62.1	49.1	51.0	.....	61.1	55.2	49.9	.....	36.4	44.0	30.7

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

OF FOOD FOR 51 CITIES ON CERTAIN SPECIFIED DATES—Continued.

Kansas City, Mo.				Little Rock, Ark.				Los Angeles, Calif.				Louisville, Ky.				Manchester, N. H.			
Nov. 15—		Oct. 15, 1921.	Nov. 15, 1921.	Nov. 15—		Oct. 15, 1921.	Nov. 15, 1921.	Nov. 15—		Oct. 15, 1921.	Nov. 15, 1921.	Nov. 15-		Oct. 15, 1921.	Nov. 15, 1921.	Nov. 15—		Oct. 15, 1921.	Nov. 15, 1921.
1913	1920			1913	1920			1913	1920			1913	1920			1913	1920		
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
24.6	40.5	35.6	33.8	25.0	36.9	31.7	30.0	23.9	37.1	33.6	33.5	23.0	34.0	30.1	28.9	[1]34.8	[1]62.3	[1]52.8	[1]50.8
22.3	35.5	30.7	28.8	20.0	35.6	29.7	28.4	21.4	32.5	28.2	27.8	20.0	33.1	28.2	27.4	29.5	53.8	46.6	42.2
18.1	28.7	24.5	24.6	20.0	30.8	24.5	23.5	18.9	31.1	28.0	28.5	18.1	26.9	22.7	22.5	20.8	32.9	26.6	26.1
15.6	21.7	18.0	17.2	16.3	23.7	18.0	17.8	16.0	22.4	17.8	18.0	15.5	22.6	17.6	17.3	18.0	28.9	22.7	21.5
12.2	16.0	10.9	10.8	13.0	18.5	13.4	13.0	13.4	19.2	13.4	12.9	13.1	19.4	13.8	13.5	.....	.....	17.3	16.5
20.8	39.9	33.8	30.9	21.0	42.2	32.9	32.9	26.0	53.0	42.7	40.6	19.6	38.3	31.5	27.8	22.0	46.0	39.7	33.2
30.9	55.0	44.7	44.7	36.7	56.5	45.3	44.4	33.5	63.9	52.8	53.2	28.6	51.6	36.3	35.1	24.0	49.7	36.1	35.1
28.8	58.5	50.8	49.4	27.5	59.7	51.3	49.3	35.0	71.1	60.4	57.4	29.0	53.5	41.5	39.6	28.3	58.5	47.6	42.7
18.3	32.3	29.6	28.8	18.8	37.5	32.9	32.5	18.6	35.2	28.1	27.6	18.2	32.3	27.0	26.0	20.0	37.5	32.9	31.9
15.8	36.8	32.0	31.0	18.8	37.1	31.7	29.2	26.3	51.0	43.7	42.5	23.0	40.1	30.6	30.1	23.7	51.2	47.6	45.9
.....	36.8	31.6	32.0	....	39.0	34.8	33.9	....	50.3	41.5	41.7	....	31.2	26.7	29.3	.....	40.8	33.6	33.3
9.1	16.0	14.7	14.7	10.5	20.0	13.0	14.0	10.0	18.0	14.0	14.0	8.6	16.0	11.0	11.0	8.0	16.8	15.0	15.0
.....	15.3	14.6	14.1	....	15.8	14.1	14.3	....	12.6	12.1	12.0	....	15.3	13.9	14.3	.....	17.1	14.6	14.8
39.1	69.3	51.4	52.0	45.0	68.3	50.6	52.5	39.7	67.4	59.1	58.4	40.0	71.1	54.8	53.8	41.8	71.9	57.1	57.2
.....	39.8	29.3	29.5	....	41.8	31.0	31.4	....	43.4	33.4	33.2	....	42.3	29.7	29.3	.....	42.3	31.0	31.4
.....	34.6	27.8	28.2	....	37.3	28.5	29.9	....	35.2	29.9	30.4	....	34.8	27.2	28.1	.....	35.3	26.0	26.0
22.0	40.7	34.6	34.5	23.3	40.1	32.9	33.4	19.5	43.7	37.1	37.1	22.5	38.9	29.9	30.6	22.0	40.2	33.9	33.8
16.4	29.9	18.1	17.2	16.5	28.1	19.8	19.3	18.1	30.6	17.6	17.1	15.8	27.1	14.7	14.4	15.8	28.2	17.7	17.4
.....	33.9	23.1	23.2	....	29.5	22.3	22.6	....	30.8	22.1	21.1	....	32.6	21.7	21.7	.....	33.4	21.6	21.6
35.3	75.2	49.6	58.7	37.5	74.3	44.3	56.8	58.8	96.3	68.8	67.9	41.3	78.3	45.8	61.5	60.0	106.7	75.0	84.7
32.5	66.3	39.4	45.6	....	68.8	44.2	48.3	37.0	71.3	46.1	46.7	35.0	60.9	37.7	45.1	40.0	71.5	49.1	52.0
6.0	12.1	9.7	9.7	5.3	11.0	9.5	8.4	6.0	9.7	9.2	9.2	5.7	10.2	8.9	8.9	5.9	11.2	8.6	8.6
3.0	6.9	5.1	4.8	3.6	7.9	5.6	5.4	3.5	7.3	5.4	5.0	3.5	7.1	5.4	5.1	3.4	7.7	6.0	5.7
2.9	6.6	4.9	4.8	2.8	4.4	3.0	3.0	3.4	7.2	5.0	4.7	2.4	3.7	2.5	2.4	3.4	7.4	5.3	5.4
.....	13.8	10.6	10.7	....	13.2	11.2	11.0	....	11.2	10.6	10.9	....	11.6	9.8	9.7	.....	12.4	9.7	9.6
.....	15.0	13.2	13.1	....	14.8	13.1	12.5	....	13.5	12.6	12.4	....	14.3	11.6	11.3	.....	15.1	12.8	12.7
.....	30.8	30.7	30.5	....	31.5	30.8	30.7	....	29.7	28.6	28.6	....	30.5	29.8	29.4	.....	29.8	29.7	29.7
.....	24.6	22.8	21.5	....	23.8	21.8	21.8	....	19.5	17.9	17.2	....	21.2	19.0	18.9	.....	27.4	25.5	25.3
8.7	13.2	9.0	8.9	8.3	11.7	8.2	8.1	7.7	13.3	9.9	9.9	8.7	12.6	9.2	8.9	8.8	14.4	9.2	9.3
.....	10.0	8.9	8.6	....	10.6	8.4	8.4	....	8.6	8.2	8.2	....	8.3	6.9	7.1	.....	10.3	8.2	8.2
2.0	3.4	3.5	3.0	2.4	3.6	4.3	3.7	1.9	3.3	3.7	3.6	2.1	2.7	3.2	2.6	1.6	3.1	2.7	2.7
.....	5.1	8.0	8.5	....	5.4	8.2	8.7	....	3.7	5.9	6.5	....	3.6	5.6	8.1	.....	3.6	6.2	7.8
.....	3.7	4.7	4.9	....	4.4	5.8	6.0	....	3.5	4.0	3.8	....	3.3	6.5	4.8	.....	3.0	5.0	4.6
.....	16.5	14.7	14.5	....	15.6	13.5	13.8	....	18.1	16.2	15.9	....	16.0	12.8	13.1	.....	17.8	16.1	15.9
.....	15.4	14.1	13.9	....	17.3	15.8	15.8	....	18.8	17.1	17.9	....	17.1	16.0	15.9	.....	20.5	19.3	19.3
.....	17.7	15.5	15.2	....	18.8	19.7	19.2	....	19.6	18.4	18.2	....	17.7	17.1	17.1	.....	22.5	21.6	21.6
.....	13.2	13.1	13.4	....	13.4	12.4	12.5	....	[2]15.0	[2]15.6	[2]15.3	....	13.1	12.9	13.3	.....	[3]22.1	[3]19.6	[3]19.4
5.7	12.9	7.2	7.0	5.3	13.5	7.8	7.7	5.3	12.3	7.0	6.8	5.3	12.5	7.0	6.8	5.3	13.1	7.0	6.7
54.0	86.4	78.7	78.5	50.0	97.6	91.3	91.3	54.5	73.9	65.7	67.2	65.0	84.9	76.2	76.6	47.5	62.1	57.6	57.2
27.8	41.6	35.7	36.0	30.8	43.5	38.1	38.1	36.3	41.3	37.2	37.3	27.5	43.1	34.2	34.0	32.0	45.2	38.2	38.8
.....	27.6	19.0	18.8	....	28.6	20.2	20.8	....	27.0	17.0	17.4	....	27.7	22.0	19.7	.....	28.2	19.4	19.6
.....	35.3	29.9	29.2	....	32.2	28.3	26.5	....	30.6	27.6	27.3	....	33.6	26.8	26.3	.....	33.3	27.2	24.5
.....	55.9	45.6	45.2	....	[4]13.3	[4]10.6	[4]10.7	....	[4]15.1	[4]11.3	[4]11.5	....	41.1	36.8	37.0	.....	[4]13.4	[4]10.8	[4]10.3
.....	82.3	57.3	57.5	....	61.6	62.1	53.0	....	62.0	38.5	42.9	....	47.7	44.5	37.2	.....	66.5	63.7	59.6

[2] No. 2½ can. [3] No. 3 can. [4] Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES

Article.	Unit.	Memphis, Tenn.				Milwaukee, Wis.				Minneapolis, Minn.			
		Nov. 15—		Oct. 15, 1921.	Nov. 15, 1921.	Nov. 15—		Oct. 15, 1921.	Nov. 15, 1921.	Nov. 15—		Oct. 15, 1921.	Nov. 15, 1921
		1913	1920			1913	1920			1913	1920		
		Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
Sirloin steak	Pound	24.0	35.9	30.3	28.7	23.6	40.2	36.7	35.0	29.0	32.7	29.9	26.6
Round steak	do	20.0	32.4	27.3	25.5	21.6	36.7	32.5	31.0	18.7	28.8	26.1	24.3
Rib roast	do	21.0	29.4	23.9	23.0	18.4	30.4	27.3	26.1	17.7	25.9	22.4	20.8
Chuck roast	do	15.0	20.7	17.0	16.5	16.2	26.7	22.5	21.8	15.3	21.1	16.7	16.5
Plate beef	do	12.5	17.9	12.7	12.5	12.1	17.5	13.6	13.3	10.1	14.1	9.7	9.8
Pork chops	do	20.5	39.3	29.7	28.0	19.6	39.7	34.2	29.3	18.0	37.3	31.9	27.2
Bacon	do	30.0	57.2	41.1	37.8	27.8	55.6	43.5	42.1	27.7	55.0	43.1	41.9
Ham	do	29.0	55.0	45.7	44.0	28.2	55.9	47.9	45.7	30.0	56.1	46.0	44.0
Lamb	do	20.6	40.4	31.7	30.2	19.0	39.3	31.7	30.2	14.6	29.4	26.1	25.3
Hens	do	19.5	37.9	33.0	32.2	17.2	35.8	29.7	28.1	16.4	31.8	27.5	26.1
Salmon, canned	do	.....	38.6	35.8	35.8	.....	41.8	35.2	35.1	.....	47.6	40.2	39.6
Milk, fresh	Quart	10.0	20.0	17.3	17.3	7.0	11.0	9.0	9.0	8.0	14.0	11.0	11.0
Milk, evaporated	15–16 oz. can	.....	16.4	14.8	14.7	.....	15.2	13.3	13.2	.....	15.5	14.1	14.1
Butter	Pound	38.8	67.0	49.1	49.7	36.6	68.5	51.4	50.8	36.3	64.8	47.8	47.8
Oleomargarine	do	.....	41.8	32.0	31.6	.....	37.3	26.5	26.6	.....	41.3	29.3	29.4
Nut margarine	do	.....	36.3	27.8	28.1	.....	33.0	25.6	25.9	.....	32.5	25.6	26.5
Cheese	do	22.0	36.2	30.1	30.6	22.3	36.0	30.9	31.5	21.3	38.2	30.5	30.8
Lard	do	15.6	26.7	14.6	14.6	16.0	28.9	17.3	16.9	15.6	28.4	16.4	15.4
Crisco	do	.....	30.2	19.4	19.7	.....	31.1	21.9	21.8	.....	32.2	22.3	22.5
Eggs, strictly fresh	Dozen	38.0	72.9	47.9	55.6	45.0	77.5	50.7	66.5	41.6	79.1	49.5	59.9
Eggs, storage	do	30.0	65.0	37.5	44.0	33.0	61.7	40.9	43.0	31.6	61.4	38.0	43.2
Bread	Pound	6.0	13.3	10.3	9.7	5.7	11.0	9.4	8.5	5.6	10.3	8.6	8.4
Flour	do	3.5	7.9	5.7	5.6	3.1	6.9	5.0	4.7	2.8	6.1	5.3	4.9
Corn meal	do	2.5	4.0	2.5	2.5	3.3	6.3	4.7	4.5	2.5	5.5	4.8	4.5
Rolled oats	do	.....	12.8	10.8	10.8	.....	8.7	7.4	7.3	.....	9.0	8.4	8.2
Corn flakes	8-oz. pkg.	.....	14.5	12.6	12.3	.....	14.3	11.6	11.6	.....	14.6	12.3	12.5
Cream of Wheat	28-oz. pkg.	.....	30.1	29.0	29.0	.....	29.8	29.3	29.4	.....	31.4	30.1	29.8
Macaroni	Pound	.....	21.6	17.1	17.2	.....	20.6	18.3	18.3	.....	19.6	17.8	17.8
Rice	do	8.1	10.1	7.7	8.1	9.0	15.9	10.0	9.9	8.6	14.6	9.3	9.3
Beans, navy	do	.....	9.6	8.1	8.0	.....	9.4	7.8	7.6	.....	10.3	8.8	8.7
Potatoes	do	2.0	3.6	4.3	3.8	1.7	2.9	3.1	2.7	1.6	2.7	3.2	2.9
Onions	do	.....	3.8	6.5	7.4	.....	3.4	7.7	8.0	.....	4.5	6.4	6.6
Cabbage	do	.....	3.3	4.9	4.6	.....	2.2	3.3	3.5	.....	3.1	3.1	3.9
Beans, baked	No. 2 can	.....	17.2	14.6	14.5	.....	15.1	12.3	12.2	.....	18.3	15.6	15.0
Corn, canned	do	.....	18.4	14.8	15.3	.....	17.0	15.4	15.3	.....	17.2	14.2	14.3
Peas, canned	do	.....	18.2	17.7	18.4	.....	16.2	15.2	15.0	.....	18.2	15.9	16.3
Tomatoes, canned	do	.....	12.4	12.6	12.5	.....	14.4	12.8	12.7	.....	16.2	15.2	15.7
Sugar, granulated	Pound	5.1	13.4	7.1	6.8	5.3	12.3	6.6	6.5	5.1	12.9	7.1	7.0
Tea	do	63.8	93.1	86.2	86.5	50.0	72.2	66.6	67.1	45.0	69.9	64.0	63.4
Coffee	do	27.5	37.8	37.9	37.9	27.5	37.3	32.1	31.6	30.8	42.0	39.7	39.6
Prunes	do	.....	29.3	20.9	19.3	.....	27.4	18.7	17.9	.....	27.7	19.5	19.4
Raisins	do	.....	34.0	28.2	29.4	.....	31.2	28.1	25.9	.....	31.1	27.8	27.0
Bananas	Dozen	.....	43.2	34.7	32.0	.....	[3]14.6	[3]10.2	[3]10.3	.....	[3]16.2	[3]12.1	[3]11.3
Oranges	do	.....	45.6	54.1	42.8	.....	73.7	56.9	57.0	.....	78.9	55.2	60.7

[1] Whole. [2] No. 3 can. [3] Per pound.

OF FOOD FOR 51 CITIES ON CERTAIN SPECIFIED DATES—Continued.

Mobile, Ala.			Newark, N. J.				New Haven, Conn.				New Orleans, La.				New York, N. Y.			
Nov. 15, 1920.	Oct. 15, 1921.	Nov. 15, 1921.	Nov. 15—		Oct. 15, 1921.	Nov. 15, 1921.	Nov. 15—		Oct. 15, 1921.	Nov. 15, 1921.	Nov. 15—		Oct. 15, 1921.	Nov. 15, 1921.	Nov. 15—		Oct. 15, 1921.	Nov. 15, 1921.
			1913	1920			1913	1920			1913	1920			1913	1920		
Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
36.7	31.1	30.4	27.4	49.6	41.4	39.1	32.2	57.3	47.3	46.4	21.5	33.6	30.5	30.3	25.9	47.9	41.0	39.9
35.3	30.8	30.0	27.3	49.2	40.5	37.7	29.6	50.8	38.9	38.7	19.0	31.0	27.6	27.0	25.4	47.7	40.2	38.9
29.3	26.6	25.4	21.3	38.8	32.1	31.4	23.8	42.0	33.2	32.3	18.0	29.6	26.8	26.8	21.3	40.7	35.6	35.1
24.9	20.8	20.6	17.8	27.5	20.8	19.8	19.6	32.6	23.7	24.0	14.9	22.0	19.1	18.5	16.0	28.2	22.3	21.6
20.5	16.2	15.4	12.4	17.0	10.6	10.7	.....	.....	15.0	14.7	11.9	19.4	15.7	15.7	14.5	21.7	18.5	18.0
48.0	36.1	36.4	23.7	46.2	37.1	32.3	23.0	46.2	38.2	30.5	24.5	49.5	38.5	33.6	22.6	47.1	39.0	35.6
58.6	46.5	45.4	25.3	47.1	36.2	34.9	28.8	55.4	43.8	42.5	30.5	56.1	44.8	43.3	25.6	50.9	39.3	38.0
57.3	48.9	47.9	[1]19.8	[1]39.7	[1]28.5	[1]26.1	32.4	64.0	53.6	50.9	26.0	57.1	48.4	46.0	27.8	60.4	54.2	50.9
38.3	33.0	32.5	19.7	40.2	33.8	32.9	19.8	41.9	32.1	31.5	20.5	42.3	35.9	34.9	15.1	32.0	30.6	30.5
46.3	37.9	36.9	22.0	44.8	40.1	39.2	23.8	49.6	43.5	42.3	20.5	46.0	39.1	37.3	21.1	44.4	40.6	38.9
38.1	35.3	34.0	.....	39.1	31.4	31.3	.....	40.8	37.0	36.9	.....	40.5	37.9	37.8	.....	42.7	36.4	36.4
23.5	17.5	17.5	9.0	19.0	17.0	17.0	9.0	17.0	15.0	15.0	9.8	18.5	16.5	15.3	9.0	18.0	15.0	15.0
16.3	13.8	13.4	.....	14.3	11.7	11.5	.....	15.0	12.9	12.9	.....	15.1	12.9	12.6	.....	14.2	11.9	11.7
72.5	53.6	54.4	42.7	74.4	54.8	55.6	36.3	65.3	49.7	50.6	38.1	70.8	51.3	52.1	39.9	71.6	55.2	54.4
41.1	31.2	30.8	.....	40.4	30.2	30.4	.....	41.8	28.8	28.7	.....	42.4	30.3	30.5	.....	41.9	30.8	30.8
38.7	29.2	29.7	.....	35.2	27.7	28.1	.....	35.8	26.7	26.7	.....	35.6	28.9	29.0	.....	34.4	27.1	27.4
38.4	31.2	31.5	24.8	42.0	35.2	35.5	23.5	39.5	33.0	32.8	21.9	39.5	32.1	32.3	20.2	40.9	33.6	34.1
28.2	17.4	17.1	16.3	29.0	16.2	15.3	15.7	27.7	16.4	15.8	15.0	27.8	16.7	16.2	16.2	29.9	18.0	17.0
32.0	21.4	21.2	.....	29.5	20.1	20.1	.....	29.8	19.6	19.7	.....	31.9	20.8	21.1	.....	30.2	20.4	20.3
79.4	48.1	56.9	67.0	101.9	72.7	85.1	59.7	103.1	76.4	90.3	41.3	68.8	46.6	48.5	56.1	99.9	71.5	82.9
70.5	41.2	44.6	36.8	72.1	48.5	49.5	33.0	72.1	46.3	48.9	30.0	61.7	40.7	40.8	37.3	68.9	43.6	49.8
11.0	8.4	8.4	5.6	11.4	9.3	9.3	6.0	12.0	9.5	9.4	4.8	10.5	8.1	8.1	6.0	11.9	10.1	10.0
8.3	5.5	5.3	3.6	7.4	5.2	4.9	3.2	7.3	5.3	4.9	3.7	8.2	6.1	6.0	3.2	7.3	5.5	5.0
4.7	3.1	3.0	3.6	7.7	6.6	6.2	3.2	7.8	6.3	5.7	2.8	4.7	3.1	2.9	3.5	7.9	6.5	6.2
13.3	10.8	10.7	.....	10.0	8.9	8.7	.....	11.6	10.3	9.7	.....	11.8	9.7	9.6	.....	9.9	8.5	8.1
14.6	12.1	11.9	.....	13.1	10.0	10.2	.....	13.8	11.0	10.9	.....	14.1	11.0	11.1	.....	12.6	10.1	10.1
31.4	29.1	29.1	.....	28.3	28.7	28.4	.....	29.3	28.5	28.4	.....	30.0	29.5	29.6	.....	28.8	28.7	28.7
21.2	20.2	19.4	.....	25.6	19.6	19.3	.....	22.5	21.2	21.8	.....	11.7	9.5	9.7	.....	24.0	21.9	21.6
11.9	8.6	8.8	9.0	14.4	8.7	8.6	9.3	15.3	9.3	9.5	7.5	10.5	8.0	8.1	8.0	13.6	9.1	8.7
10.7	9.0	8.8	.....	10.4	8.1	8.0	.....	10.7	7.9	8.1	.....	9.6	7.5	7.6	.....	10.6	8.7	8.6
4.4	5.0	4.2	2.7	3.5	4.0	3.8	1.8	3.3	3.1	3.1	2.2	4.2	4.8	4.2	2.3	3.8	4.0	4.1
4.7	7.1	8.6	.....	4.9	6.6	8.0	.....	4.3	6.4	7.7	.....	4.1	6.0	6.8	.....	4.6	6.4	7.4
4.4	5.5	5.3	.....	3.6	5.0	4.7	.....	3.7	4.9	4.7	.....	3.1	4.4	4.4	.....	3.3	5.1	4.3
15.7	13.8	13.8	.....	14.2	11.6	11.4	.....	16.5	13.2	13.4	.....	16.3	13.6	13.5	.....	14.9	13.0	12.6
18.3	16.2	16.3	.....	18.3	16.1	15.9	.....	21.1	19.0	18.9	.....	16.1	14.1	14.1	.....	17.7	14.7	14.4
18.7	18.5	18.6	.....	18.7	18.1	18.0	.....	22.9	22.4	22.4	.....	17.7	17.7	17.8	.....	17.4	16.5	16.3
14.1	13.3	13.1	.....	12.1	10.9	11.0	.....	[2]21.8	[2]21.0	[2]22.1	.....	14.2	12.8	12.7	.....	12.1	11.3	12.2
13.8	7.0	6.8	5.2	12.2	6.0	5.8	5.2	13.0	6.5	6.3	5.1	12.3	6.4	6.3	4.9	11.9	6.0	5.8
78.8	74.3	73.2	53.8	52.5	49.4	50.2	55.0	61.5	55.0	55.0	62.1	73.1	71.5	71.5	43.3	53.4	52.3	50.7
40.4	32.4	32.9	29.3	34.8	31.1	31.5	33.8	43.7	37.8	37.8	25.7	34.4	30.1	29.8	27.2	34.3	32.6	31.9
28.5	20.6	18.6	.....	24.5	17.5	17.4	.....	25.2	17.7	18.4	.....	26.4	18.8	19.0	.....	25.2	19.1	18.9
34.1	30.1	26.3	.....	31.7	26.4	24.2	.....	33.6	25.6	25.3	.....	32.4	28.5	26.1	.....	32.4	25.9	24.9
32.5	28.0	27.5	.....	50.0	39.6	40.0	.....	42.3	35.8	35.0	.....	30.0	23.8	21.3	.....	45.9	41.8	41.6
49.6	49.4	42.4	.....	73.9	66.9	58.3	.....	77.1	63.3	58.2	.....	45.6	53.5	45.6	.....	82.4	66.5	62.2

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES

Article.	Unit.	Norfolk, Va.			Omaha, Nebr.				Peoria, Ill.		
		Nov. 15, 1920.	Oct. 15, 1921.	Nov. 15, 1921.	Nov. 15— 1913.	Nov. 15— 1920.	Oct. 15, 1921.	Nov. 15, 1921.	Nov. 15, 1920.	Oct. 15, 1921.	Nov. 15, 1921.
		Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
Sirloin steak	Pound	48.8	38.0	36.0	25 9	41.6	36.3	34.7	35.2	31.4	29.8
Round steak	do	43.1	31.1	28.9	23.1	38.1	32.2	31.1	34.6	30.2	28.2
Rib roast	do	37.8	31.2	28.8	20.0	29.3	26.0	25.2	26.4	23.0	22.6
Chuck roast	do	27.1	20.1	19.9	17.0	22.5	19.8	19.0	23.5	18.7	18.5
Plate beef	do	18.4	13.3	13.0	11.1	15.2	11.2	11.0	15.8	12.8	12.1
Pork chops	do	45.9	29.6	28.8	21.1	41.9	36.3	31.6	40.4	34.6	27.6
Bacon	do	52.3	39.4	36.0	28.8	58.2	49.1	46.9	54.1	43.8	42.3
Ham	do	52.0	42.5	40.6	31.3	61.6	52.8	51.3	57.5	49.2	48.8
Lamb	do	42.9	32.8	32.5	16.7	37.4	30.9	29.7	35.1	31.4	31.7
Hens	do	48.5	39.6	37.3	16.3	35.1	30.9	29.8	36.3	29.1	30.3
Salmon, canned	do	34.5	27.6	25.9	.....	39.8	34.3	33.6	37.9	35.2	33.7
Milk, fresh	Quart	21.3	20.5	20.5	8.7	15.5	12.8	12.8	15.1	12.7	12.7
Milk, evaporated	15–16 oz. can	14.8	12.9	12.6	.....	15.7	14.1	14.0	15.3	14.3	13.9
Butter	Pound	72.8	54.4	54.8	37.0	66.7	50.9	50.5	65.3	49.5	49.1
Oleomargarine	do	45.8	28.5	29.5	.....	42.9	32.1	32.0	39.9	30.1	29.3
Nut margarine	do	35.5	28.3	30.5	.....	35.7	28.4	28.2	35.3	28.0	27.6
Cheese	do	39.2	30.6	31.4	23.3	38.7	32.0	32.2	38.5	33.5	33.8
Lard	do	29.3	17.7	17.1	17.7	31.0	19.1	18.9	28.9	16.6	16.2
Crisco	do	31.8	20.2	20.2	.....	33.3	22.1	22.7	32.6	22.5	22.0
Eggs, strictly fresh	Dozen	81.5	53.3	66.4	43.3	72.4	44.3	55.3	80.2	52.1	63.1
Eggs, storage	do	64.0	43.0	44.0	30.0	62.3	39.7	44.9	64.9	41.4	41.4
Bread	Pound	11.4	9.1	9.1	5.2	11.5	10.5	10.0	12.6	9.3	9.2
Flour	do	7.7	5.7	5.4	2.7	6.6	4.6	4.1	7.7	5.5	5.2
Corn meal	do	5.1	3.3	3.1	2.7	5.6	3 9	3.3	5.4	4.0	4.1
Rolled oats	do	11.6	9.5	9.6	.....	13.5	10.4	10.6	12.6	10.8	10.7
Corn flakes	8-oz. pkg	13.9	11.6	11.5	.....	15.0	13.8	13.4	15.1	13.0	13.3
Cream of Wheat	28-oz. pkg	28.3	28.8	29.5	.....	31.5	30.8	30 8	32.0	30.3	30.5
Macaroni	Pound	21.1	19.6	19.8	.....	23.1	20.8	20.4	21.8	20.6	20.6
Rice	do	18.0	9.8	10.0	8.5	14.8	9.0	9.0	14.7	8.7	9.2
Beans, navy	do	10.7	8.6	8.7	.....	10.0	8.4	8.5	9.4	8.4	8.2
Potatoes	do	3.6	3.7	3.5	1.8	3.0	3.0	2.7	2.9	3.1	2.7
Onions	do	4.9	6.1	8.0	.....	3.9	6.7	8.3	4.5	7.6	7.6
Cabbage	do	4.6	5.1	4.7	.....	3.2	4.8	4.6	3.6	5.3	4.9
Beans, baked	No. 2 can	13.6	10.7	10.7	.....	18.9	16.2	15.8	17.2	14.0	14.0
Corn, canned	do	20.4	15.5	15.4	.....	17.2	14.7	14.7	17.3	14.7	14.7
Peas, canned	do	21.9	20.7	21.4	.....	17.7	15.6	16.3	17.9	16.3	16.3
Tomatoes, canned	do	12.6	12.0	12.0	.....	15.6	13.7	14.3	15.1	12.7	12.8
Sugar, granulated	Pound	13.0	6.5	6.3	5.7	12.6	7.2	6.9	13.1	7.5	7.0
Tea	do	88.2	77.5	79.6	56.0	80.2	71.7	71.7	72.7	63.3	62.9
Coffee	do	47.0	38.5	38.2	30.0	41.6	37.8	37.8	42.3	31.7	32.0
Prunes	do	25.9	19.6	19.7	.....	29.4	19.4	19.1	30.7	22.5	22.3
Raisins	do	30.2	27.6	26.7	.....	32.5	30.3	28.9	33.4	30.8	30.3
Bananas	Dozen	45.6	35.5	35.3	.....	[1] 15.4	[1] 10.6	[1] 11.0	[1] 13.9	[1] 11.1	[1] 11.1
Oranges	do	56.8	55.8	43.4	.....	78.5	53.4	54.6	71.5	53.3	55.9

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

OF FOOD FOR 51 CITIES ON CERTAIN SPECIFIED DATES—Continued.

Philadelphia, Pa.				Pittsburgh, Pa.				Portland, Me.			Portland, Oreg.				Providence, R. I.			
Nov. 15—		Oct. 15, 1921.	Nov. 15, 1921.	Nov. 15—		Oct. 15, 1921.	Nov. 15, 1921.	Nov. 15, 1920.	Oct. 15, 1921.	Nov. 15, 1921.	Nov. 15—		Oct. 15, 1921.	Nov. 15, 1921.	Nov. 15—		Oct. 15, 1921.	Nov. 15, 1921
1913	1920			1913	1920						1913	1920			1913	1920		
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
[1]30.5	[1]55.3	[1]44.1	[1]42.9	27.3	48.3	41.2	39.5	[1]61.4	[1]56.6	[1]52.4	22.9	31.6	28.9	28.2	[1]39.8	[1]75.8	[1]64.5	[1]63.2
25.7	48.8	37.0	34.6	24.0	43.5	34.5	32.3	50.3	44.3	42.1	21.0	30.0	25.9	25.0	31.0	58.7	48.2	47.1
21.5	40.3	31.6	31.1	21.7	36.6	30.5	29.1	30.6	27.4	26.0	19.1	29.0	24.6	23.7	24.2	44.1	35.6	35.4
18.0	29.0	19.0	18.9	17.3	28.4	21.4	20.4	23.4	18.6	17.2	16.7	21.0	16.8	16.6	18.8	34.0	27.3	26.7
12.0	15.9	10.3	10.1	12.8	18.2	11.6	11.6	.....	14.8	12.2	13.5	16.2	12.6	12.3	.....	.....	17.9	18.0
22.5	45.0	37.1	32.4	22.5	45.0	37.4	31.3	47.7	39.0	34.2	21.4	44.6	34.5	34.0	22.0	50.6	44.6	37.1
26.9	49.2	37.4	35.6	30.4	55.3	43.2	42.6	50.8	39.2	37.9	30.3	57.7	46.7	45.8	22.8	48.8	36.7	36.1
30.4	62.6	53.9	49.8	29.8	63.6	52.5	50.1	63.9	51.7	47.5	30.0	57.2	49.5	47.4	32.7	64.5	56.0	52.6
18.8	42.6	34.4	33.4	20.3	43.0	35.0	33.3	38.1	30.3	29.7	17.5	32.9	27.1	27.2	18.7	45.2	34.6	34.4
23.1	46.9	41.7	39.3	23.8	48.8	41.8	39.2	49.2	44.5	41.8	20.3	40.1	34.5	36.0	25.0	52.3	46.4	46.0
.....	35.8	28.7	28.0	.....	40.2	33.2	31.6	38.6	32.8	30.6	.....	47.2	40.7	42.7	.....	42.5	36.8	36.1
8.0	15.0	11.0	11.0	9.2	16.0	14.0	14.0	17.0	15.0	15.0	9.7	15.6	12.8	12.8	9.0	18.1	15.5	15.5
.....	15.1	13.3	13.0	.....	14.8	12.8	12.6	15.8	14.5	14.2	.....	14.0	12.7	12.8	.....	16.0	13.8	13.8
44.3	76.4	59.9	60.4	40.4	73.9	56.8	56.4	70.1	54.7	56.1	40.4	66.1	55.2	53.7	38.4	67.5	53.1	53.5
.....	41.9	29.8	29.0	.....	37.7	28.5	28.5	43.1	33.5	33.4	.....	41.0	30.0	30.0	.....	41.6	30.4	30.8
.....	36.6	28.1	28.3	.....	34.1	27.3	27.6	34.9	29.1	28.9	.....	37.1	30.1	30.4	.....	35.2	28.3	28.6
25.0	41.3	35.7	35.6	24.5	40.4	34.3	34.5	41.6	34.2	34.1	20.8	40.6	35.5	35.9	22.0	41.1	32.1	32.1
15.5	28.3	15.7	14.9	15.7	28.4	15.9	15.7	28.2	16.8	15.8	17.8	34.1	21.4	19.6	15.8	28.6	17.0	16.2
.....	29.2	19.7	20.0	.....	30.1	20.5	20.5	31.9	21.6	21.9	.....	34.7	24.1	24.0	.....	31.7	22.3	22.5
50.8	90.8	62.5	74.0	46.3	86.6	56.7	69.9	110.8	73.1	92.9	55.0	85.2	58.8	62.5	63.0	111.2	81.2	95.2
34.7	68.2	46.3	47.9	33.4	67.1	44.1	44.3	70.1	50.3	53.6	37.5	67.9	45.0	45.0	36.8	68.7	46.6	48.5
4.8	10.6	8.7	8.7	5.4	11.8	9.1	9.1	12.0	10.1	10.1	5.5	10.4	9.5	8.4	6.1	12.3	10.6	10.6
3.2	7.5	5.5	5.0	3.2	7.3	5.4	5.2	7.4	5.6	5.3	2.9	6.4	4.5	4.2	2.9	7.7	6.0	5.6
2.9	5.3	4.0	4.1	3.0	6.9	4.3	4.5	5.9	4.7	4.5	3.5	6.7	4.3	4.3	3.1	6.2	4.4	4.3
.....	9.7	8.7	8.6	.....	11.3	10.4	10.3	9.3	7.6	7.9	.....	12.0	9.3	9.1	.....	11.9	10.4	10.2
.....	12.8	10.8	10.8	.....	13.9	11.5	11.4	14.7	12.0	11.9	.....	14.4	13.0	13.1	.....	14.1	11.7	11.8
.....	28.7	28.1	28.4	.....	29.9	29.5	29.5	29.9	29.6	29.6	.....	33.4	31.3	31.2	.....	30.5	29.8	29.7
.....	22.2	20.6	20.5	.....	22.6	21.5	21.7	24.7	24.2	23.8	.....	18.5	17.6	17.6	.....	24.3	22.5	22.7
9.8	15.6	9.7	10.3	9.2	16.1	10.1	10.1	16.1	10.5	10.6	8.6	15.6	9.8	9.7	9.3	15.1	9.9	10.0
.....	10.1	8.4	8.3	.....	9.3	7.6	7.6	10.2	8.4	8.2	.....	8.6	7.7	7.6	.....	9.8	8.1	8.0
2.3	3.4	3.9	3.8	2.0	3.3	3.2	3.0	3.0	2.6	2.7	1.2	2.4	2.6	2.5	1.7	3.4	2.9	2.8
.....	4.0	6.0	7.1	.....	4.6	6.9	8.1	3.6	6.4	7.4	.....	4.0	5.2	6.1	.....	4.1	6.7	8.3
.....	3.3	4.4	4.4	.....	4.1	4.8	4.7	2.2	3.5	3.3	.....	2.8	4.1	2.8	.....	3.9	4.9	4.6
.....	14.9	12.2	12.2	.....	16.4	13.3	13.6	18.9	16.3	16.8	.....	21.2	17.8	18.0	.....	16.2	13.1	12.7
.....	17.3	15.2	15.4	.....	17.2	15.4	15.3	19.2	16.9	16.7	.....	21.9	18.3	18.2	.....	20.6	18.7	18.3
.....	17.3	16.0	16.1	.....	17.9	16.1	16.0	20.7	19.5	19.7	.....	20.7	18.2	17.9	.....	21.3	19.5	20.0
.....	12.6	11.6	11.9	.....	12.9	12.1	12.5	[2]21.5	[2]10.2	[2]10.0	.....	[3]17.3	[3]14.3	[3]14.5	.....	14.8	14.2	13.9
5.0	11.9	6.1	5.7	5.7	13.2	7.1	6.8	13.0	6.8	6.7	6.1	12.8	7.5	7.2	5.0	13.0	6.7	6.7
54.0	60.8	62.6	62.3	58.0	77.9	76.2	76.5	61.6	57.5	57.7	55.0	68.2	64.1	63.4	48.3	60.1	60.8	60.9
24.5	32.5	29.8	30.2	30.0	42.9	36.2	35.8	44.5	38.5	38.4	35.0	43.4	37.3	37.2	30.0	44.7	39.4	39.2
.....	25.9	18.2	17.2	.....	28.2	21.2	21.0	25.3	18.1	18.0	.....	19.1	12.7	14.6	.....	25.0	18.7	18.7
.....	29.9	24.6	24.4	.....	34.3	27.4	26.8	31.2	25.9	24.6	.....	30.9	26.9	25.5	.....	29.8	27.7	24.6
.....	40.0	35.4	35.2	.....	52.6	43.4	44.0	[4]12.7	[4]10.7	[4]10.2	.....	[4]17.5	[4]13.6	[4]13.0	.....	50.6	38.8	35.0
.....	66.9	56.2	54.9	.....	78.2	54.1	54.5	81.0	60.8	60.4	.....	91.7	56.7	60.0	.....	74.1	69.5	62.7

[2] No. 3 can. [3] No. 2½ can. [4] Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES

Article.	Unit.	Richmond, Va.				Rochester, N.Y.			St. Louis, Mo.			
		Nov. 15—		Oct. 15, 1921.	Nov. 15, 1921.	Nov. 15, 1920.	Oct. 15, 1921.	Nov. 15, 1921.	Nov. 15—		Oct. 15, 1921.	Nov. 15, 1921.
		1913.	1920.						1913.	1920.		
		Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
Sirloin steak	Pound	22.2	44.8	39.2	37.8	42.0	36.7	35.1	26.6	40.0	34.3	32.7
Round steak	do	20.0	41.1	34.9	33.3	38.2	31.3	29.6	23.6	38.5	32.6	29.7
Rib roast	do	18.9	34.2	30.4	29.1	32.2	26.2	25.6	20.1	31.4	28.2	27.1
Chuck roast	do	15.9	27.9	23.8	23.6	28.2	23.3	21.5	16.0	22.5	19.2	17.7
Plate beef	do	13.2	22.1	18.0	17.0	18.7	12.4	11.9	12.4	17.9	13.4	12.9
Pork chops	do	21.2	44.6	35.5	33.5	44.9	37.5	34.2	17.8	37.4	33.8	24.8
Bacon	do	27.2	49.5	37.1	36.1	44.9	35.1	31.9	25.8	48.1	38.3	33.7
Ham	do	25.0	54.7	44.0	41.6	56.1	50.8	46.8	27.3	55.6	46.8	43.8
Lamb	do	19.3	45.0	40.0	38.0	36.6	32.3	30.6	18.3	34.5	29.3	28.2
Hens	do	19.5	45.3	36.4	33.8	45.4	41.5	38.3	16.5	33.4	30.4	30.5
Salmon, canned	do	.....	25.7	18.1	18.3	38.8	33.3	31.7	.....	37.1	33.1	32.0
Milk, fresh	Quart	10.0	16.0	14.0	14.0	15.5	14.0	14.0	8.8	16.0	13.0	12.3
Milk, evaporated	15-16 oz. can	.....	16.5	14.5	14.4	15.8	13.9	13.6	.....	13.8	12.5	12.1
Butter	Pound	41.2	75.9	58.9	58.8	68.6	52.4	53.0	38.1	71.7	55.0	53.6
Oleomargarine	do	.....	43.4	32.6	32.9	41.9	31.0	30.8	.....	37.9	28.3	27.8
Nut margarine	do	.....	37.6	28.2	28.9	34.7	28.5	29.3	.....	33.9	25.5	25.6
Cheese	do	22.8	39.9	32.6	32.9	39.2	33.6	34.7	20.3	36.7	30.6	31.1
Lard	do	15.4	29.5	18.4	17.5	27.7	17.1	16.5	12.9	23.9	12.4	12.2
Crisco	do	.....	31.2	20.9	21.8	29.8	20.1	20.4	.....	28.7	20.7	20.8
Eggs, strictly fresh	Dozen	40.0	79.2	50.8	68.9	96.7	63.1	81.3	38.9	77.7	49.9	59.2
Eggs, storage	do	33.0	66.0	43.7	45.8	65.1	45.4	45.5	32.5	61.4	39.4	41.3
Bread	Pound	5.3	12.8	10.7	10.6	11.2	8.1	8.1	5.6	12.0	9.7	9.6
Flour	do	3.2	7.5	5.7	5.2	7.4	5.6	5.1	2.9	6.6	4.7	4.4
Corn meal	do	2.3	5.5	4.1	4.0	7.0	5.4	5.2	2.5	4.6	3.2	2.7
Rolled oats	do	.....	12.2	10.9	10.7	7.7	7.5	7.9	.....	10.0	9.2	9.0
Corn flakes	8-oz. pkg	.....	14.3	12.6	12.7	14.5	12.0	11.8	.....	12.8	10.5	10.6
Cream of Wheat	28-oz. pkg	.....	31.0	31.3	31.3	30.1	28.7	28.9	.....	30.1	30.0	29.8
Macaroni	Pound	.....	20.9	21.8	22.3	22.3	20.4	20.2	.....	20.8	20.7	20.9
Rice	do	10.0	17.2	11.6	11.7	14.9	9.0	9.5	8.1	12.9	8.7	8.7
Beans, navy	do	.....	10.8	9.3	9.3	10.6	8.2	8.2	.....	8.7	7.5	7.4
Potatoes	do	2.0	4.1	4.8	4.3	2.5	2.6	2.6	1.8	3.6	3.8	3.3
Onions	do	.....	4.9	6.7	8.9	3.9	5.7	7.2	.....	4.2	6.4	7.5
Cabbage	do	.....	4.1	5.6	5.4	1.8	4.3	4.0	.....	3.3	4.9	4.5
Beans, baked	No. 2 can	.....	13.4	12.1	12.3	14.4	11.6	11.8	.....	15.1	11.8	11.8
Corn, canned	do	.....	19.2	15.5	15.4	19.6	16.3	15.9	.....	15.6	15.3	15.3
Peas, canned	do	.....	21.2	20.4	19.8	20.3	19.3	18.9	.....	15.8	16.0	16.2
Tomatoes, canned	do	.....	13.3	13.2	13.0	15.5	13.3	12.6	.....	12.7	12.8	12.8
Sugar, granulated	Pound	5.4	13.8	6.8	6.6	12.9	6.6	6.4	5.1	12.0	6.8	6.5
Tea	do	56.0	89.6	84.1	83.8	67.5	61.0	60.3	55.0	74.3	68.1	67.8
Coffee	do	27.4	42.1	36.8	35.6	38.1	33.3	33.8	24.4	37.6	32.4	32.7
Prunes	do	.....	28.0	21.0	20.8	25.8	21.7	19.6	.....	28.0	19.2	19.3
Raisins	do	.....	32.8	25.9	25.6	31.2	28.1	26.4	.....	31.7	27.7	26.0
Bananas	Dozen	.....	51.8	40.6	38.3	49.3	42.3	41.3	.....	39.4	33.0	33.4
Oranges	do	.....	59.3	51.4	45.4	81.3	61.8	56.0	.....	57.9	49.9	46.7

OF FOOD FOR 51 CITIES ON CERTAIN SPECIFIED DATES—Continued.

St. Paul, Minn.				Salt Lake City, Utah.				San Francisco, Calif.				Savannah, Ga.			Scranton, Pa.			
Nov. 15—		Oct. 15, 1921.	Nov. 15, 1921.	Nov. 15—		Oct. 15, 1921.	Nov. 15, 1921.	Nov. 15—		Oct. 15, 1921.	Nov. 15, 1921.	Nov. 15, 1920.	Oct. 15, 1921.	Nov. 15, 1921.	Nov. 15—		Oct. 15, 1921.	Nov. 15, 1921.
1913	1920			1913	1920			1913	1920						1913	1920		
Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
25.0	37.7	32.3	30.5	22.4	33.3	28.1	27.7	21.0	34.4	29.0	29.0	37.9	31.4	31.4	26.0	51.9	47.8	45.6
20.8	31.6	27.0	25.9	20.0	30.2	24.8	23.3	19.7	32.1	26.4	25.9	34.6	27.9	27.5	21.5	43.7	38.3	35.8
20.0	30.0	25.8	24.8	19.0	25.9	21.6	21.0	21.3	31.5	27.1	28.2	29.4	24.6	24.6	23.0	38.4	35.0	34.1
16.0	23.4	19.8	18.2	14.5	22.3	16.6	16.5	15.5	22.4	17.3	17.5	22.5	17.2	17.9	17.6	31.1	25.9	24.4
10.8	14.5	11.0	10.0	12.5	15.6	11.7	11.3	14.3	19.5	13.5	13.9	19.3	15.2	14.4	11.9	18.6	11.7	11.6
18.8	37.8	32.6	27.3	23.4	47.3	33.7	32.7	24.2	46.4	40.7	40.5	42.9	29.9	29.9	21.8	47.4	40.9	35.3
25.3	53.3	41.3	39.4	30.0	55.8	41.3	40.7	34.4	64.8	55.0	53.2	50.0	38.9	37.0	27.5	54.2	43.9	42.3
28.3	57.1	46.3	43.0	30.0	55.4	45.0	44.2	32.0	62.8	53.8	51.8	53.3	42.2	40.0	29.3	59.7	53.3	49.7
16.1	31.5	26.3	25.1	18.0	31.0	24.4	25.5	17.0	35.9	30.1	30.9	43.3	38.3	37.5	18.7	46.0	40.0	37.9
16.4	32.4	28.9	27.9	22.6	42.5	35.6	36.1	24.8	51.6	45.3	45.2	46.0	37.1	35.8	21.0	50.3	44.1	42.5
.....	40.7	39.5	37.7	.....	40.4	35.6	35.3	.....	34.9	29.1	28.7	38.2	33.3	33.7	.....	43.6	39.1	37.4
7.8	14.0	11.0	11.0	8.7	12.5	12.5	12.5	10.0	16.8	14.0	14.0	24.7	20.0	20.0	8.8	16.0	13.3	14.0
.....	14.8	14.2	14.4	.....	14.8	12.5	12.5	.....	13.0	12.4	12.3	14.7	12.4	12.4	.....	15.1	13.7	13.4
35.0	65.3	47.1	47.1	39.2	66.1	52.7	51.1	40.4	66.7	58.3	57.6	71.2	54.1	52.9	37.1	63.9	52.0	52.5
.....	42.6	30.2	30.3	.....	41.5	30.3	30.0	.....	37.9	29.3	30.0	43.7	35.1	35.0	.....	42.2	30.0	29.9
.....	34.4	27.6	27.8	.....	37.5	30.6	31.3	.....	35.3	29.2	29.8	37.4	31.6	31.4	.....	36.4	29.0	29.0
21.0	37.8	31.5	32.5	24.2	38.6	28.4	30.0	21.0	42.1	34.1	39.7	38.1	31.1	31.6	18.3	38.3	31.4	31.8
14.8	29.0	17.0	16.8	20.0	31.5	18.7	18.4	17.7	32.1	18.9	19.0	33.0	20.0	20.0	16.5	29.7	19.0	17.8
.....	34.9	24.1	24.7	.....	35.6	25.1	24.6	.....	32.4	22.4	22.9	32.0	19.8	19.5	.....	32.4	21.5	21.8
39.6	77.0	50.5	58.5	46.7	84.3	51.3	61.5	65.0	95.5	67.2	71.2	80.0	53.3	57.7	51.3	96.1	66.2	79.4
31.2	62.5	42.0	45.0	35.0	70.0	44.0	47.6	40.7	64.4	42.6	43.5	63.3	41.1	42.6	32.5	67.9	47.8	49.7
6.0	10.4	8.5	8.5	5.9	12.2	9.8	9.8	5.9	10.9	9.3	8.5	12.4	10.5	10.4	5.6	13.9	10.2	10.2
2.9	6.4	5.3	5.0	2.4	5.5	3.3	3.2	3.4	7.4	5.4	5.3	7.9	5.8	5.6	3.6	7.9	6.5	6.2
2.5	6.1	4.6	4.4	3.3	6.9	3.9	3.8	3.5	6.8	4.7	4.5	4.6	2.7	2.9	.....	8.4	7.0	7.0
.....	9.5	9.4	9.5	.....	10.4	10.5	10.6	.....	11.1	10.5	10.3	13.5	10.4	10.5	.....	11.9	10.9	11.0
.....	14.9	13.5	13.6	.....	15.0	13.7	14.0	.....	14.6	12.4	12.3	15.0	10.9	10.8	.....	14.4	12.8	12.3
.....	31.0	30.0	30.0	.....	34.0	31.8	31.1	.....	29.0	28.6	28.6	31.2	29.7	29.7	.....	29.9	29.3	29.3
.....	19.9	19.2	19.0	.....	23.0	22.3	23.0	.....	13.9	14.1	13.7	23.1	19.6	19.6	.....	25.4	23.6	23.4
10.0	14.6	9.0	9.0	8.2	13.5	8.3	8.4	8.5	13.9	8.4	9.1	11.6	8.5	8.4	8.5	15.0	9.9	9.7
.....	10.4	8.7	8.7	.....	10.9	8.5	8.5	.....	7.8	6.9	7.1	13.2	9.6	9.4	.....	11.8	9.8	9.9
1.4	2.6	2.9	2.7	1.3	2.6	2.4	2.2	1.9	2.9	3.5	3.4	3.8	3.6	3.7	1.8	3.0	3.2	3.1
.....	3.3	5.4	5.9	.....	3.4	5.5	5.8	.....	2.4	4.5	5.0	5.4	7.5	8.1	.....	5.0	5.9	7.3
.....	3.1	3.3	3.7	.....	3.2	3.8	3.5	.....	.....	.....	.....	5.0	5.6	5.3	.....	2.6	4.5	3.9
.....	19.0	16.3	15.5	.....	20.0	17.4	18.2	.....	18.0	16.4	16.4	17.9	13.2	13.3	.....	15.0	13.3	13.0
.....	17.6	16.9	16.6	.....	18.9	15.5	15.5	.....	19.3	17.2	17.8	18.3	14.8	14.8	.....	18.0	17.2	16.7
.....	17.2	16.6	16.8	.....	17.3	15.9	16.1	.....	18.7	18.4	18.3	18.2	18.5	18.5	.....	18.4	17.7	17.1
.....	14.4	14.3	14.2	.....	15.0	12.8	13.5	.....	[1]13.8	[1]13.4	[1]13.4	13.8	12.3	12.5	.....	14.9	12.8	13.2
5.1	13.1	7.4	7.2	5.7	13.8	7.9	7.8	5.4	12.5	6.8	6.7	12.5	6.5	6.5	5.6	13.8	7.0	6.8
45.0	73.4	68.6	68.1	65.7	82.3	82.3	81.7	50.0	59.8	57.0	57.0	78.2	68.8	68.2	52.5	68.3	63.3	61.8
30.0	43.3	39.3	40.2	35.8	54.6	45.1	45.1	32.0	39.2	33.8	33.3	36.1	31.8	31.8	31.3	45.7	39.2	39.2
.....	28.6	20.6	20.1	.....	26.4	16.5	15.8	.....	21.7	16.2	17.0	31.4	19.4	19.1	.....	24.6	17.7	17.3
.....	33.1	28.7	28.2	.....	30.8	25.9	25.5	.....	29.7	25.3	23.7	31.8	24.4	24.4	.....	31.5	29.4	28.6
.....	[2]16.3	[2]12.2	[2]12.2	.....	[2]18.2	[2]17.0	[2]16.2	.....	43.6	38.6	39.3	55.0	37.5	38.0	.....	39.5	36.5	35.0
.....	87.4	59.3	58.5	.....	73.8	54.1	56.9	.....	70.0	53.3	56.8	47.0	57.5	45.7	.....	70.6	59.7	56.7

[1] No 2½ can.

[2] Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD FOR 51 CITIES ON CERTAIN SPECIFIED DATES—Concluded.

Article.	Unit.	Seattle, Wash.				Springfield, Ill.			Washington, D. C.			
		Nov. 15—		Oct. 15, 1921.	Nov. 15, 1921.	Nov. 15, 1920.	Oct. 15, 1921.	Nov. 15, 1921.	Nov. 15—		Oct. 15, 1921.	Nov. 15, 1921.
		1913.	1920.						1913.	1920.		
		Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
Sirloin steak	Pound	23.6	35.8	30.0	29.3	39.2	32.9	31.4	26.5	50.5	43.7	39.8
Round steak	do	20.6	32.3	26.8	25.7	38.5	31.8	29.7	22.5	45.1	36.8	33.2
Rib roast	do	20.0	28.8	23.5	22.9	26.5	22.7	22.5	21.0	39.8	32.7	32.2
Chuck roast	do	15.6	20.9	16.2	15.9	22.0	18.8	17.8	17.6	30.2	22.6	21.6
Plate beef	do	12.8	16.6	12.1	12.1	17.2	13.2	12.6	12.8	18.5	13.1	13.2
Pork chops	do	24.0	46.2	37.0	35.8	41.2	33.3	29.3	21.4	48.2	38.7	35.1
Bacon	do	32.0	61.4	50.2	48.4	48.7	39.9	37.1	26.4	50.6	40.0	37.5
Ham	do	30.0	60.3	52.8	50.0	56.4	47.9	45.3	31.3	61.2	55.8	53.9
Lamb	do	18.4	32.5	27.1	26.2	36.7	31.3	30.6	19.1	45.7	34.6	33.5
Hens	do	24.2	39.7	32.3	33.7	38.5	32.1	29.7	21.3	48.6	41.7	39.0
Salmon (canned)	do	.....	38.0	31.6	31.7	40.4	39.2	38.3	.....	37.7	34.7	33.2
Milk, fresh	Quart	10.0	13.0	12.0	12.0	16.7	12.5	12.5	9.0	18.0	15.0	15.0
Milk, evaporated	15-16 oz. can	.....	13.0	12.3	12.3	17.3	14.6	14.2	.....	15.1	14.1	13.7
Butter	Pound	40.8	63.4	52.8	52.7	73.4	52.9	52.4	40.3	74.2	56.8	57.5
Oleomargarine	do	.....	41.3	30.0	30.3	40.5	30.3	29.9	.....	42.6	29.3	29.1
Nut margarine	do	.....	36.1	30.3	30.8	35.9	28.2	28.8	.....	35.6	28.8	28.8
Cheese	do	22.8	40.5	32.6	33.9	40.9	34.4	33.8	23.5	40.3	34.7	35.5
Lard	do	16.9	31.8	17.9	17.1	28.5	16.1	15.1	15.0	28.9	17.4	16.0
Crisco	do	.....	34.3	23.9	23.9	34.6	21.3	21.0	.....	30.7	21.6	21.6
Eggs, strictly fresh	Dozen	59.2	85.2	62.3	65.2	82.2	50.8	63.3	47.9	90.6	61.3	77.2
Eggs, storage	do	37.5	67.0	45.0	49.0	68.3	42.0	46.3	35.0	68.9	46.2	51.7
Bread	Pound	5.6	11.4	9.8	8.2	13.5	10.7	10.4	5.7	12.0	10.2	8.1
Flour	do	2.9	6.2	4.6	4.3	7.4	5.7	5.5	3.8	7.8	6.0	5.8
Corn meal	do	3.2	6.3	4.4	4.1	6.1	4.6	4.3	2.6	4.8	4.0	4.0
Rolled oats	do	.....	10.3	8.8	8.8	13.6	10.8	10.7	.....	12.9	11.2	11.0
Corn flakes	8-oz. pkg	.....	14.7	13.5	13.3	15.4	13.5	13.3	.....	13.9	11.5	11.4
Cream of Wheat	28-oz. pkg	.....	31.5	30.7	30.7	31.4	30.4	30.5	.....	29.8	29.2	29.4
Macaroni	Pound	.....	19.0	18.2	18.2	23.6	20.9	20.6	.....	24.4	23.0	22.2
Rice	do	7.7	15.6	9.4	10.1	15.9	9.6	9.3	9.4	15.5	10.0	10.1
Beans, navy	do	.....	8.5	7.7	7.7	9.6	7.9	7.8	.....	10.2	8.2	8.4
Potatoes	do	1.4	2.7	2.5	2.4	3.3	3.6	3.0	1.8	3.1	4.0	3.7
Onions	do	.....	3.7	6.0	7.0	4.2	7.1	6.8	.....	4.6	7.3	8.0
Cabbage	do	.....	2.9	4.1	3.5	3.3	5.3	5.1	.....	3.4	4.8	4.5
Beans, baked	No. 2 can	.....	19.5	17.0	17.1	18.1	15.1	14.1	.....	14.6	12.1	12.0
Corn, canned	do	.....	20.3	18.4	17.4	17.2	15.5	15.2	.....	17.3	15.0	15.3
Peas, canned	do	.....	20.3	18.4	18.4	18.3	17.3	17.0	.....	17.8	16.8	16.5
Tomatoes, canned	do	.....	[1] 14.9	[1] 17.5	[1] 17.0	15.3	13.9	13.9	.....	12.7	12.2	12.8
Sugar, granulated	Pound	6.1	12.8	7.6	7.2	13.9	7.7	7.3	5.1	12.8	6.8	6.8
Tea	do	50.0	69.3	63.7	63.1	88.2	73.0	73.7	57.5	78.8	75.0	74.8
Coffee	do	28.0	42.1	37.0	36.7	43.0	35.3	35.3	28.8	39.1	33.2	33.1
Prunes	do	.....	25.8	17.0	16.8	28.7	19.5	19.2	.....	28.5	20.2	20.3
Raisins	do	.....	30.8	27.6	26.0	35.4	30.8	29.8	.....	32.5	25.9	25.3
Bananas	Dozen	.....	[2] 17.2	[2] 15.0	[2] 14.9	[2] 14.0	[2] 10.4	[2] 10.6	.....	48.6	41.1	38.3
Oranges	do	.....	80.4	50.9	53.6	72.5	58.7	58.2	.....	57.7	62.9	54.8

[1] No. 2½ can.

[2] Per pound.

Comparison of Retail Food Costs in 51 Cities.

TABLE 6 shows for 39 cities the percentage of increase or decrease in the retail cost of food[7] in November, 1921, compared with the average cost in the year 1913, in November, 1920, and in October, 1921. For 12 other cities comparisons are given for the one-year and the one-month periods. These cities have been scheduled by the bureau at different dates since 1913. These percentage changes are based on actual retail prices secured each month from retail dealers and on the average family consumption of these articles in each city.[8]

Effort has been made by the bureau each month to have perfect reporting cities. For the month of November 98 per cent of all the firms reporting in the 51 cities sent in a report promptly. The following were perfect reporting cities; that is, every merchant in the following-named 38 cities who is cooperating with the bureau sent in his report in time for his prices to be included in the city averages: Atlanta, Birmingham, Boston, Bridgeport, Buffalo, Chicago, Cincinnati, Columbus, Dallas, Denver, Detroit, Houston, Indianapolis, Kansas City, Little Rock, Los Angeles, Louisville, Manchester, Milwaukee, Minneapolis, Mobile, Newark, New Haven, New York, Norfolk, Omaha, Peoria, Philadelphia, Portland, Me., Providence, Rochester, St. Paul, Salt Lake City, San Francisco, Savannah, Scranton, Springfield, Ill., and Washington, D. C.

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

RETAIL PRICE REPORTS RECEIVED DURING OCTOBER.

Item.	United States.	Geographical division.				
		North Atlantic.	South Atlantic.	North Central.	South Central.	Western.
Percentage of reports received	98	99	98	99	98	97
Number of cities in each section from which every report was received	38	12	4	12	6	4

[7] For list of articles, see footnote 2, p. 57.

[8] The consumption figure used from January, 1913, to December, 1920, for each article in each city is given in the MONTHLY LABOR REVIEW for November, 1918, pp. 94 and 95. The consumption figures which have been used for each month beginning with January, 1921, are given in the MONTHLY LABOR REVIEW for March, 1921, p. 26.

TABLE 6.—PERCENTAGE CHANGES IN THE RETAIL COST OF FOOD IN NOVEMBER, 1921, COMPARED WITH THE COST IN OCTOBER, 1921, NOVEMBER, 1920, AND WITH THE AVERAGE COST IN THE YEAR 1913, BY CITIES.

City.	Percentage increase, November, 1921, compared with year 1913.	Percentage decrease, November, 1921, compared with November, 1920.	Percentage decrease, November, 1921, compared with October, 1921.	City.	Percentage increase, November, 1921, compared with year 1913.	Percentage decrease, November, 1921, compared with November, 1920.	Percentage decrease, November, 1921, compared with October, 1921.
Atlanta	46	24	2	Milwaukee	49	22	2
Baltimore	54	23	[1] 0.2	Minneapolis	45	23	1
Birmingham	53	23	1	Mobile	.....	24	0.4
Boston	60	21	[1] 1	Newark	50	21	[1] 0.4
Bridgeport	.....	21	[1] 0.4	New Haven	53	21	[1] 1
Buffalo	58	22	0	New Orleans	47	23	3
Butte	.....	23	[1] 0.2	New York	59	19	[1] 0.2
Charleston	52	23	1	Norfolk	.....	24	0
Chicago	52	22	1	Omaha	49	23	1
Cincinnati	49	23	3	Peoria	.....	23	2
Cleveland	47	25	1	Philadelphia	52	21	[1] 0.3
Columbus	.....	23	3	Pittsburgh	53	22	[1] 0.4
Dallas	48	20	1	Portland, Me.	.....	20	2
Denver	41	23	0	Portland, Oreg.	38	20	2
Detroit	52	24	1	Providence	64	20	[1] 1
Fall River	60	19	[1] 3	Richmond	65	20	[1] 0.1
Houston	.....	21	[1] 1	Rochester	.....	21	[1] 1
Indianapolis	44	22	2	St. Louis	48	24	3
Jacksonville	47	20	[1] 0.2	St. Paul	.....	23	1
Kansas City	51	21	1	Salt Lake City	36	22	[1] 1
Little Rock	42	23	1	San Francisco	50	17	0.3
Los Angeles	45	18	1	Savannah	.....	22	0.3
Louisville	40	24	[1] 0.3	Scranton	63	19	[1] 1
Manchester	57	21	0.1	Seattle	39	19	2
Memphis	44	23	2	Springfield, Ill.	.....	24	2
				Washington, D. C.	59	21	3

[1] Increase.

Retail Prices of Coal in the United States.[1]

THE following table shows the average retail prices of coal on November 15, 1920, and on October 15 and November 15, 1921, for the United States and for each of the cities included in the total for the United States. Prices for coal are secured from the cities from which monthly retail prices of food are received.

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

The prices shown for bituminous coal are averages of prices of the several kinds used. The coal dealers in each city are 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 is necessary.

[1] Prices of coal were formerly secured semiannually and published in the March and September issues of the MONTHLY LABOR REVIEW. Since June, 1920, these prices have been secured and published monthly.

AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON NOV. 15, 1920, AND ON OCT. 15 AND NOV. 15, 1921.

City, and kind of coal.	Nov. 15, 1920.	1921	
		Oct. 15.	Nov. 15.
United States:			
Pennsylvania anthracite—			
Stove	**$16.216**	**$15.073**	**$15.107**
Chestnut	**16.292**	**15.105**	**15.138**
Bituminous	**12.525**	**10.402**	**10.342**
Atlanta, Ga.:			
Bituminous	14.375	8.833	8.750
Baltimore, Md.:			
Pennsylvania anthracite—			
Stove	[a] 15.708	[a] 14.958	[a] 15.000
Chestnut	[a] 15.708	[a] 14.750	[a] 14.750
Bituminous	[a] 11.594	8.079	8.050
Birmingham, Ala.:			
Bituminous	10.421	8.746	8.645
Boston, Mass.:			
Pennsylvania anthracite—			
Stove	16.000	15.500	15.500
Chestnut	16.000	15.500	15.500
Bridgeport, Conn.:			
Pennsylvania anthracite—			
Stove	17.500	14.500	14.500
Chestnut	17.500	14.400	14.400
Buffalo, N. Y.:			
Pennsylvania anthracite—			
Stove	13.220	13.120	13.070
Chestnut	13.240	13.120	13.070
Butte, Mont.:			
Bituminous	12.801	11.815	11.721
Charleston, S. C.:			
Pennsylvania anthracite—			
Stove	[a] 17.875	[a] 17.000	[a] 17.000
Chestnut	[a] 17.725	[a] 17.100	[a] 17.100
Bituminous	13.250	12.000	12.000
Chicago, Ill.:			
Pennsylvania anthracite—			
Stove	16.638	15.520	15.560
Chestnut	16.663	15.490	15.530
Bituminous	10.661	8.926	9.056
Cincinnati, Ohio:			
Pennsylvania anthracite—			
Stove	16.215	15.500	15.500
Chestnut	16.250	15.750	15.750
Bituminous	9.000	7.563	7.563
Cleveland, Ohio:			
Pennsylvania anthracite—			
Stove	16.290	14.388	14.413
Chestnut	16.263	14.350	14.413
Bituminous	12.064	8.944	8.897
Columbus, Ohio:			
Pennsylvania anthracite—			
Chestnut	16.500	15.000	15.083
Bituminous	10.875	7.670	7.568
Dallas, Tex.:			
Arkansas anthracite—			
Egg	20.500	18.334	18.417
Bituminous	15.583	15.500	15.500
Denver, Colo.:			
Colorado anthracite—			
Stove, 3 and 5 mixed	17.600	16.000	16.000
Furnace, 1 and 2 mixed	17.600	16.000	16.000
Bituminous	11.691	10.964	11.050
Detroit, Mich.:			
Pennsylvania anthracite—			
Stove	17.700	14.750	14.750
Chestnut	17.600	14.750	14.750
Bituminous	13.706	9.344	9.250
Fall River, Mass.:			
Pennsylvania anthracite—			
Stove	16.333	15.250	15.250
Chestnut	16.250	15.000	15.000
Bituminous	14.000	10.333	9.833
Houston, Tex.:			
Bituminous	16.610	12.417	12.417

[a] Per ton of 2,240 pounds.

AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON NOV. 15, 1920, AND ON OCT. 15 AND NOV. 15, 1921—Continued.

City, and kind of coal.	Nov. 15, 1920.	1921	
		Oct. 15.	Nov. 15.
Indianapolis, Ind.:			
Pennsylvania anthracite—			
Stove	.....	$15.500	$15.625
Chestnut	.....	15.667	15.667
Bituminous	$10.708	8.560	8.524
Jacksonville, Fla.:			
Pennsylvania anthracite—			
Stove	23.000	17.500	17.500
Chestnut	23.000	17.500	17.500
Bituminous	16.000	13.000	13.000
Kansas City, Mo.:			
Arkansas anthracite—			
Furnace	19.100	17.286	17.214
Stove, or No. 4	19.500	17.813	17.938
Bituminous	11.438	9.650	9.533
Little Rock, Ark.:			
Arkansas anthracite—			
Egg	17.000	15.000	16.000
Bituminous	15.385	13.286	13.167
Los Angeles, Calif.:			
Bituminous	19.222	19.000	19.000
Louisville, Ky.:			
Pennsylvania anthracite—			
Stove	.....	16.875	16.875
Chestnut	17.000	16.833	16.833
Bituminous	11.176	8.100	8.100
Manchester, N. H.:			
Pennsylvania anthracite—			
Stove	18.000	16.500	16.500
Chestnut	18.000	16.500	16.500
Bituminous	15.000	11.333	11.333
Memphis, Tenn.:			
Pennsylvania anthracite—			
Stove	18.000	18.000	18.000
Chestnut	18.000	18.000	18.000
Bituminous	11.550	8.393	8.393
Milwaukee, Wis.:			
Pennsylvania anthracite—			
Stove	16.200	16.150	16.010
Chestnut	16.300	16.150	15.950
Bituminous	14.469	10.602	10.611
Minneapolis, Minn.:			
Pennsylvania anthracite—			
Stove	18.390	17.950	17.950
Chestnut	18.470	17.950	17.950
Bituminous	15.547	12.486	12.498
Mobile, Ala.:			
Bituminous	14.235	11.429	11.357
Newark, N. J.:			
Pennsylvania anthracite—			
Stove	13.000	12.875	12.875
Chestnut	13.000	12.875	12.875
New Haven, Conn.:			
Pennsylvania anthracite—			
Stove	18.000	14.000	14.000
Chestnut	18.000	14.000	14.000
New Orleans, La.:			
Pennsylvania anthracite—			
Stove	22.500	17.500	18.000
Chestnut	22.500	17.500	18.000
Bituminous	14.145	10.750	10.781
New York, N. Y.:			
Pennsylvania anthracite—			
Stove	14.873	13.342	13.342
Chestnut	14.873	13.300	13.342
Norfolk, Va.:			
Pennsylvania anthracite—			
Stove	16.000	14.000	14.000
Chestnut	16.000	14.000	14.000
Bituminous	13.679	10.000	9.429
Omaha, Nebr.:			
Pennsylvania anthracite—			
Stove	23.900	22.000	22.000
Chestnut	24.000	22.000	22.000
Bituminous	14.753	12.579	12.553
Peoria, Ill.:			
Pennsylvania anthracite—			
Stove	16.500	15.375	15.500
Chestnut	16.500	15.500	15.500
Bituminous	9.031	6.222	6.139

AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON NOV. 15, 1920, AND ON OCT. 15 AND NOV. 15, 1921—Concluded.

City, and kind of coal.	Nov. 15, 1920.	1921	
		Oct. 15.	Nov. 15.
Philadelphia, Pa.:			
Pennsylvania anthracite—			
Stove	[a] $14.975	[a] $14.313	[a] $14.313
Chestnut	[a] 14.975	[a] 14.281	[a] 14.313
Pittsburgh, Pa.:			
Pennsylvania anthracite—			
Stove	[a] 18.500	[a] 15.500	[a] 15.500
Chestnut	[a] 18.500	[a] 15.667	[a] 15.667
Bituminous	9.125	6.857	6.929
Portland, Me.:			
Pennsylvania anthracite—			
Stove	17.280	15.115	15.840
Chestnut	17.280	15.115	15.840
Bituminous	14.373	----	----
Portland, Oreg.:			
Bituminous	14.272	12.396	13.063
Providence, R. I.:			
Pennsylvania anthracite—			
Stove	[b] 17.100	[b] 15.000	[b] 15.000
Chestnut	[b] 17.100	[b] 15.000	[b] 15.000
Bituminous	[b] 14.667	----	----
Richmond, Va.:			
Pennsylvania anthracite—			
Stove	15.500	14.250	14.250
Chestnut	15.500	14.250	14.250
Bituminous	12.528	10.808	10.808
Rochester, N. Y.:			
Pennsylvania anthracite—			
Stove	13.400	13.550	13.550
Chestnut	13.500	13.550	13.550
St. Louis, Mo.:			
Pennsylvania anthracite—			
Stove	16.250	15.938	16.063
Chestnut	16.250	16.125	16.250
Bituminous	8.400	6.938	7.237
St. Paul, Minn.:			
Pennsylvania anthracite—			
Stove	18.458	17.950	17.950
Chestnut	18.492	17.950	17.950
Bituminous	16.824	13.385	13.240
Salt Lake City, Utah:			
Colorado anthracite—			
Furnace, 1 and 2 mixed	17.900	19.000	19.125
Stove, 3 and 5 mixed	18.500	19.875	20.000
Bituminous	10.069	8.963	8.067
San Francisco, Calif.:			
New Mexico anthracite—			
Cerillos egg	28.650	27.250	27.250
Colorado anthracite—			
Egg	26.750	26.250	26.250
Bituminous	19.400	19.273	19.273
Savannah, Ga.:			
Pennsylvania anthracite—			
Stove	[c] 19.100	[c] 17.100	[c] 17.100
Chestnut	[c] 19.100	[c] 17.100	[c] 17.100
Bituminous	[c] 17.350	[c] 12.433	[c] 12.433
Scranton, Pa.:			
Pennsylvania anthracite—			
Stove	9.833	9.650	9.650
Chestnut	9.833	9.650	9.650
Seattle, Wash.:			
Bituminous	[d] 11.612	[d] 11.045	[d] 10.360
Springfield, Ill.:			
Bituminous	4.740	4.475	4.575
Washington, D. C.:			
Pennsylvania anthracite—			
Stove	[a] 15.600	[a] 15.064	[a] 15.064
Chestnut	[a] 15.529	[a] 14.621	[a] 14.700
Bituminous	[a] 11.510	[a] 9.554	[a] 9.617

[a] Per ton of 2,240 pounds.

[b] Fifty cents per ton additional is charged for "binning." Most customers require binning or basketing the coal into the cellar.

[c] All coal sold in Savannah is weighed by the city. A charge of 10 cents per ton or half ton is made. This additional charge has been included in the above prices.

[d] Prices in Zone A. The cartage charges in Zone A were as follows: November, 1920, $1.85; October and November, 1921, $1.75. These charges have been included in the averages. The cartage charges in Seattle during these months have ranged from $1.55 to $3.05, according to distance.

Wholesale Prices in November.

A FURTHER slight drop in the general level of wholesale prices is shown for November by information gathered by the United States Department of Labor through the Bureau of Labor Statistics. The bureau's weighted index number, based on 327 commodities or price series, stands at 149 compared with 150 for the preceding month.

The largest decreases took place among farm products, particularly cotton, wheat, rye, cattle, hogs, sheep, and poultry. Clothing and metals also were cheaper than in the month before. No change in the general price level was reported for the groups of foods, chemicals and drugs, housefurnishing goods, and miscellaneous commodities. In the groups of fuel and building materials prices averaged higher than in October.

Some of the more important changes occurring between October and November, as measured by average prices in each month, are as follows:

IMPORTANT ARTICLES INCREASING OR DECREASING IN AVERAGE PRICE IN NOVEMBER AS COMPARED WITH OCTOBER, 1921, BY GROUPS OF COMMODITIES.

Increases.

Commodity.	Per cent.	Commodity.	Per cent.	Commodity.	Per cent.
Farm products.		*Cloths and clothing*—Concd.		*Building materials.*	
Corn, No. 2 mixed, Chicago.	2.7	Sheeting, brown, 4/4, Ware Shoals, New York.	2.4	Brick, common building, Cincinnati	3.6
Oats, cash, Chicago	2.1	Silk, Japan, Kansai, No. 1, New York	18.7	Lumber:	
Hides, packers', heavy native steers, Chicago	6.7	Wool, Ohio, Boston:		Douglas fir, at mill:	
Live stock, lambs, Chicago.	2.7	Fine clothing	3.6	No. 1	9.5
Peanuts, No. 1, Norfolk	4.8	Half blood	3.1	No. 2	19.2
Hay, alfalfa, No. 1, Kansas City	4.1	*Fuel and lighting.*		Oak, white, plain, N. Y.	8.3
Food, etc.		Gasoline, motor, New York	6.7	Pine, yellow, siding, Norfolk	6.3
Cheese, San Francisco	27.2	Petroleum, crude, at wells:		Poplar, yellow, N. Y.	3.3
Coffee, Rio, New York	8.6	Kansas-Oklahoma	37.1	Turpentine, New York	7.3
Eggs, fresh:		Pennsylvania	24.8	*Chemicals and drugs.*	
Chicago	19.9	Petroleum, refined, N. Y.:		Alum, lump, New York	7.1
New York	20.6	Standard white, 110°	13.6	Glycerine, refined, N. Y.	1.3
San Francisco	10.1	Water white, 150°	3.4	*Miscellaneous.*	
Meat, Chicago:		Coal, bituminous:		Bran, Minneapolis	21.5
Bacon, rough sides	6.5	Mine run, f. o. b. mine, St. Louis	5.3	Lubricating oil, paraffin, New York	10.2
Beef, fresh, good native steers	4.9	Prepared sizes, Pittsburgh	7.1	Rubber, Para, island, New York	2.4
Lamb, dressed	7.6	*Metals and metal products.*		Millfeed, middlings, Minneapolis	17.5
Tea, Formosa, New York.	21.7	Copper, ingot, New York	2.8		
Cloths and clothing.		Tin, pig, New York	5.0		
Denims, Mass. 2.20, New York	7.2	Zinc, pig (spelter), New York	1.2		

IMPORTANT ARTICLES INCREASING OR DECREASING IN AVERAGE PRICE IN NOVEMBER AS COMPARED WITH OCTOBER, 1921, BY GROUPS OF COMMODITIES—Con.

Decreases.

Commodity.	Per cent.
Farm products.	
Cotton, middling:	
New Orleans	8.5
New York	7.6
Rye, No. 2, cash, Chicago	8.9
Wheat:	
No. 1, northern spring, Minneapolis	5.0
No. 1, hard white, Portland, Oreg	3.1
Hides, calfskins, No. 1, Chicago	6.5
Live stock, Chicago:	
Cattle, steers, good to choice	3.5
Hogs, heavy	13.9
Sheep, ewes	5.7
Poultry, live, Chicago	7.4
Food, etc.	
Butter, creamery, extra:	
Chicago	1.8
New York	3.1
Cheese, New York	3.9
Flour, rye, white, Minneapolis	4.6
Flour, wheat:	
Patent, Kansas City	6.4
Standard patent, Minneapolis	3.4
Patent, Portland, Oreg.	5.2
Fruit, Chicago:	
Apples, Baldwin	4.6
Lemons, California	38.3
Oranges, California	6.0
Lard, prime, contract, New York	3.3
Meats:	
Hams, smoked, Chicago	5.6
Mutton, dressed, N. Y.	18.9
Poultry, dressed, Chicago	9.2
Oleo oil, extra, Chicago	8.2
Rice, Blue Rose, New Orleans	13.6
Food, etc.—Concluded.	
Sugar, raw, New York	1.5
Potatoes, white, Chicago	5.3
Cloths and clothing.	
Shoes, factory:	
Men's tan grain blucher	6.1
Women's, Goodyear welt, kid, lace	1.9
Print cloths, 27 in., Boston	6.2
Muslin, bleached, Fruit of the Loom, 4/4, N. Y.	1.6
Cotton yarns, Boston:	
Carded, 22/1	5.8
Twisted, 40/2	5.8
Leather, Boston:	
Chrome calf, B grades	4.8
Glazed kid, black	6.7
Broadcloth, 9½ ounce, New York	13.3
French serge, factory	1.5
Woolen yarns, Philadelphia:	
Fine domestic, 2/50s	5.0
Fuel and lighting.	
Coal, semibituminous:	
New River, Cincinnati	5.1
Pocahontas, Norfolk	13.8
Coke, Connellsville, furnace, at ovens	9.3
Metals and metal products.	
Bar iron, refined iron bars, Pittsburgh	2.7
Nails, wire, Pittsburgh	2.0
Pig iron, foundry, No. 2 northern, Pittsburgh	1.3
Steel plates, tank, Pittsburgh	5.0
Steel rails, open hearth, Pittsburgh	11.6
Steel, structural, Chicago	3.5
Silver, bar, fine, N. Y.	3.7
Tin plate, domestic, coke, Pittsburgh	7.3
Zinc, sheet, factory	6.3
Building materials.	
Glass, plate, 5 to 10 square feet, New York	28.6
Lath, eastern spruce, New York	10.1
Maple, New York	10.5
Linseed oil, raw, New York	1.5
Chemicals and drugs.	
Alcohol, wood, refined, New York	3.8
Soda, New York:	
Carbonate of	5.4
Caustic	2.7
Nitrate of	2.5
House-furnishing goods.	
Glassware, tumblers, one-third pint, factory	8.3
Pails, 10-quart, galvanized iron, factory	7.8
Tubs, galvanized iron, factory	5.3
Miscellaneous.	
Cottonseed meal, New York	2.2
Cottonseed oil, New York	6.8
Jute, raw, New York	15.3
Phosphate rock, 68 per cent, f. o. b. mines	12.8
Hemp, Manila, New York	4.8
Sisal, Mexican, New York	26.9
Tankage, 9 and 20 per cent, Chicago	12.8
Coconut oil, crude, Pacific coast	6.1
Paper, newsprint, rolls, contract, f. o. b. mill	5.0

INDEX NUMBERS OF WHOLESALE PRICES IN SPECIFIED YEARS AND MONTHS, 1913 TO NOVEMBER, 1921, BY GROUPS OF COMMODITIES.

[1913=100.]

Year and month.	Farm products.	Food, etc.	Cloths and clothing.	Fuel and lighting.	Metals and metal products.	Building materials.	Chemicals and drugs.	House-furnishing goods.	Miscellaneous.	All commodities.
1913	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**
January	97	99	100	103	107	100	101	100	100	100
April	97	96	100	98	102	101	101	100	98	98
July	101	102	100	99	98	101	99	100	101	100
October	103	102	100	100	99	98	100	100	100	101
1914	**103**	**103**	**98**	**96**	**87**	**97**	**101**	**99**	**99**	**100**
January	101	102	98	99	92	98	100	99	99	100
April	103	95	99	98	91	99	100	99	101	98
July	104	104	99	95	85	97	99	99	97	100
October	103	107	97	93	83	96	105	99	96	99
1915	**105**	**104**	**100**	**93**	**97**	**94**	**114**	**99**	**99**	**101**
January	102	106	96	93	83	94	103	99	100	99
April	107	105	99	89	91	94	102	99	99	100
July	108	104	99	90	102	93	108	99	98	101
October	105	103	103	96	100	93	124	99	99	101
1916	**122**	**126**	**128**	**119**	**148**	**101**	**159**	**115**	**120**	**124**
January	108	113	110	105	126	99	150	105	107	110
April	114	117	119	108	147	101	172	108	110	117
July	118	121	126	108	115	99	156	121	120	119
October	136	140	138	133	151	101	150	124	132	134
1917	**189**	**176**	**181**	**175**	**208**	**124**	**198**	**144**	**155**	**176**
January	148	150	161	176	183	106	159	132	138	151
April	181	182	169	184	208	114	170	139	149	172
July	199	181	187	192	257	132	198	152	153	186
October	208	183	193	146	182	134	252	152	163	181
1918	**220**	**189**	**239**	**163**	**181**	**151**	**221**	**196**	**193**	**196**
January	207	187	211	157	174	136	232	161	178	185
February	208	186	216	157	176	138	232	161	181	186
March	212	177	223	158	176	144	232	165	184	187
April	217	178	232	157	177	146	229	172	191	190
May	214	177	237	160	178	148	223	173	194	190
June	217	179	245	159	178	150	219	198	196	193
July	224	184	249	166	184	154	216	199	190	198
August	230	191	252	166	185	157	222	221	191	202
September	237	199	255	167	184	159	220	226	194	207
October	224	201	257	167	187	158	218	222	196	204
November	221	206	256	171	188	164	215	226	203	206
December	222	210	250	171	184	164	195	227	204	206
1919	**234**	**210**	**261**	**173**	**161**	**192**	**179**	**236**	**217**	**212**
January	222	207	234	170	172	161	191	218	212	208
February	218	196	223	169	168	163	185	218	208	197
March	228	203	216	168	162	165	183	218	217	201
April	235	211	217	167	152	162	178	217	216	203
May	240	214	228	167	152	164	179	217	213	207
June	231	204	258	170	154	175	174	233	212	207
July	246	216	282	171	158	186	171	245	221	218
August	243	227	304	175	165	208	172	259	225	226
September	226	211	306	181	160	227	173	262	217	220
October	230	211	313	181	161	231	174	264	220	223
November	240	219	325	179	164	236	176	299	220	230
December	244	234	335	181	169	253	179	303	220	238
1920	**218**	**236**	**302**	**238**	**186**	**308**	**210**	**337**	**236**	**243**
January	246	253	350	184	177	268	189	324	227	248
February	237	244	356	187	189	300	197	329	227	249
March	239	246	356	192	192	325	205	329	230	253
April	246	270	353	213	195	341	212	331	238	265
May	244	287	347	235	193	341	215	339	246	272
June	243	279	335	246	190	337	218	362	247	269
July	236	268	317	252	191	333	217	362	243	262
August	222	235	299	268	193	328	216	363	240	250
September	210	223	278	284	192	318	222	371	239	242
October	182	204	257	282	184	313	216	371	229	225
November	165	195	234	258	170	274	207	369	220	207
December	144	172	220	236	157	266	188	346	205	189
1921:										
January	136	162	208	228	152	239	182	283	190	177
February	129	150	198	218	146	221	178	277	180	167
March	125	150	192	207	139	208	171	275	167	162
April	115	141	186	199	138	203	168	274	154	154
May	117	133	181	194	138	202	166	262	151	151
June	113	132	180	187	132	202	166	250	150	148
July	115	134	179	184	125	200	163	235	149	148
August	118	152	179	182	120	198	161	230	147	152
September	122	146	187	178	120	193	162	223	146	152
October	119	142	190	182	121	192	162	218	145	150
November	114	142	186	186	119	197	162	218	145	149

Compared with prices in November, 1920, it is seen from the above table that the general level has declined 28 per cent. The greatest decrease is again shown for the group of house-furnishing goods, in which prices have fallen 41 per cent. Farm products were 31 per cent cheaper in November than in the corresponding month of last year, metals and metal products were 30 per cent cheaper, and fuel and building materials were 28 per cent cheaper. Food products in the aggregate have declined 27 per cent, chemicals and drugs 21¾ per cent, and clothing 20½ per cent since November of last year. In the group of miscellaneous commodities, including such important articles as cottonseed meal and oil, lubricating oil, jute, bran and mill-feed middlings, newsprint and wrapping paper, and wood pulp, the decrease has been 34 per cent.

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

THE index numbers of retail prices published by several foreign countries have been brought together with those of this bureau in the subjoined table after having been reduced to a common base, viz, prices for July, 1914, equal 100. This base was selected instead of the average for the year 1913, which is used in other tables of index numbers compiled by the bureau, because of the fact that in some instances satisfactory information for 1913 was not available. For Belgium, Denmark, Germany, Great Britain, Norway, Sweden, and the city of Rome, Italy, the index numbers are reproduced as published in the original sources. With three exceptions all these are shown on the July, 1914, base in the source from which the information is taken. The index numbers for Belgium are computed on April, 1914, as the base period, those for Germany on the average of October, 1913, January, April, and July, 1914, while those for Rome are based on the first half of 1914. The index numbers here shown for the remaining countries have been obtained by dividing the index for each month specified in the table by the index for July, 1914, or the nearest period thereto, as published. As shown in the table, the number of articles included in the index numbers for the different countries differs widely. These results should not, therefore, be considered as closely comparable one with another. In one or two instances, also, the figures here shown are not absolutely comparable from month to month over the entire period, owing to slight changes in the list of commodities included at successive dates.

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

[July, 1914=100.]

Year and month.	United States: 22 foodstuffs, to December, 1920; since that time, 43 foodstuffs; 51 cities (variable). Weighted.	Australia: 46 foodstuffs; 30 towns. Weighted.	Belgium: 54 articles (variable); Brussels. Not weighted.	Canada: 29 foodstuffs; 60 cities. Weighted.	Denmark: Family food budget; 5 persons. Weighted.	France: Family budget, 13 articles.		Germany: Family food budget; 5 persons. Weighted.
						Cities over 10,000 population (except Paris). Weighted.	Paris only. Weighted.	
1914.								
July	100	100	[1] 100	100	100	[2] 100	100	[3] 100
October	103	99	.....	108	.....	.....	.....	.....
1915.								
January	101	107	.....	107	.....	[2] 110	120	.....
April	97	113	.....	105	.....	.....	114	.....
July	98	131	.....	105	128	[2] 123	120	.....
October	101	133	.....	105	.....	.....	118	.....
1916.								
January	105	129	.....	112	.....	[2] 133	134	.....
April	107	131	.....	112	.....	[2] 137	132	.....
July	109	130	.....	114	146	[2] 141	129	.....
October	119	125	.....	125	.....	[2] 146	135	.....
1917.								
January	125	125	.....	138	.....	[2] 154	139	.....
February	130	126	.....	141	158	.....	.....	.....
March	130	126	.....	144	.....	.....	.....	.....
April	142	127	.....	145	.....	[2] 171	147	.....
May	148	127	.....	159	.....	.....	.....	.....
June	149	127	.....	160	.....	.....	.....	.....
July	143	126	.....	157	166	[2] 184	183	.....
August	146	129	.....	157	.....	.....	.....	.....
September	150	129	.....	157	.....	.....	.....	.....
October	154	129	.....	159	.....	[2] 200	184	.....
November	152	129	.....	163	.....	.....	.....	.....
December	154	128	.....	165	.....	.....	.....	.....
1918.								
January	157	129	.....	167	.....	[2] 211	191	.....
February	158	130	.....	169	173	.....	.....	.....
March	151	131	.....	170	.....	.....	.....	.....
April	151	131	.....	169	.....	[2] 232	218	.....
May	155	132	.....	171	.....	.....	.....	.....
June	159	132	.....	172	.....	.....	.....	.....
July	164	131	.....	175	187	[2] 244	206	.....
August	168	128	.....	181	.....	.....	.....	.....
September	175	128	.....	179	.....	.....	.....	.....
October	177	131	.....	182	.....	[2] 260	238	.....
November	179	133	.....	182	.....	.....	.....	.....
December	183	134	.....	184	.....	.....	.....	.....
1919.								
January	181	140	639	186	186	[2] 278	248	.....
February	169	141	534	181	.....	.....	227	.....
March	172	143	424	176	.....	.....	248	.....
April	178	145	374	180	.....	[2] 293	257	.....
May	181	146	351	182	.....	.....	268	.....
June	180	147	344	185	.....	.....	264	.....
July	186	147	354	186	212	[2] 289	261	.....
August	188	148	348	195	.....	.....	238	.....
September	184	148	342	193	.....	.....	259	.....
October	184	156	337	192	.....	[2] 201	283	.....
November	188	158	341	192	.....	.....	280	.....
December	193	158	359	198	.....	.....	285	.....

[1] April, 1914.
[2] Quarter beginning month specified.
[3] Average for October, 1913, January, April, and July, 1914.

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

Year and month.	United States: 22 foodstuffs, to December, 1920; since that time, 43 foodstuffs; 51 cities (variable). Weighted.	Australia: 46 foodstuffs; 30 towns. Weighted.	Belgium: 54 articles (variable); Brussels. Not weighted.	Canada: 29 foodstuffs; 60 cities. Weighted.	Denmark: Family food budget; 5 persons. Weighted.	France: Family budget, 13 articles.		Germany: Family food budget; 5 persons. Weighted.
						Cities over 10,000 population (except Paris). Weighted.	Paris only. Weighted.	
1920.								
January	197	160	410	206	251	[2] 319	290	.....
February	196	163	445	212	.....	.....	297	854
March	196	163	473	215	.....	.....	339	1,003
April	207	173	488	215	.....	[2] 379	358	1,123
May	211	176	492	224	.....	.....	379	1,178
June	215	187	490	228	.....	.....	369	1,133
July	215	194	479	227	253	[2] 388	373	1,156
August	203	194	480	221	.....	.....	373	1,049
September	199	197	493	215	.....	.....	407	1,032
October	194	192	505	213	.....	[2] 450	420	1,129
November	189	186	499	206	.....	.....	426	1,184
December	175	184	493	200	.....	.....	424	1,272
1921.								
January	169	186	477	195	276	[2] 429	410	1,265
February	155	184	457	190	.....	.....	382	1,191
March	153	181	429	178	.....	.....	359	1,188
April	149	173	417	171	.....	[2] 363	328	1,171
May	142	168	404	165	.....	.....	317	1,152
June	141	165	405	150	.....	.....	312	1,175
July	145	161	393	148	236	[2] 350	306	1,274
August	152	158	403	154	.....	.....	317	1,399
September	150	154	406	159	.....	.....	329	1,418

Year and month.	Great Britain: 21 foodstuffs; 600 towns. Weighted.	Italy: Family food budget; 5 persons; Rome. Weighted.	Netherlands: 27 foodstuffs; Amsterdam. Weighted.	New Zealand: 59 foodstuffs; 25 towns. Weighted.	Norway: Family food budget. Weighted.	South Africa: 18 foodstuffs; 9 towns. Weighted.	Sweden: 21 articles; 44 towns. Weighted.	Switzerland: 9 groups of foodstuffs. Not weighted.
1914.								
July	100	[4] 100	[5] 100	100	100	[6] 100	100	[7] 100
October	112	.....	.....	102	.....	.....	[2] 107	[7] 103
1915.								
January	118	95	.....	111	.....	.....	[2] 113	[7] 107
April	124	107	.....	113	.....	.....	[2] 121	[7] 114
July	132½	95	.....	112	.....	[6] 107	[2] 124	[7] 119
October	140	100	.....	112	.....	.....	[2] 128	[7] 120
1916.								
January	145	111	.....	116	.....	.....	[2] 130	[7] 126
April	149	116	.....	118	.....	.....	[2] 134	[7] 129
July	161	111	.....	119	[8] 160	[6] 116	[2] 142	[7] 140
October	168	111	.....	120	.....	.....	[2] 152	[7] 144
1917.								
January	187	124	.....	127	.....	.....	160	[7] 148
February	189	127	.....	126	.....	.....	166	.....
March	192	121	.....	126	.....	.....	170	158
April	194	120	.....	127	.....	.....	175	.....
May	198	123	.....	128	.....	.....	175	.....
June	202	136	.....	128	.....	.....	175	179
July	204	137	.....	127	.....	[6] 128	177	.....
August	202	143	.....	127	214	.....	181	.....
September	206	142	.....	129	.....	.....	187	192
October	197	148	.....	130	.....	.....	192	.....
November	206	166	.....	130	.....	.....	200	.....
December	205	157	.....	132	.....	.....	212	197

[2] Quarter beginning month specified.
[4] January–July.
[5] Year 1913.
[6] For calendar year.
[7] Previous month.
[8] August.

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

Year and month.	Great Britain: 21 foodstuffs; 600 towns. Weighted.	Italy: Family food budget; 5 persons; Rome. Weighted.	Netherlands: 27 foodstuffs; Amsterdam. Weighted.	New Zealand: 59 foodstuffs; 25 towns. Weighted.	Norway: Family food budget. Weighted.	South Africa: 18 foodstuffs; 9 towns. Weighted.	Sweden: 21 articles; 44 towns. Weighted.	Switzerland: 9 groups of foodstuffs. Not weighted.
1918.								
January	206	177	.....	133	.....	128	221	.....
February	208	181	.....	134	.....	129	227	.....
March	207	199	.....	134	.....	131	235	204
April	206	200	.....	137	.....	134	247	.....
May	207	202	.....	139	.....	136	258	.....
June	208	199	.....	139	.....	135	261	230
July	210	203	.....	139	279	134	268	.....
August	218	208	.....	141	.....	134	280	.....
September	216	219	.....	141	.....	135	284	251
October	229	235	.....	140	.....	139	310	.....
November	233	249	.....	144	275	135	320	.....
December	229	254	.....	150	275	134	330	252
1919.								
January	230	259	195	145	279	136	339	.....
February	230	258	212	142	278	137	334	.....
March	220	243	205	141	278	137	331	257
April	213	230	196	142	276	139	337	.....
May	207	232	186	142	283	139	328	.....
June	204	225	204	143	290	141	319	261
July	209	206	210	144	289	139	310	.....
August	217	207	207	146	291	145	313	.....
September	216	214	203	148	298	145	309	.....
October	222	241	204	150	300	154	307	.....
November	231	246	202	153	297	167	309	.....
December	234	252	199	155	299	170	307	245
1920.								
January	236	275	203	158	299	177	298	244
February	235	299	205	160	297	187	290	.....
March	233	300	205	162	298	183	291	244
April	235	310	206	162	305	183	297	243
May	246	325	209	163	311	188	294	.....
June	255	315	210	163	311	194	294	.....
July	258	318	217	167	319	197	297	246
August	262	322	219	171	333	196	308	.....
September	267	324	223	173	336	195	307	.....
October	270	341	226	177	340	197	306	262
November	291	361	220	176	342	196	303	.....
December	282	375	208	179	342	188	294	.....
1921.								
January	278	367	199	178	334	172	283	243
February	263	376	200	175	308	165	262	237
March	249	386	199	169	300	160	253	234
April	238	432	193	169	300	156	248	231
May	232	420	189	167	292	152	237	212
June	218	409	186	166	290	144	234	210
July	220	402	185	164	292	139	232	214
August	226	416	184	163	297	134	234	209
September	225	430	184	161	290	133	228	206

Prices of Farm Products in the United States.

A RECENT bulletin of the United States Bureau of Markets and Crop Estimates [1] gives the prices paid to producers of farm products, by months, from August, 1909, to July, 1921, shows the relation between farm prices and wages, and gives the purchasing power of farm products from August, 1909, to June, 1921, by months. There is, according to the report, a very great similarity in the behavior of prices during the War of 1812, Civil War, and World

[1] United States. Department of Agriculture. Bureau of Markets and Crop Estimates. Prices of farm products in the United States. Washington, 1921. 72 pp. Bul. No. 999.

War periods. "In each case the highest price level was reached after the war closed, and in each case there was an extremely violent drop in prices," except that in the case of the World War this drop was more violent than after either of the other wars.

Violent changes in the price level result in violent changes in industry. If the price of a particular product is not favorable, its production is checked, but the price does not fully respond to the reduced effort until the product that is already in the process of production and merchandising is nearly exhausted. Prices then rise and new production begins, but the new efforts at production have only a limited effect on prices until the new goods have passed through the process of production and merchandising. The length of time that the prices of a particular product remain high or low, therefore, depends largely on how long it takes from the beginning to the completion of the product. Other factors are, of course, involved.

Relation of Wages and Farm Prices.

WAGES tend to lag behind when there is a sudden rise or fall in prices. When prices rise rapidly, as they did in 1863–64 and in 1916–17, there results a very "real" high cost of living. "The usual quantity of labor will not buy the usual quantity of things," and some form of economy must therefore be practiced. Food is one of the items which may be economized on. This can be done by changing from animal to plant foods, since the latter may be obtained at much less cost. The increased demand for plant foods will in turn usually cause grains to rise higher than the general price level. This is shown in the following instance: On the basis of the average of prices during the five-year period before the war being equal to 100, the general price level in 1917 stood at 178, as indicated by the index number for wholesale prices. The weighted average price of 31 farm products was 179. Wages lagged behind prices and stood at 131. Index numbers of farm prices of corn, wheat, rye, buckwheat, beans, cabbage, onions, and potatoes were very high, ranging from 210 for buckwheat to 324 for beans. But the index number of butter was only 141; of eggs, 160; of chickens, 146; of beef cattle, 157; and of hogs, 188. According to the report, these striking differences in prices were largely owing to shifts made in food habits because wages had not risen so rapidly as the general price level.

When the general price level falls, wages again lag behind and there is an increased demand for animal foods, provided there is not too much unemployment.

The report states, however, that—

The effect of wages is not as great as might be inferred from wage rates and wholesale prices. When prices rise rapidly, wages lag behind, but there is full employment, so that the wage earners are not in as serious a condition as the wages indicate. When prices fall rapidly, wages lag behind and remain high, but there is likely to be unemployment, so that the buying power is not as high as the wages suggest.

Purchasing Power of Farm Products.

IN JUNE, 1921, the general average of all commodities at wholesale, including farm products, was 151 per cent of the average prices over the five-year period preceding the war. At that time the price of corn was 92 per cent of its prewar average price. The price of corn was therefore 61 per cent of the general price level on June 1, 1921. That is to say that the price brought by the sale of a bushel of corn

on June 1, 1921, if used to buy commodities of all kinds at wholesale, would purchase only 61 per cent of the amount which the sale price of a bushel of corn would have bought before the war. "Manifestly the sellers of corn could not buy the usual quantity of other things."

The purchasing power of 31 farm products on June 1, 1921, was as follows:

PURCHASING POWER OF 31 FARM PRODUCTS ON JUNE 1, 1921. [1]

Commodity.	Purchasing power.	Commodity.	Purchasing power.	Commodity.	Purchasing power.
Corn	61	Hay	68	Butter	83
Oats	60	Timothy seed	50	Milch cows	80
Wheat	93	Clover seed	74	Beef cattle	69
Barley	53	Cabbage	111	Veal calves	73
Rye	101	Onions	73	Sheep	66
Buckwheat	101	Potatoes	64	Lambs	79
Flaxseed	55	Sweet potatoes	89	Wool	58
Beans	81	Peanuts	48	Hogs	67
Broom corn	56	Apples	91	Horses	45
Cotton	51	Chickens	116	All commodities, weighted	70
Cotton seed	52	Eggs	77		

[1] Obtained by dividing the index number for the farm price of each product by the index number for wholesale prices of all commodities. If the purchasing power is 100, it means that the product can be exchanged for the usual quantity of other things. That is, if a farmer sold a given quantity of this product and used the money to buy all kinds of other commodities at wholesale he would be able to buy the normal quantity. If the purchasing power is 50, it means that he would be able to buy half the normal amount.

Practically nothing that the farmer sells can be exchanged for the usual quantity of other things. It is physically impossible for farmers to absorb the products of factories.

The weighted average purchasing power of 31 farm products in June, 1921, was 70 per cent of the five-year average before the war. The yield per acre for some crops was above the average so that the buying power of the crops would be higher than this figure would indicate. Offsetting factors are the fact that retail prices lag behind wholesale prices. The farmer usually buys at retail so that he buys on a higher market than the index number of wholesale prices indicates. Also the portion of the income that must go to pay debts and taxes is much greater when prices drop suddenly. Even if prices of all things dropped evenly the buying power would still be reduced.

The seriousness of the farmers' situation is shown by the extract below:

At the farm price December 1, 1920, cotton had a purchasing power of 68 per pound and 61 per acre harvested. This is the lowest since 1894. Since December 1 the price of cotton has continued to drop, so that now (1921) the purchasing power of an acre of cotton is the lowest ever reported. Unless there is more reserve capital or credit it would appear that at no time since records have been kept could cotton farmers buy so little.

The 1920 corn crop was a very large crop and its purchasing power at December 1 prices was 60 per bushel and 73 per acre. Both have dropped since that time. Even at December 1 prices there has not been a time in 20 years when an acre of corn or wheat would sell for so little.

The Nation is not only confronted with the most violent drop in prices that it has ever experienced, but agricultural prices have dropped so much more than other prices that we have a severe agriculture panic on top of a severe general depression.

At first thought the city consumer of farm things is likely to delight in low prices of farm products and high prices for city products. The farm consumer of city things is equally likely to delight in low prices of city goods and high prices of farm products. But neither can long prosper at the expense of the other.

Suggested Remedial Measures.

THOUGH emphasis is laid on the fact that the prime purpose of the bulletin is the presentation of statistics, some remedial measures are suggested. These are as follows:

1. A general adjustment to some fairly stable price level, making it possible for each class of workers to use the output of other workers and thus opening the channels of production and trade.
2. Encouragement of exports of farm products, thus in large measure restoring the buying power of farmers and enabling them again to absorb the products of factories.
3. The return of the individual farm to a more nearly self-sustaining system.
4. Extension of credit to the farmer as a matter of investment rather than from bank credit.
5. Increase of the supply of live stock.
6. The giving of more attention to the storage and financing of crops.

Minimum of Subsistence Costs in Berlin in October, 1921.

A STATEMENT by Dr. R. Kuczynski, economist and director of the Statistical Office of Berlin-Schöneberg, giving the minimum subsistence costs in Berlin in October, 1921, shows a continual increase in the cost of living in that city.

The enormous increase in the price of foreign securities, it is stated, has offered both producers and dealers an opportunity to greatly increase prices. In October milk and butter had increased 16 per cent in price over the preceding month; lard, 22 per cent; margarine, 24 per cent, and potatoes 29 per cent. In comparison with prewar prices bread costs 15 times as much as eight years ago, briquettes 17 times as much, milk 19 times as much, margarine 20 times as much, rice 22 times as much, and potatoes 33 times as much. Rationed foodstuffs cost 15 times as much in October, 1921, as in October, 1913. The same rationed quantities which now cost 41.37 marks ($9.85, par) could be bought eight years ago for 2.75 marks (65 cents, par). These rationed quantities contain a weekly average of about 6,200 calories, while the weekly food requirements of a child 6 to 10 years of age are about 11,200 calories, of a woman, 16,800 calories, and of a man, 21,000 calories. In calculating the minimum of subsistence, therefore, the rationed quantities for a child would have to be supplemented by foodstuffs having a nourishment value of 5,000 calories. A woman would have to buy 5,600 calories more than calculated for a child and a man a still further additional quantity of 4,200 calories. If the calculation is limited so far as possible to the cheapest foodstuffs, the weekly minimum requirement for a child of 6 to 10 years, as will be seen by the following table, amounts to 27 marks ($6.43, par), for a woman, 52 marks ($12.38, par), and for a man, 70 marks ($16.66, par). These same quantities of food cost in October, 1913, 1.42 marks (34 cents, par), 2.98 marks (71 cents, par), and 3.88 marks (92 cents, par), respectively, although actually the minimum of existence eight years ago was cheaper

than these figures indicate because fresh meat could then be obtained in unlimited quantities.

The following table shows the cost of the minimum food budget in October, 1921, and before the war:

COST OF EACH ITEM OF MINIMUM WEEKLY FOOD REQUIREMENTS IN BERLIN, OCTOBER, 1913, AND OCTOBER, 1921.

[Mark at par=23.8 cents.]

Minimum quantity required.	October, 1913.	October, 1921.	Minimum quantity required.	October, 1913.	October, 1921.
Child:	*Marks.*	*Marks.*	Woman (additional quantities)—Concluded.	*Marks.*	*Marks.*
Rationed foodstuffs	0.69	10.34	Tinned meats, 250 grams	0.56	5.63
Barley groats, 250 grams	.10	2.11	Bacon, 125 grams	.25	5.88
Potatoes, 2,750 grams	.14	4.54	Margarine, 125 grams	.20	4.06
Margarine, 125 grams	.20	4.06			
Sugar, 125 grams	.06	1.20	Total	2.98	52.32
Milk, 1 liter	.23	4.40			
Total	1.42	26.65	Man (additional quantities):		
			Rice, 500 grams	.22	4.75
Woman (additional quantities):			Pease, 250 grams	.10	2.02
Bread, 250 grams	.06	1.28	Bacon, 125 grams	.25	5.88
Barley flakes, 125 grams	.06	1.07	Salt herring, 250 grams	.13	1.31
Edible beans, 250 grams	.10	1.86	Margarine, 125 grams	.20	4.06
Potatoes, 1,750 grams	.09	2.89			
Vegetables, 1,500 grams	.24	3.00	Total	3.88	70.34

The following table shows the increase in the cost of the weekly minimum of subsistence for a single man, a married couple, and a married couple with two children:

INCREASE IN COST OF WEEKLY MINIMUM OF SUBSISTENCE IN GREATER BERLIN, 1913–14 TO OCTOBER, 1921.

[Mark at par=23.8 cents.]

Item.	Cost of weekly minimum for—		
	Single man.	Married couple.	Married couple with two children.
	Marks.	*Marks.*	*Marks.*
August, 1913, to July, 1914	16.75	22.30	28.80
July, 1921	156	237	324
August, 1921	165	251	339
September, 1921	171	260	349
October, 1921:			
Food	70	123	176
Lodging	10	10	10
Heating and lighting	27	27	27
Clothing	36	60	84
Other	44	66	89
Total, October	187	286	386

With regard to the wages which must be received in order to secure the minimum necessities of life, Dr. Kuczynski says:

Reckoned by the working day, the necessary minimum wage in October, 1921, for a single man was 31 marks [$7.38, par], for a childless couple 48 marks [$11.42, par], and for a couple with 2 children of 6 to 10 years 64 marks [$15.23, par]. Reckoned by the year, the minimum of existence for a single man amounts to 9,700 marks [$2,308.60, par], for a childless couple 14,900 marks [$3,546.20, par], and for a couple with two children 20,100 marks [$4,783.80, par].

From the last year preceding the war to October, 1921, the weekly minimum of existence in Greater Berlin has increased: For the single man from 16.75 marks to 187 marks [$3.99 to $44.51, par], or 11.1 times; for a childless couple from 22.30 marks to 286 marks [$5.31 to $68.07, par], i. e., 12.8 times; and for a couple with two children from 28.80 to 386 marks [$6.85 to $91.87, par], i. e., 13.4 times. Measured by the minimum cost of existence in Greater Berlin, the mark [23.8 cents, par] is now worth about 8 pfennigs [1.9 cents, par].

Cost of Living in Greece.

A REPORT has recently been received relative to the rapid increase in the cost of living in Greece during the past summer. A 72 per cent increase in the custom tariff resulted in an increase in the value of the gold drachma from 1.45 to 2.50 paper drachmas, and as a consequence the prices of foodstuffs, textiles, clothing, and all imported products were increased to cover the added duty. The rise in the cost of imports was followed by an increase in the price of articles produced in Greece, so that there was a general advance of from 50 to 60 per cent in prices over those prevailing the preceding year. The principal causes for the advance in prices of local products were the long drought during the summer affecting all crops, increase of 30 to 60 per cent in railway freight rates, tax of 4 to 6 per cent on gross production of agricultural products, and hoarding of present stocks by speculators.

The following table shows the prices of various necessities in 1920 and 1921 converted into American equivalents of the drachma at the normal rate of exchange, $0.193. The present price of the drachma is about $0.043, a depreciation of 72 per cent.

PRICES OF VARIOUS NECESSARIES OF LIFE IN GREECE IN 1920 AND 1921.

Article.	Unit.	Year.		Article.	Unit.	Year.	
		1920	1921			1920	1921
Hard coal:							
Ocean	Short ton	$15.50	$38.60	Butter	Pound	$1.64	$1.88
Admiralty	do	20.40	43.42	Cheese (sliced)	do	.48	.68
Wood	Pound	.03	.03	Cheese (macaroni)	do	.27	.41
Coke	do	.04	.05	Eggs	Dozen	.97	.97
Charcoal	do	.06	.07	Fish, dried	Pound	.27	.27
Shoes, men's	Pair	10.70	17.57	Fish, fresh	do	.82	.92
Underwear, cotton	Suit	2.70	3.20	Fruit, fresh	do	.18	.18
Shirts, white	Each	5.00	6.00	Meat	do	.66	.75
Suiting	Yard	13.50	25.00	Milk	Gallon	1.44	1.25
Suits to order	3½ yards	67.55	100.00	Potatoes	Pound	.08	.13
Bread	Pound	.14	.21	Rice	do	.30	.30

Consumers' Prices in Italy, 1914-1921.

THE September, 1921, issue of the monthly municipal bulletin of the city of Milan, Italy,[1] contains a list of consumers' prices current during September, 1921, of 150 articles of common use, such as building materials, iron and metal articles, lumber for furniture, paving materials, drugs, office supplies, toys, household

[1] Città di Milano. Bollettino Municipale Mensile di Cronaca Amministrativa e Statistica. Vol. 37, No. 9, pp. 399–401. Milan, Sept. 30, 1921.

articles, hats, shoes, shirts, underwear, and suits, and compares these prices with those governing in July, 1914. The list is reproduced below with the sole omission of the prices of drugs:

CONSUMERS' PRICES OF VARIOUS COMMODITIES IN MILAN, ITALY, JULY, 1914, AND SEPTEMBER, 1921.

[1 lira at par=19.3 cents; 1 kilogram=2.2 pounds; 1 cubic meter=35.31 cubic feet; 1 square meter=10.76 square feet; 1 liter=1.06 quarts.]

Article.	Unit.	Price.		Per cent increase.
		July, 1914.	September, 1921.	
		Lire.	*Lire.*	
Building materials:				
Lime, in lumps	100 kilograms	3.50	21.00	500
Lime, "Palazzolo"	do	2.90	13.00	348
Cement, Portland	do	4.50	28.00	522
Cement, quick drying	do	3.50	19.00	442
Sand	Cubic meter	2.00	27.00	1,250
Brick	1,000	26.00	170.00	553
Hollow tile	do	35.00	240.00	600
Roofing tile, common	do	60.00	530.00	488
Roofing tile, curved	do	30.00	320.00	967
Cement and stone materials:				
Bathtubs	Each	40.00	340.00	750
Laundry tubs and sinks, 23½ by 15¾ by 9 inches	do	10.00	53.00	430
Chimneys, cement, plain or decorated	do	5.50	43.00	773
Flagstones for gas stoves	do	3.00	26.50	783
Ashlar freestone	do	200.00	1,800.00	800
Granite	Cubic meter	80.00	650.00	712
Plumbers' supplies:				
Bowls for latrines	Each	9.00	150.00	1,566
Water tanks for latrines (8 to 10 liters)	do	8.00	60.00	650
Pipe, iron	100 kilograms	14.00	250.00	1,685
Pipe, lead	do	38.00	245.00	544
Lumber (building):				
Fir beams, round, for scaffolding and roofs	Cubic meter	32.50	260.00	700
Fir beams, square, for ceilings and roofs	do	60.00	450.00	650
Fir rafters and battens for roofs	do	50.00	250.00	400
Fir boards, rough, for garrets, framework, and floors	do	60.00	350.00	483
Fir boards, first quality, for construction of closets	do	80.00	514.00	539
Fir boards, planed for floors, 1 inch thick	Square meter	2.00	14.00	600
Pitch-pine boards for floors, 1 inch thick	Cubic meter	120.00	1,200.00	900
Sashes and doors:				
Window sashes, inclusive of blinds	Square meter	32.00	260.00	712
French fir doors	Each	28.00	225.00	703
Iron and metal articles:				
Angle iron	100 kilograms	25.00	130.00	420
Round iron bars for reinforced concrete construction	do	34.00	130.00	282
Iron chains for chimneys	Kilogram	1.20	4.00	233
Screws, iron, for furniture	Gross	1.00	2.50	150
Screws, brass, for furniture	do	2.50	6.00	140
Handles, ordinary, iron	Each	.25	.50	100
Handles, ordinary, brass	do	.65	1.50	130
Handles, shell	do	1.10	1.30	18
Hammers and pincers	Kilogram	1.90	4.50	137
Sheet-iron stovepipes	100 kilograms	65.00	300.00	361
Iron wire	Kilogram	.60	1.80	200
Iron wire, galvanized	do	.80	2.20	175
Wire, woven, all sizes	do	.70	2.50	257
Flatirons	do	.80	3.50	337
Iron pails for masons	do	.78	4.00	412
Chains, for pulleys	do	1.20	4.00	233
Chains, for wagons	do	1.10	3.60	227
Lead for soldering	do	.50	2.20	340
Pewter for soldering	do	5.00	17.00	240
Lumber for furniture:				
Walnut	Cubic meter	200.00	1,000.00	400
Oak	do	130.00	850.00	553
Walnut for inlaying	Square meter	.60	4.00	567
Paving:				
Sidewalks, asphalt	do	4.00	33.00	725
Office supplies:				
Paper, for notebooks	Quire	.10	.50	400
Draft paper, official	100 sheets	2.00	9.00	350
Registry books	Kilogram	.70	10.00	1,328
Ink, black	Liter	.30	8.00	2,566
Rubber erasers	Each	.50	.70	40
Lead pencils, Faber	Dozen	.80	6.00	650
Steel pens	Gross	1.20	12.00	900
Fountain pens, Waterman	Each	15.00	60.00	300

CONSUMERS' PRICES OF VARIOUS COMMODITIES IN MILAN, ITALY, JULY, 1914, AND SEPTEMBER, 1921—Concluded.

Article.	Unit.	Price.		Per cent increase.
		July, 1914.	September, 1921.	
		Lire.	*Lire.*	
Toys:				
Toy horses of papier-mâché	Each	0.25	1.20	380
Dolls, porcelain	do	1.00	1.80	80
Dolls, celluloid, small	do	.50	1.80	260
Lead soldiers	Dozen	.20	.80	300
Rubber balls, average size	Each	.25	1.20	380
Household articles:				
Glasses, drinking, pressed	do	.20	.75	275
Glasses, drinking, blown	do	.80	2.80	250
Glass bottles	do	1.50	4.75	216
Plates, earthenware	do	.20	2.25	1,025
Plates, majolica, common	do	.35	3.20	814
Iron pots, enameled, medium size	do	2.20	16.00	627
Spoons, plated	do	.60	4.50	650
Hats:				
Men's hats, felt, common quality	do	4.50	17.50	288
Men's hats, felt, fine quality	do	10.00	68.50	585
Men's hats, straw, common quality	do	2.75	14.90	442
Shoes:				
Men's shoes, common quality	Pair	15.00	60.00	300
Men's shoes, fine quality	do	19.50	130.00	567
Ladies' shoes, common quality	do	12.00	50.00	317
Ladies' shoes, fine quality	do	18.00	100.00	455
Boys' shoes	do	.....	40.00	.....
Shirts, underwear, etc.:				
Men's shirts	Each	4.50	26.00	477
Chemises	do	3.00	8.25	175
Men's drawers	Pair	2.00	12.60	530
Ladies' drawers	do	2.50	8.25	230
Handkerchiefs, cotton	Each	.20	1.30	550
Men's undershirts	do	5.00	15.00	200
Ladies' undervests	do	4.00	15.00	275
Socks	Pair	1.00	2.00	100
Ladies' stockings	do	1.50	2.80	86
Clothing:				
Men's 3-piece suits	Each	50.00	200.00	300
Ladies' suits	do	45.00	250.00	455

From the preceeding table it becomes evident that, although prices of the various commodities listed here have somewhat receded during the last year (a table like the present one but showing prices in June, 1920, was published in the November, 1920, issue of the MONTHLY LABOR REVIEW), prices in Italy are on the average still seven and one-half times as high as in prewar times. The rise in prices in September, 1921, as compared with July, 1914, varies between 18 per cent (shell handles) and 2,566 per cent (black ink).

The issue of June 30, 1921, of the municipal bulletin of the city of Milan contains the following table showing the index numbers of prices of various groups of commodities governing during the years 1915 to 1921 as compared with those prevailing during July, 1914, and also a total index, presumably weighted for these same groups of commodities:

INDEX NUMBERS OF CONSUMERS' PRICES OF VARIOUS GROUPS OF COMMODITIES IN MILAN, ITALY, 1915 TO 1921.

[Prices of July, 1914=100.]

Commodity group.	July, 1915.	July, 1916.	July, 1917.	July, 1918.	June, 1919.	June, 1920.	September, 1920.	December, 1920.	March, 1921.	June, 1921.	September, 1921.
Building materials	138	179	466	689	604	851	980	980	907	822	.....
Cement and stone materials	128	184	223	437	475	717	722	866	866	866	.....
Plumbers' supplies	205	378	653	1,280	850	1,406	1,478	1,391	1,191	1,000	.....
Paving	117	130	175	425	500	824	824	824	824	824	.....
Lumber (building)	166	244	408	669	599	800	806	806	946	839	.....
Sash and doors	142	183	275	433	600	708	783	832	850	808	.....
Iron and metal articles	192	306	905	1,098	388	782	760	681	552	453	.....
Lumber for furniture	148	174	251	304	266	387	450	455	515	561	.....
Medicinal drugs	191	307	495	737	427	1,166	1,081	1,070	974	758	.....
Office supplies	115	136	212	295	294	558	582	604	595	531	.....
Toys	150	211	329	443	520	520	520	520	531	531	.....
Household articles	129	178	262	476	473	663	796	720	700	585	.....
Hats	126	147	217	324	434	577	739	715	704	602	.....
Shoes	122	165	294	503	491	604	698	674	648	592	.....
Shirts, drawers, etc	125	152	268	347	453	676	839	869	753	526	.....
Underwear and hoisery	138	198	245	317	442	565	600	600	530	496	.....
Suits	131	163	242	305	400	550	642	658	584	474	.....
General index	176	272	454	672	438	976	984	946	894	744	751

The preceding table conveys a clear picture of the movement of prices in Milan, Italy, during the period 1915–1921. During the entire war, i. e., during the four years 1915 to 1918, prices of all commodities showed a steady upward tendency from year to year. In 1919 prices of the more important groups of commodities receded somewhat from their high level in 1918, especially those of iron and metal articles, plumbers' supplies, building materials, and lumber. New high levels were, however, reached in the fall of 1920. In September of that year the price index of plumbers' suplies reached the figure 1,478, that of medicinal drugs, 1,081, and that of building materials, 980. The general index rose steadily until 1918 when it reached the figure 672. In June, 1919, it dropped to 438 but rose again rapidly in 1920 and by September, 1920, it had reached the phenomenal height of 984. Since then there has been a considerable drop in the general index to 744 in June, 1921. During the quarter ended September, 1921, there has, however, been another although very slight rise to 751.

Union Scale of Wages and Hours of Labor in Building Trades, May 15, 1921, and Rates of Wages Paid and Hours Worked, November 15, 1921.

THE following table shows the union scale of wages and hours of labor in the building trades in the leading industrial centers of the United States on May 15, 1921, and rates of wages paid and hours worked on November 15, 1921, in so far as reports have been secured by the Bureau of Labor Statistics.

The data for May 15, 1921, were secured through personal interviews by agents of the bureau with officers of the unions in the localities reported. The data for November 15, 1921, were secured through questionnaires sent to officers of the unions who had furnished the data for May 15, 1921. Data for November 15, 1921, for some cities for which data for May 15, 1921, was secured are not shown in these tables because answers to the questionnaires from the officers of the unions in these cities have not been received. In such cases data for May 15, 1921, only is reported.

UNION SCALE OF WAGES AND HOURS OF LABOR, MAY 15, 1921, AND RATES OF WAGES PAID AND HOURS WORKED, NOVEMBER 15, 1921.

Bricklayers.

City.	Rate per hour, 1921.		Hours per week, 1921.		City.	Rate per hour, 1921.		Hours per week, 1921.	
	May 15.	Nov. 15.	May 15.	Nov. 15.		May 15.	Nov. 15.	May 15.	Nov. 15.
Atlanta, Ga	$1.00	$1.00	44	44	Nashville, Tenn	$1.00	$1.00	44	44
Baltimore, Md	1.25	1.25	45	45	Newark, N. J	1.25	1.25	44	44
Birmingham, Ala	1.00	1.00	44	44	New Haven, Conn	1.00	1.00	44	44
Boston, Mass	1.00	1.00	44	44	New Orleans, La	1.00	1.00	44	44
Bridgeport, Conn	1.00	.....	44	.....	New York, N. Y	1.25	1.25	44	44
Buffalo, N. Y	1.00	1.00	44	44	Norfolk, Va	1.12½	1.12½	44	44
Bute, Mont	1.25	1.25	44	44	Omaha, Nebr	1.12½	1.00	44	44
Charleston, S. C	.85	.85	48	48	Peoria, Ill	1.25	1.10	44	44
Chicago, Ill	1.25	1.10	44	44	Philadelphia, Pa	1.30	1.30	44	44
Cincinnati, Ohio	1.25	1.00	44	45	Pittsburgh, Pa	1.50	1.30	44	44
Cleveland, Ohio	1.25	1.04	44	44	Portland, Me	1.10	.90	44	44
Columbus, Ohio	1.25	1.12½	44	44	Portland, Oreg	1.25	1.12½	44	44
Dallas, Tex	1.50	1.37½	44	44	Providence, R. I	1.15	1.00	44	44
Dayton, Ohio	1.10	1.10	45	45	Reading, Pa	1.15	1.15	44	44
Denver, Colo	1.25	1.25	44	44	Richmond, Va	1.00	1.00	45	45
Des Moines, Iowa	1.12½	1.11¼	44	44	Rochester, N. Y	1.25	1.06¼	44	44
Detroit, Mich	1.00	1.00	44	44	Rock Island, Ill., district[1]	1.12½	1.00	44	44
Erie, Pa	1.25	1.12½	44	44	Saginaw, Mich	1.00	.....	44	.....
Fall River, Mass	1.15	.95	44	44	St. Louis, Mo	1.25	1.25	44	44
Grand Rapids, Mich	1.00	1.00	44	44	St. Paul, Minn	1.12½	1.00	44	44
Houston, Tex	1.37½	1.37½	44	44	Salt Lake City, Utah	1.12½	1.12½	44	44
Indianapolis, Ind	1.15	1.15	44	44	San Francisco, Calif	1.25	1.15⅝	44	44
Jacksonville, Fla	1.00	.....	44	.....	Scranton, Pa	1.25	1.25	44	44
Kansas City, Mo	1.12½	1.07½	44	44	Seattle, Wash	1.12½	1.12½	44	44
Little Rock, Ark	1.25	1.25	44	44	Spokane, Wash	1.12½	1.12½	44	44
Los Angeles, Calif	1.25	1.25	44	44	Springfield, Mass	1.05	.95	44	44
Louisville, Ky	1.25	1.25	44	44	Toledo, Ohio	1.25	1.00	44	44
Manchester, N. H	1.12½	1.12½	44	44	Washington, D. C	1.25	1.25	44	44
Memphis, Tenn	1.12½	1.12½	44	44	Wichita, Kans	1.12½	1.12½	44	44
Milwaukee, Wis	1.00	1.00	44	44	Worcester, Mass	.97½	.97½	44	44
Minneapolis, Minn	1.12½	1.00	44	44	York, Pa	.87½	.87½	44	44
Muskegon, Mich	1.00	1.00	44	44	Youngstown, Ohio	1.25	1.00	44	44

[1] Includes Davenport, Iowa, and Moline and Rock Island, Ill.

UNION SCALE OF WAGES AND HOURS OF LABOR, MAY 15, 1921, AND RATES OF WAGES PAID AND HOURS WORKED, NOVEMBER 15, 1921—Continued.

Building laborers.

City.	Rate per hour, 1921.		Hours per week, 1921.		City.	Rate per hour, 1921.		Hours per week, 1921.	
	May 15.	Nov. 15.	May 15.	Nov. 15.		May 15.	Nov. 15.	May 15.	Nov. 15.
Baltimore, Md	$0.75	.....	44	.....	New Orleans, La	$0.45	$0.45	45	45
Boston, Mass	.67½	{$0.55–.60}	44	44	New York, N. Y	.60	.60	48	48
					Omaha, Nebr	.60	.....	48	.....
Butte, Mont	.68¾	.....	48	.....	Peoria, Ill	.67½	.55	44	44
Chicago, Ill	1.00	.....	44	.....	Pittsburgh, Pa	.80	.62½	44	44
Cincinnati, Ohio	.50	.40	50½	50	Portland, Me	.55	.55	50	50
Cleveland, Ohio	.87½	.60	44	44	Portland, Oreg	.67½	.67½	44	44
Columbus, Ohio	.65	.50	44	44	Providence, R. I	.50	.40	44	50
Dallas, Tex	.62½	{.25–.50}	48	44–53	Rochester, N. Y	.70	.55	44	44
					Saginaw, Mich	.60	{.25–.45}	44	54
Denver, Colo	.62½	.62½	44	44	St. Louis, Mo	.67½	.....	44	.....
Des Moines, Iowa	.55	.55	50	50	St. Paul, Minn	.61¼	.55	49½	49½
Detroit, Mich	.60	.50	44	44	Salt Lake City, Utah	.56½	.56¼	44	44
Erie, Pa	.75	.40	50	50	San Francisco, Calif	.81¼	.75	48	44
Fall River, Mass	.50	.50	44	44	Scranton, Pa	.70	{.50–.70}	48	48
Grand Rapids, Mich	.65	.55	50	50					
Houston, Tex	.62½	.62½	44	.....	Seattle, Wash	.75	.62½	44	44
Kansas City, Mo	.75	.70	44	44	Spokane, Wash	.62½	.62½	44	44
Little Rock, Ark	.50	.50	44	44	Springfield, Mass	.50	.40	44	44
Los Angeles, Calif	.62½	.62½	44	44	Toledo, Ohio	.70	.55	44	44
Louisville, Ky	.80	.30	44	55½	Washington, D. C	.50	.62¾	44	44
Manchester, N. H	.55	.55	44	44	Wichita, Kans	.62½	.....	44	.....
Milwaukee, Wis	.65	.55	44	44					
Minneapolis, Minn	.55	.55	44	44					

Carpenters.

Atlanta, Ga	$0.70	$0.70	44	44	Nashville, Tenn	$0.64	$0.64	44	44
Baltimore, Md	.90	.80	44	44	Newark, N. J	1.00	1.12½	44	44
Birmingham, Ala	.75	.75	44	44	New Haven, Conn	1.00	.90	44	44
Boston, Mass	1.00	1.00	40	40	New Orleans, La	1.00	.88	44	44
Bridgeport, Conn	.85	.85	44	44	New York, N. Y	1.12½	1.12½	44	44
Buffalo, N. Y	.87½	.87½	44	44	Norfolk, Va	.90	.80	44	44
Butte, Mont	1.12½	.....	44	.....	Omaha, Nebr	1.01¼	.90	44	44
Charleston, S. C	.80	.80	48	44	Peoria, Ill	1.00	.90	44	44
Chicago, Ill	1.25	1.25	44	44	Philadelphia, Pa	1.12½	.....	44	.....
Cincinnati, Ohio	1.00	1.00	44½	44½	Pittsburgh, Pa	1.25	1.00	44	44
Cleveland, Ohio	1.25	1.04	44	44	Portland, Me	1.00	.80	44	44
Columbus, Ohio	.90	.80	44	44	Portland, Oreg	.90	.90	44	44
Dallas, Tex	1.00	1.00	44	44	Providence, R. I	1.00	.....	44	.....
Dayton, Ohio	.85	.85	44	44	Reading, Pa	.75	.75	44	44
Denver, Colo	1.12½	1.00	44	44	Richmond, Va	.72½	.72½	47	47
Des Moines, Iowa	1.00	.92	44	44	Rochester, N. Y	1.00	.85	44	44
Detroit, Mich	.85	.85	44	44	Rock Island, Ill. district [1]	1.00	.87½	44	44
Erie, Pa	1.00	.85	44	44	Saginaw, Mich	.80	.80	44	44
Fall River, Mass	1.00	.85	44	44	St. Louis, Mo	1.25	1.25	44	44
Grand Rapids, Mich	.85	.85	44	44	St. Paul, Minn	1.00	.80	44	44
Houston, Tex	1.06¼	1.06¼	44	44	Salt Lake City, Utah	1.00	1.00	44	44
Indianapolis, Ind	.92½	.92½	44½	44½	San Francisco, Calif	1.12½	1.04⅜	44	44
Jacksonville, Fla	.80	.80	44	44	Scranton, Pa	.87½	.87½	44	44
Kansas City, Mo	1.00	1.00	44	44	Seattle, Wash	.87½	.87½	44	44
Little Rock, Ark	.80	.80	44	44	Spokane, Wash	.87½	.87½	44	44
Los Angeles, Calif	1.00	1.00	44	44	Springfield, Mass	.95	.85	44	44
Louisville, Ky	.80	.80	44	44	Toledo, Ohio	.80	.80	44	44
Manchester, N. H	.90	.90	44	44	Washington, D. C	1.05	1.05	44	44
Memphis, Tenn	.75	.75	44	44	Wichita, Kans	1.00	.87½	44	44
Milwaukee, Wis	.85	1.00	44	44	Worcester, Mass	.85	.85	44	44
Minneapolis, Minn	1.00	.80	44	44	York, Pa	.75	.75	44	44
Muskegon, Mich	.80	.80	44	44	Youngstown, Ohio	1.03¼	.92	44	44

[1] Includes Davenport, Iowa, and Moline and Rock Island, Ill.

UNION SCALE OF WAGES AND HOURS OF LABOR, MAY 15, 1921, AND RATES OF WAGES PAID AND HOURS WORKED, NOVEMBER 15, 1921—Continued.

Cement finishers.

City.	Rate per hour, 1921.		Hours per week, 1921.		City.	Rate per hour, 1921.		Hours per week, 1921.	
	May 15.	Nov. 15.	May 15.	Nov. 15.		May 15.	Nov. 15.	May 15.	Nov. 15.
Baltimore, Md.	$1.00	.....	44	.....	Newark, N. J.	$1.25	$1.25	44	44
Birmingham, Ala.	1.00	.....	48	.....	New Haven, Conn.	1.00	1.00	44	44
Boston, Mass.	1.00	$0.90	44	44	New Orleans, La.	1.00	1.00	45	45
Bridgeport, Conn.	1.00	1.00	44	44	New York, N. Y.	1.12½	1.12½	44	44
Buffalo, N. Y.	1.00	.85	44	44	Norfolk, Va.	1.00	1.00	44	44
Butte, Mont.	1.37½	.....	44	.....	Omaha, Nebr.	1.00	1.00	44	44
Chicago, Ill.	1.25	.85	44	44	Peoria, Ill.	1.00	.87½	44	44
Cincinnati, Ohio.	.90	.87½	44½	45	Philadelphia, Pa.	1.00	.80	44	44
Cleveland, Ohio.	1.25	1.04	44	44	Pittsburgh, Pa.	1.12½	.87½	44	44
Columbus, Ohio.	1.00	1.00	44	44	Portland, Me.	1.00	.90	44	44
Dallas, Tex.	1.25	1.25	48	48	Portland, Oreg.	.90	.....	44	.....
Dayton, Ohio.	.85	.80	49½	49	Providence, R. I.	1.00	.....	44	.....
Denver, Colo.	1.00	.....	44	.....	Reading, Pa.	.90	.....	44	.....
Des Moines, Iowa.	1.12½	.90	44	44	Rochester, N. Y.	1.25	.....	44	.....
Detroit, Mich.	1.00	1.00	44	44	Rock Island, Ill., district [1]	1.00	.87½	44	44
Erie, Pa.	1.12½	1.00	44	44	Saginaw, Mich.	1.00	1.00	44	44
Fall River, Mass.	1.15	.95	44	44	St. Louis, Mo.	1.25	1.25	44	44
Houston, Tex.	1.12½	1.12½	44	44	St. Paul, Minn.	1.00	.80	44	44
Indianapolis, Ind.	1.00	.....	50	.....	Salt Lake City, Utah.	1.00	1.00	44	44
Kansas City, Mo.	1.07½	1.00	44	44	San Francisco, Calif.	1.12½	1.04⅜	44	44
Little Rock, Ark.	1.12½	1.12½	44	44	Seattle, Wash.	1.12½	1.00	40	48
Los Angeles, Calif.	1.12½	1.12½	44	44	Spokane, Wash.	1.25	1.00	44	44
Louisville, Ky.	.90	.90	44	44	Springfield, Mass.	1.00	.90	44	44
Manchester, N. H.	1.12½	1.12½	44	44	Washington, D. C.	1.00	1.00	44	44
Milwaukee, Wis.	1.00	1.00	44	44	Wichita, Kans.	1 12½	.....	44	.....
Minneapolis, Minn.	1.00	1.00	44	44	Worcester, Mass.	.85	.90	44	44
Muskegon, Mich.	1.25	1.00	44	44	Youngstown, Ohio.	1.15	.....	44	.....
Nashville, Tenn.	1.00	1.00	44	44					

Composition roofers.

Boston, Mass.	$1.00	.....	44	.....	New York, N. Y.	$1.00	$1.00	44	44
Butte, Mont. (foremen).	.719	.....	48	.....	Philadelphia, Pa.	.80	.60	44	44
Chicago, Ill. (foremen).	1.25	$1.25	44	44	Pittsburgh, Pa.	1.00	.....	44	.....
Cincinnati, Ohio.	.70	.65	44½	44½	Portland, Me.	.80	.70	48	48
Cleveland, Ohio.	1.00	.83	44	44	Rochester, N. Y.	.90	.80	44	44
Dayton, Ohio.	.60	.60	44	44	Rock Island, Ill., district [1]	1.00	.90	44	44
Denver, Colo.	.87½	.87½	44	44	St. Louis, Mo.	1.00	1.00	44	44
Kansas City, Mo.	.85	.85	44	44	San Francisco, Calif.	1.12½	1.04⅜	44	44
Los Angeles, Calif.	1.00	.87½	44	44	Scranton, Pa.	.75	.....	44	.....
Milwaukee, Wis.	.77½	.....	44	44	Seattle, Wash.	1.00	1.00	44	44
Newark, N. J.	.87½	.87½	44	44	Youngstown, Ohio.	1.15	.....	44	.....

Elevator constructors.

Atlanta, Ga.	$0.95	$0.95	44	44	Minneapolis, Minn.	$0.90	$1.00	44	44
Baltimore, Md.	1.00	1.00	44	44	New York, N. Y.	1.12½	1.12½	44	44
Birmingham, Ala.	.95	.....	44	.....	Omaha, Nebr.	1.10	.....	44	.....
Boston, Mass.	1.00	.87½	44	44	Peoria, Ill.	.85	.85	44	44
Buffalo, N. Y.	1.12	.97½	44	44	Philadelphia, Pa.	1.25	1.06	44	44
Chicago, Ill.	1.25	1.07	44	44	Pittsburgh, Pa.	1.25	1.06¼	44	44
Cincinnati, Ohio.	1.00	1.00	44	44	Portland, Oreg.	1.00	1.00	44	44
Cleveland, Ohio.	1.25	1.06¼	44	44	Providence, R. I.	1.00	1.00	44	44
Columbus, Ohio.	1.00	1.00	44	44	Richmond, Va.	.92½	.92½	48	48
Dallas, Tex.	1.00	.....	44	.....	Rochester, N. Y.	1.00	1.00	44	44
Denver, Colo.	1.00	1.00	44	44	Rock Island, Ill., district [1]	.90	.....	44	.....
Des Moines, Iowa.	.90	.90	48	48	St. Louis, Mo.	1.25	1.25	44	44
Detroit, Mich.	1.25	1.02½	44	44	St. Paul, Minn.	.90	.....	44	.....
Grand Rapids, Mich.	.95	.95	44	44	Salt Lake City, Utah.	1.00	.....	44	.....
Houston, Tex.	1.00	1.00	44	44	San Francisco, Calif.	1.06¼	.98⅛	44	44
Indianapolis, Ind.	1.00	.....	44	.....	Seattle, Wash.	1.06¼	1.06¼	44	44
Kansas City, Mo.	1.25	1.12½	44	44	Springfield, Mass.	1.00	.....	44	.....
Los Angeles, Calif.	1.00	1.00	44	44	Toledo, Ohio.	1.00	1.00	44	44
Louisville, Ky.	.90	.90	49	44	Washington, D. C.	1.25	1.25	44	44
Memphis, Tenn.	.95	.....	44	.....	Worcester, Mass.	1.00	.87½	44	44
Milwaukee, Wis.	1.00	.90	44	44					

[1] Includes Davenport, Iowa, and Moline and Rock Island, Ill.

UNION SCALE OF WAGES AND HOURS OF LABOR, MAY 15, 1921, AND RATES OF WAGES PAID AND HOURS WORKED, NOVEMBER 15, 1921—Continued.

Elevator constructors' helpers.

City.	Rate per hour, 1921.		Hours per week, 1921.		City.	Rate per hour, 1921.		Hours per week, 1921.	
	May 15.	Nov. 15.	May 15.	Nov. 15.		May 15.	Nov. 15.	May 15.	Nov. 15.
Atlanta, Ga	$0.60	$0.60	44	44	Minneapolis, Minn	$0.65	$0.72½	44	44
Baltimore, Md	.70	.70	44	44	New York, N. Y	.87½	.87½	44	44
Birmingham, Ala	.60	.....	44	.....	Omaha, Nebr	.70	.....	44	.....
Boston, Mass	.75	.62½	44	44	Peoria, Ill	.65	.65	44	44
Buffalo, N. Y	.78	.67½	44	44	Philadelphia, Pa	.80	.80	44	44
Chicago, Ill	.85	.75	44	44	Pittsburgh, Pa	.81¼	.75	44	44
Cincinnati, Ohio	.75	.75	44	44	Portland, Oreg	.75	.75	44	44
Cleveland, Ohio	.87½	.75	44	44	Providence, R. I	.75	.75	44	44
Columbus, Ohio	.70	.70	44	44	Rochester, N. Y	.70	.70	44	44
Dallas, Tex	.65	.....	44	.....	Rock Island, Ill., district[1]	.65	.....	44	.....
Denver, Colo	.62½	.62½	44	44	St. Louis, Mo	.85	.85	44	44
Des Moines, Iowa	.65	.55	48	48	St. Paul, Minn	.65	.....	44	.....
Detroit, Mich	87½	.75	44	44	Salt Lake City, Utah	.62½	.....	44	.....
Grand Rapids, Mich	.60	.60	44	44	San Francisco, Calif	.75	.69⅜	44	44
Houston, Tex	.65	.65	44	44	Seattle, Wash	.75	.75	44	44
Indianapolis, Ind	.72	.....	44	.....	Springfield, Mass	.75	.....	44	.....
Kansas City, Mo	.80	.72½	44	44	Toledo, Ohio	.70	.70	44	44
Los Angeles, Calif	.75	.75	44	44	Washington, D. C	.80	.80	44	44
Memphis, Tenn	.60	.....	44	.....	Worcester, Mass	.75	.62½	44	44
Milwaukee, Wis	.70	.60	44	44					

Engineers, portable and hoisting.

Atlanta, Ga	$0.75	.....	44	.....	Muskegon, Mich	$0.75	$0.75	54	50
Baltimore, Md	1.02¼	$1.02¼	44	44	Newark, N. J	1.25	1.25	44	44
Birmingham, Ala	1.00	.....	44	.....	New Haven, Conn	.90	.90	44	44
Boston, Mass	1.00	.....	44	.....	New Orleans, La	1.00	.90	44	44
Bridgeport, Conn	.90	.90	44	44	New York, N. Y	1.18¾	1.00	44	44
Buffalo, N. Y	1.00	1.00	44	44	Norfolk, Va	1.00	.87½	44	44
Butte, Mont	.87½	.87½	44	44	Omaha, Nebr	1.00	1.00	44	44
Charleston, S. C	.84	.80	44	44	Peoria, Ill	1.00	.90	44	44
Chicago, Ill	1.25	1.25	44	44	Philadelphia, Pa	1.18¾	1.02½	44	44
Cincinnati, Ohio	1.00	.95	45	44	Pittsburgh, Pa	1.12½	1.00	44	44
Cleveland, Ohio	1.25	1.04	44	44	Portland, Me	.90	.90	44	44
Columbus, Ohio	1.00	.80	44	44	Portland, Oreg	1.01¼	1.01¼	44	44
Dallas, Tex	1.25	1.00	44	44	Providence, R. I	1.00	.....	44	.....
Dayton, Ohio	.90	.90	44	44	Richmond, Va	92½	1.00	44	44
Denver, Colo	1.00	1.00	44	44	Rochester, N. Y	1.02½	.....	44	.....
Des Moines, Iowa	.92½	.....	44	.....	Rock Island, Ill., district[1]	1.00	.87½	44	44
Detroit, Mich	.90	.90	44	44	St. Louis, Mo	1.25	1.25	44	44
Erie, Pa	.90	1.00	44	44	St. Paul, Minn	1.00	.80	48	48
Grand Rapids, Mich	.80	.80	54	45	Salt Lake City, Utah	1.00	.90	44	44
Houston, Tex	1.06¼	1.06¼	44	44	San Francisco, Calif	1.25	1.04⅜	44	44
Indianapolis, Ind	1.00	1.02½	44	45	Scranton, Pa	1.00	.....	44	.....
Kansas City, Mo	1.00	.....	44	.....	Seattle, Wash	1.12½	1.12½	44	44
Little Rock, Ark	.87½	.87½	44	44	Spokane, Wash	1.00	1.00	44	44
Los Angeles, Calif	1.00	1.00	44	44	Springfield, Mass	1.00	.90	44	44
Louisville, Ky	1.00	1.00	44	44	Toledo, Ohio	1.00	1.00	44	44
Memphis, Tenn	1.00	.87½	44	44	Washington, D. C	1.00	1.00	44	44
Milwaukee, Wis	1.00	.....	44	.....	Worcester, Mass	1.00	.....	44	.....
Minneapolis, Minn	1.00	.80	44	44	Youngstown, Ohio	1.25	1.00	44	44

Granite cutters.

Atlanta, Ga	$1.00	$1.00	44	44	Manchester, N. H	$1.00	$1.00	44	44
Baltimore, Md	1.00	1.00	44	44	Newark, N. J	1.12½	1.12½	44	44
Boston, Mass	1.00	1.00	44	44	New Haven, Conn	1.00	1.00	44	44
Bridgeport, Conn	1.00	1.00	44	44	New Orleans, La	1.00	1.00	44	44
Buffalo, N. Y	1.00	1.00	44	44	New York, N. Y	1.12½	1.12½	44	44
Butte, Mont	1.12½	1.12½	44	44	Philadelphia, Pa	1.00	1.00	44	44
Charleston, S. C	1.00	.....	44	.....	Pittsburgh, Pa	1.06¼	1.00	44	44
Chicago, Ill	1.12½	1.12½	44	40	Portland, Me	1.00	1.00	44	44
Cincinnati, Ohio	1.00	1.00	44	44	Providence, R. I	1.00	1.00	44	44
Cleveland, Ohio	1.00	1.00	44	44	Richmond, Va	1.00	1.00	44	44
Dallas, Tex	1.00	1.00	44	44	Rochester, N. Y	1.00	1.00	44	44
Denver, Colo	1.06¼	1.06¼	44	44	St. Louis, Mo	1.00	1.00	44	44
Des Moines, Iowa	1.00	1.00	44	44	Salt Lake City, Utah	1.00	1.12½	44	44
Detroit, Mich	1.00	1.00	44	44	San Francisco, Calif	1.12½	1.12½	44	44
Fall River, Mass	1.00	1.00	44	44	Seattle, Wash	1.12½	1.12½	40	40
Houston, Tex	1.00	1.00	44	44	Springfield, Mass	1.00	1.00	44	44
Los Angeles, Calif	1.12½	1.12½	44	44	Washington, D. C	1.00	1.00	44	44
Louisville, Ky	1.00	1.00	44	44	Worcester, Mass	1.00	1.00	44	44

[1] Includes Davenport, Iowa, and Moline and Rock Island, Ill.

UNION SCALE OF WAGES AND HOURS OF LABOR, MAY 15, 1921, AND RATES OF WAGES PAID AND HOURS WORKED, NOVEMBER 15, 1921—Continued.

Hod carriers.

City.	Rate per hour, 1921.		Hours per week, 1921.		City.	Rate per hour, 1921.		Hours per week, 1921.	
	May 15.	Nov. 15.	May 15.	Nov. 15.		May 15.	Nov. 15.	May 15.	Nov. 15.
Baltimore, Md	$0.87½	$0.87½	44	45	Norfolk, Va	$0.65	$0.65	44	44
Boston, Mass	.70	.60	44	44	Omaha, Nebr	.75	.....	44	.....
Butte, Mont	1.00	.....	44	.....	Peoria, Ill	.67½	.....	44	.....
Chicago, Ill	1.00	.72½	44	44	Philadelphia, Pa	.85	.85	44	44
Cincinnati, Ohio	.85	.72½	45	45½	Pittsburgh, Pa	1.00	.80	44	44
Cleveland, Ohio	.87½	.60	44	44	Portland, Me	.65	.65	44	44
Columbus, Ohio	.80	.....	44	.....	Portland, Oreg	.90	.67½	44	44
Dallas, Tex	.75	.....	44	.....	Providence, R. I	.55	.....	44	.....
Denver, Colo	.75	.....	44	.....	Rochester, N. Y	.70	.55	44	44
Des Moines, Iowa	.75	.75	44	44	Saginaw, Mich	.65	{ .25– .50 }	44	53
Detroit, Mich	.75	.50	44	44	St. Louis, Mo	.85	.85	44	46½
Erie, Pa	.80	.50	47	47	St. Paul, Minn	.80	.80	44	44
Fall River, Mass	.50	.50	44	44	Salt Lake City, Utah	.75	.....	44	.....
Grand Rapids, Mich	.75	.55	50	44	San Francisco, Calif	1.00	.92½	44	44
Houston, Tex	.75	.....	44	.....	Scranton, Pa	.70	.....	44	.....
Indianapolis, Ind	.67½	.....	44	.....	Seattle, Wash	.75	.....	44	.....
Kansas City, Mo	.90	.80	44	44	Spokane, Wash	.75	.75	44	44
Little Rock, Ark	.62½	.62½	44	44	Springfield, Mass	.75	.62½	44	44
Los Angeles, Calif	.62½	.62½	44	44	Toledo, Ohio	.80	.65	44	44
Louisville, Ky	.80	.....	44	.....	Washington, D. C	.75	{ .62½ to .75 }	44	44
Manchester, N. H	.75	.75	44	44					
Memphis, Tenn	.62½	.....	44	.....					
Milwaukee, Wis	.70	.75	44	48					
Minneapolis, Minn	.85	.70	44	44	Wichita, Kans	.75	.75	44	44
Newark, N. J	.87½	.72	44	44	Worcester, Mass	.90	.75	44	44
New Orleans, La	.65	.65	45	44	York, Pa	.75	.75	44	44
New York, N. Y	.87½	.87½	44	44	Youngstown, Ohio	.87½	.....	44	.....

Inside wiremen.

Atlanta, Ga	$0.90	$0.76¼	44	50	Newark, N. J	$1.12½	$1.12½	44	44
Baltimore, Md	1.12½	1.00	44	44	New Haven, Conn	.93¾	.85	44	44
Birmingham, Ala	1.00	1.00	44	44	New Orleans, La	1.00	1.00	44	44
Boston, Mass	1.00	.90	44	44	New York, N. Y	1.12½	1.12½	44	44
Bridgeport, Conn	1.00	.....	44	.....	Norfolk, Va	.87½	.....	44	.....
Buffalo, N. Y	.90	.90	44	44	Omaha, Nebr	1.12½	1.12½	44	44
Butte, Mont	1.12½	1.12½	44	44	Peoria, Ill	1.00	.90	44	44
Charleston, S. C	.80	.....	44	.....	Philadelphia, Pa	1.12½	.90	44	44
Chicago, Ill	1.25	1.10	44	44	Pittsburgh, Pa	1.25	1.12½	44	44
Cincinnati, Ohio	1.00	1.00	44½	44½	Portland, Me	.85	.80	44	44
Cleveland, Ohio	1.37½	1.10	44	44	Portland, Oreg	1.00	.90	44	44
Dallas, Tex	1.12½	1.12½	44	44	Providence, R. I	1.15	1.00	44	44
Dayton, Ohio	.95	.95	44	44	Reading, Pa	.75	.75	44	44
Denver, Colo	1.00	1.00	44	44	Richmond, Va	.75	.75	44	48
Des Moines, Iowa	1.12½	.87½	44	44	Rochester, N. Y	.87½	.93¾	44	44
Detroit, Mich	1.00	1.00	44	44	Rock Island, Ill., district[1]	1.00	.87½	44	44
Erie, Pa	1.00	.85	44	44	Saginaw, Mich	.80	.80	44	44
Fall River, Mass	.90	.....	44	.....	St. Louis, Mo	1.25	1.25	44	44
Grand Rapids, Mich	1.00	.90	44	44	St. Paul, Minn	1.00	{ .80– 1.00 }	44	.....
Houston, Tex	1.12½	1.12½	44	44	Salt Lake City, Utah	.90	.90	44	44
Indianapolis, Ind	1.00	1.00	44	44	San Francisco, Calif	1.25	1.15½	44	44
Jacksonville, Fla	1.00	{ .60– .80 }	44	44	Scranton, Pa	.87½	.87½	44	44
Kansas City, Mo	1.00	1.00	44	44	Seattle, Wash	1.12½	1.00	40	40
Little Rock, Ark	.87½	.87½	44	44	Spokane, Wash	1.00	{ .60– .75 }	48	48
Los Angeles, Calif	1.00	1.00	44	44	Springfield, Mass	.95	.85	44	44
Louisville, Ky	1.00	.90	44	44	Toledo, Ohio	1.00	1.00	44	44
Manchester, N. H	1.00	1.00	44	44	Washington, D. C	1.06¼	1.06¼	44	44
Memphis, Tenn	1.00	.87½	44	44	Wichita, Kans	1.00	1.00	44	44
Milwaukee, Wis	1.00	1.00	44	44	Worcester, Mass	1.00	.87½	44	44
Minneapolis, Minn	1.00	1.00	44	44	York, Pa	.75	.65	44	50
Muskegon, Mich	.85	.85	44	44	Youngstown, Ohio	1.15	1.15	44	44
Nashville, Tenn	.87½	.87½	44	44					

[1] Includes Davenport, Iowa, and Moline and Rock Island, Ill.

UNION SCALE OF WAGES AND HOURS OF LABOR, MAY 15, 1921, AND RATES OF WAGES PAID AND HOURS WORKED, NOVEMBER 15, 1921—Continued.

Lathers.

City.	Rate per hour, 1921.		Hours per week, 1921.		City.	Rate per hour, 1921.		Hours per week, 1921.	
	May 15.	Nov. 15.	May 15.	Nov. 15.		May 15.	Nov. 15.	May 15.	Nov. 15.
Atlanta, Ga.	$0.75	$0.75	44	44	Muskegon, Mich.	$0.80	.....	44	.....
Baltimore, Md.	1.00	1.00	44	44	Newark, N. J.	1.12½	$1.12½	44	44
Boston, Mass.	1.00	.....	40	.....	New Haven, Conn.	1.00	1.00	44	44
Bridgeport, Conn.	1.00	1.00	44	44	New York, N. Y.	1.12½	1.12½	44	44
Buffalo, N. Y.	1.00	1.00	44	40	Norfolk, Va.	1.00	1.00	44	44
Charleston, S. C.	.....	.60	.....	44	Omaha, Nebr.	1.25	1.06¼	44	44
Chicago, Ill.	1.25	.....	44	.....	Peoria, Ill.	1.00	1.00	44	44
Cincinnati, Ohio.	1.00	.....	44½	.....	Philadelphia, Pa.	1.25	1.06¼	44	44
Cleveland, Ohio.	1.25	1.04	44	44	Pittsburgh, Pa.	1.25	1.12½	44	44
Columbus, Ohio.	1.00	.80	44	44	Portland, Oreg.	1.00	1.00	44	44
Dallas, Tex.	1.25	1.25	44	44	Providence, R. I.	1.00	.....	44	.....
Dayton, Ohio.	1.00	1.00	44	44	Reading, Pa.	.75	.75	44	44
Denver, Colo.	1.12½	1.12½	44	44	Rochester, N. Y.	1.00	.85	44	44
Des Moines, Iowa.	1.25	1.12½	44	44	Rock Island, Ill., district[1]	1.25	1.12½	44	44
Detroit, Mich.	1.25	1.00	44	44	St. Louis, Mo.	1.25	1.25	44	44
Erie, Pa.	1.25	1.12½	44	44	St. Paul, Minn.	1.00	1.00	44	44
Fall River, Mass.	1.00	1.00	44	44	Salt Lake City, Utah.	1.00	.....	44	.....
Grand Rapids, Mich.	.80	.80	44	44	San Francisco, Calif.	1.25	1.15⅝	40	44
Houston, Tex.	1.37½	.....	44	.....	Scranton, Pa.	.90	.....	44	.....
Indianapolis, Ind.	.90	.90	44	44	Seattle, Wash.	1.00	1.00	40	40
Kansas City, Mo.	1.12½	1.10	44	44	Spokane, Wash.	1.00	.90	44	44
Los Angeles, Calif.	1.25	.....	44	.....	Springfield, Mass.	.95	.85	44	44
Louisville, Ky.	1.00	1.00	44	44	Toledo, Ohio.	1.25	1.00	44	44
Manchester, N. H.	1.00	1.00	44	44	Washington, D. C.	1.12½	1.12½	44	44
Memphis, Tenn.	1.00	.93¾	44	44	Wichita, Kans.	1.25	1.12½	44	44
Milwaukee, Wis.	1.00	1.00	44	44	Worcester, Mass.	1.00	.85	44	44
Minneapolis, Minn.	1.00	1.00	44	44	Youngstown, Ohio.	1.25	1.04	44	44

Marble setters.

Atlanta, Ga.	$1.06¼	$1.00	44	44	Minneapolis, Minn.	$1.00	$1.00	44	44
Baltimore, Md.	1.00	1.06¼	44	44	Nashville, Tenn.	.75	1.00	44	44
Birmingham, Ala.	1.00	1.00	44	44	Newark, N. J.	1.12½	1.12½	44	44
Boston, Mass.	1.00	1.06¼	44	44	New Haven, Conn.	1.00	1.00	44	44
Bridgeport, Conn.	1.00	1.00	44	44	New Orleans, La.	1.00	1.00	44	44
Buffalo, N. Y.	1.00	1.00	44	44	New York, N. Y.	1.12½	1.12½	44	.....
Butte, Mont.	1.25	1.25	44	44	Norfolk, Va.	1.12½	1.06¼	44	44
Chicago, Ill.	1.25	.97½	44	44	Omaha, Nebr.	1.06¼	1.06¼	44	44
Cincinnati, Ohio.	1.06¼	1.06¼	44	44	Philadelphia, Pa.	1.06¼	1.06¼	44	44
Cleveland, Ohio.	1.06¼	1.06¼	44	44	Pittsburgh, Pa.	1.00	1.00	44	44
Columbus, Ohio.	1.06¼	1.12½	44	44	Portland, Oreg.	1.06¼	1.06¼	44	44
Dallas, Tex.	1.25	1.05	44	44	Rochester, N. Y.	1.00	1.06¼	44	44
Dayton, Ohio.	1.06¼	1.00	44	45	St. Louis, Mo.	1.00	1.06¼	44	44
Denver, Colo.	1.06¼	1.06¼	44	44	St. Paul, Minn.	1.00	1.00	44	44
Des Moines, Iowa.	1.00	1.11½	44	44	Salt Lake City, Utah.	.93¾	1.00	44	44
Detroit, Mich.	1.06¼	1.06¼	44	44	San Francisco, Calif.	1.00	.92½	44	44
Houston, Tex.	1.06¼	1.12½	44	44	Scranton, Pa.	1.10	.....	44	.....
Indianapolis, Ind.	1.06¼	1.06¼	44	44	Seattle, Wash.	1.06¼	1.06¼	44	44
Kansas City, Mo.	1.00	1.06¼	44	44	Springfield, Mass.	1.05	1.00	44	44
Los Angeles, Calif.	1.00	1.06¼	44	44	Washington, D. C.	.85	1.00	44	44
Louisville, Ky.	1.00	1.00	44	44	Wichita, Kans.	1.12½	1.00	44	44
Memphis, Tenn.	1.00	1.06¼	44	44	Worcester, Mass.	.97½	.97½	44	44
Milwaukee, Wis.	1.06¼	1.06¼	44	44					

Painters.

Atlanta, Ga.	$0.85	$0.90	44	44	Dallas, Tex.	$1.00	$1.00	44	44
Baltimore, Md.	.90	.....	44	.....	Dayton, Ohio.	.80	.80	44	44½
Birmingham, Ala.	.87½	.87½	44	44	Denver, Colo.	1.12½	1.00	44	44
Boston, Mass.	1.00	.....	40	.....	Des Moines, Iowa.	1.00	.92	44	44
Bridgeport, Conn.	1.00	1.00	44	44	Detroit, Mich.	1.00	.85	44	44
Buffalo, N. Y.	.87½	.87½	48	44	Erie, Pa.	.87½	{.35–.75}	44	44
Butte, Mont.	1.12½	1.12½	44	44					
Charleston, S. C.	.80	.65	44	44	Fall River, Mass.	1.00	.75	44	44
Chicago, Ill.	1.25	.....	44	.....	Grand Rapids, Mich.	.80	.80	44	44
Cincinnati, Ohio.	1.00	.....	44	.....	Houston, Tex.	1.00	1.00	44	44
Cleveland, Ohio.	1.12½	.93	44	44	Indianapolis, Ind.	1.00	.92½	44	44
Columbus, Ohio.	.85	.85	44	44	Jacksonville, Fla.	.75	.....	44	.....

[1] Includes Davenport, Iowa, and Moline and Rock Island, Ill.

UNION SCALE OF WAGES AND HOURS OF LABOR, MAY 15, 1921, AND RATES OF WAGES PAID AND HOURS WORKED, NOVEMBER 15, 1921—Continued.

Painters—Continued.

City.	Rate per hour, 1921.		Hours per week, 1921.		City.	Rate per hour, 1921.		Hours per week, 1921.	
	May 15.	Nov. 15.	May 15.	Nov. 15.		May 15.	Nov. 15.	May 15.	Nov. 15.
Kansas City, Mo.	$1.00	$1.00	44	44	Providence, R. I.	$0.90	$0.80	44	44
Little Rock, Ark.	1.00	1.00	44	44	Reading, Pa.	.85	.85	44	44
Los Angeles, Calif.	1.00	1.00	44	44	Richmond, Va.	.75	.75	48	48
Louisville, Ky.	.87½	.87½	44	44	Rochester, N. Y.	1.00	.85-1.00	44	44
Manchester, N. H.	.80	.70	44	44	Rock Island, Ill., district[1]	1.00	.87½	44	44
Memphis, Tenn.	1.00	.87½	44	44	Saginaw, Mich.	.80	.....	44	.....
Milwaukee, Wis.	.85	.85	44	44	St. Louis, Mo.	1.25	1.25	44	44
Minneapolis, Minn.	1.00	.80	44	44	St. Paul, Minn.	1.00	.80	44	44
Muskegon, Mich.	.80	.80	44	44	Salt Lake City, Utah.	1.00	.90	44	44
Nashville, Tenn.	.75	.75	44	44	San Francisco, Calif.	1.06¼	1.04⅜	44	44
Newark, N. J.	1.00	1.00	44	44	Scranton, Pa.	.87½	.87½	44	44
New Haven, Conn.	1.00	.87½	44	44	Seattle, Wash.	.93¾	.93¾	40	40
New Orleans, La.	.90	.80	44	44	Spokane, Wash.	1.00	.90	44	44
New York, N. Y.	1.12½	1.12½	44	40	Springfield, Mass.	.95	.85	44	44
Norfolk, Va.	.87½	.75	44	44	Toledo, Ohio.	1.00	.80	44	44
Omaha, Nebr.	1.01¼	.90	44	44	Washington, D. C.	1.00	1.00	44	44
Peoria, Ill.	.87½	.87½	44	44	Wichita, Kans.	.87½	.87½	44	44
Philadelphia, Pa.	1.00	.80	40	44	Worcester, Mass.	.87½	.87½	44	44
Pittsburgh, Pa.	1.12½	1.00	44	44	York, Pa.	.70	.75	44	44
Portland, Me.	.85	.75	44	44	Youngstown, Ohio.	1.12½	.....	44	.....
Portland, Oreg.	.90	.....	44	.....					

Plasterers.

Atlanta, Ga.	$1.00	$1.00	44	44	Nashville, Tenn.	$1.00	$1.00	44	44
Baltimore, Md.	1.25	1.25	44	44	Newark, N. J.	1.25	1.25	44	44
Birmingham, Ala.	1.00	1.00	44	44	New Haven, Conn.	1.00	1.00	44	44
Boston, Mass.	1.25	.....	40	.....	New Orleans, La.	1.00	1.00	45	45
Bridgeport, Conn.	1.00	1.00	44	44	New York, N. Y.	1.25	1.25	44	44
Buffalo, N. Y.	1.00	1.00	40	40	Norfolk, Va.	1.00	1.00	44	44
Butte, Mont.	1.37½	.....	44	.....	Omaha, Nebr.	1.25	1.25	44	44
Charleston, S. C.	.85	.85	48	48	Peoria, Ill.	1.25	1.10	44	44
Chicago, Ill.	1.25	1.25	44	44	Philadelphia, Pa.	1.25	1.25	40	40
Cincinnati, Ohio.	1.12½	1.12½	44½	44½	Pittsburgh, Pa.	1.25	1.12½	44	44
Cleveland, Ohio.	1.25	1.04	44	44	Portland, Me.	1.12½	.90	44	44
Columbus, Ohio.	1.25	1.25	44	44	Portland, Oreg.	1.12½	.....	44	.....
Dallas, Tex.	1.50	1.37½	44	44	Providence, R. I.	1.15	.....	40	.....
Dayton, Ohio.	1.10	1.10	44	44	Reading, Pa.	.90	.90	44	44
Denver, Colo.	1.25	1.25	44	44	Richmond, Va.	.87½	.87½	44	44
Des Moines, Iowa.	1.12½	1.12½	44	44	Rochester, N. Y.	1.25	.....	44	.....
Detroit, Mich.	1.25	1.00	44	44	Rock Island, Ill., district[1]	1.25	1.12½	44	44
Erie, Pa.	1.25	1.12½	44	44	Saginaw, Mich.	1.00	.....	44	.....
Fall River, Mass.	1.15	.95	44	44	St. Louis, Mo.	1.37½	.....	44	.....
Grand Rapids, Mich.	1.00	1.00	44	44	St. Paul, Minn.	1.00	1.00	44	44
Houston, Tex.	1.50	1.50	44	44	Salt Lake City, Utah.	1.12½	1.12½	44	44
Indianapolis, Ind.	1.12½	1.12½	44	44	San Francisco, Calif.	1.37½	1.27½	40	44
Jacksonville, Fla.	.87½	.87½	44	44	Scranton, Pa.	1.50	1.25	44	44
Kansas City, Mo.	1.20	1.12½	44	44	Seattle, Wash.	1.25	1.12½	40	40
Little Rock, Ark.	1.12½	1.12½	44	44	Spokane, Wash.	1.25	1.12½	44	44
Los Angeles, Calif.	1.25	1.25	40	40	Springfield, Mass.	1.05	.95	44	44
Louisville, Ky.	1.12½	1.12½	44	44	Toledo, Ohio.	1.25	1.00	44	44
Manchester, N. H.	1.12½	1.12½	44	44	Washington, D. C.	1.25	1.25	44	44
Memphis, Tenn.	1.12½	.....	44	.....	Wichita, Kans.	1.12½	.....	44	.....
Milwaukee, Wis.	1.12½	1.12½	44	44	Worcester, Mass.	.97½	.97½	44	44
Minneapolis, Minn.	1.25	1.12½	44	44	York, Pa.	.90	.90	45	48
Muskegon, Mich.	1.25	1.00	44	44	Youngstown, Ohio.	1.25	.....	44	.....

Plasterers' laborers.

Boston, Mass.	$0.80	$0.80	40	40	Milwaukee, Wis.	$0.85	$0.75	44	44
Butte, Mont.	1.00	.....	44	.....	Minneapolis, Minn.	.85	.85	44	44
Chicago, Ill.	1.06¼	.....	44	.....	Newark, N. J.	.87½	.....	44	.....
Cincinnati, Ohio.	.85	.....	45	.....	New Orleans, La.	.50	.50	45	44
Cleveland, Ohio.	.87½	.87½	44	44	New York, N. Y.	.93¾	.93¾	44	44
Dallas, Tex.	.75	.62½	44	44	Peoria, Ill.	.77½	.65	44	44
Denver, Colo.	.81¼	.81¼	44	44	Philadelphia, Pa.	1.10	.....	44	.....
Detroit, Mich.	.75	.75	44	44	Pittsburgh, Pa.	1.00	.80	44	44
Indianapolis, Ind.	.70	.70	44	44	Portland, Me.	.80	.75	44	44
Kansas City, Mo.	.90	.80	44	44	Portland, Oreg.	.90	.90	44	44
Los Angeles, Calif.	1.12½	1.12½	40	40	Providence, R. I.	.75	.75	44	44
Louisville, Ky.	.80	.80	44	44	Rochester, N. Y.	.70	55	44	44
Memphis, Tenn.	.62½	.....	44	.....	St. Louis, Mo.	1.00	1.00	44	44

[1] Includes Davenport, Iowa, and Moline and Rock Island, Ill.

UNION SCALE OF WAGES AND HOURS OF LABOR, MAY 15, 1921, AND RATES OF WAGES PAID AND HOURS WORKED, NOVEMBER 15, 1921—Continued.

Plasterers' laborers—Concluded.

City.	Rate per hour, 1921.		Hours per week, 1921.		City.	Rate per hour, 1921.		Hours per week, 1921.	
	May 15.	Nov. 15.	May 15.	Nov. 15.		May 15.	Nov. 15.	May 15.	Nov. 15.
St. Paul, Minn	$0.85	$0.85	44	44	Seattle, Wash	$0.87½	$0.87½	40	40
Salt Lake City, Utah	.87½	.87½	44	44	Spokane, Wash	.75	.75	44	44
San Francisco, Calif	1.12½	1.04⅜	40	44	Washington, D. C	.62½	.62½	44	44
Scranton, Pa	.70	.....	44	.....	Wichita, Kans	.75	.....	44	.....

Plumbers.

Atlanta, Ga	$0.75	$1.00	44	44	Nashville, Tenn	$1.12½	.....	44	.....
Baltimore, Md	1.00	.93¾	44	44	Newark, N. J	1.12½	.....	44	.....
Birmingham, Ala	1.50	1.50	44	44	New Haven, Conn	1.00	$0.87½	44	44
Boston, Mass	1.00	.90	44	44	New Orleans, La	1.00	1.00	44	44
Bridgeport, Conn	1.00	.85	44	44	New York, N. Y	1.12½	1.12½	44	44
Buffalo, N. Y	1.00	1.00	44	44	Norfolk, Va	1.00	1.00	44	44
Butte, Mont	1.25	1.25	44	44	Omaha, Nebr	1.25	1.12½	44	44
Charleston, S. C	1.00	1.00	44	44	Peoria, Ill	1.06¼	1.00	44	44
Chicago, Ill	1.25	1.10	44	44	Philadelphia, Pa	1.15	.90	44	44
Cincinnati, Ohio	1.00	.....	44	.....	Pittsburgh, Pa	1.25	1.25	44	44
Cleveland, Ohio	1.37½	1.10	44	44	Portland, Me	1.00	.90	44	44
Columbus, Ohio	1.00	1.00	44	44	Portland, Oreg	1.12½	1.06¼	44	44
Dallas, Tex	1.37½	1.25	44	44	Providence, R. I	1.00	.....	44	.....
Dayton, Ohio	1.00	1.00	44	44	Reading, Pa	1.00	1.00	44	44
Denver, Colo	1.06¼	1.06¼	44	44	Richmond, Va	.75	.75	44	44
Des Moines, Iowa	1.25	1.25	44	44	Rochester, N. Y	1.06¼	1.00	44	48
Detroit, Mich	1.00	1.00	44	44	Rock Island, Ill., district[1]	1.00	1.00	44	44
Erie, Pa	.87½	.97	44	44	Saginaw, Mich	1.00	1.00	44	44
Fall River, Mass	1.00	.85	44	44	St. Louis, Mo	1.25	1.25	44	44
Grand Rapids, Mich	.90	.90	44	44	St. Paul, Minn	1.00	1.00	44	44
Houston, Tex	1.25	1.25	44	44	Salt Lake City, Utah	1.00	1.00	44	44
Indianapolis, Ind	1.25	1.15	44	44	San Francisco, Calif	1.25	1.15⅝	44	44
Jacksonville, Fla	1.12½	1.00	44	44	Scranton, Pa	.87½	.87½	44	44
Kansas City, Mo	1.25	1.12½	44	44	Seattle, Wash	1.12½	1.00	40	40
Little Rock, Ark	1.12½	1.12½	44	44	Spokane, Wash	1.00	1.00	44	44
Los Angeles, Calif	1.12½	1.12½	44	44	Springfield, Mass	.95	.87½	44	44
Louisville, Ky	1.00	1.00	44	44	Toledo, Ohio	1.00	1.00	44	44
Manchester, N. H	.90	.90	44	44	Washington, D. C	1.00	1.06¼	44	44
Memphis, Tenn	1.25	.....	44	.....	Wichita, Kans	1.12½	1.12½	44	44
Milwaukee, Wis	1.00	1.00	44	44	Worcester, Mass	1.00	.90	44	44
Minneapolis, Minn	1.00	.87½	44	44	York, Pa	.75	.75	44	44
Muskegon, Mich	1.00	.90	44	44	Youngstown, Ohio	1.25	.....	44	.....

Sheet metal workers.

Atlanta, Ga	$0.80	.....	48	.....	Nashville, Tenn	$0.75	$0.75	44	44
Baltimore, Md	.90	$0.90	44	44	Newark, N. J	1.12½	1.12½	44	44
Birmingham, Ala	1.00	85	44	44	New Haven, Conn	1.00	.87½	44	44
Boston, Mass	1.00	.....	44	.....	New Orleans, La	1.00	.90	44	44
Bridgeport, Conn	1.00	.85	44	44	New York, N. Y	1.12½	1.12½	44	44
Buffalo, N. Y	.87½	.87½	44	44	Omaha, Nebr	1.12½	1.12½	44	44
Butte, Mont	1.12½	1.12½	44	44	Peoria, Ill	1.00	.87½	44	44
Chicago, Ill	1.25	.....	44	.....	Philadelphia, Pa	1.10	.....	44	.....
Cincinnati, Ohio	.80	.75	48	48	Pittsburgh, Pa	1.12½	1.00	44	44
Cleveland, Ohio	1.25	1.04	44	44	Portland, Me	1.00	.85	44	44
Columbus, Ohio	.90	.....	44	.....	Portland, Oreg	1.00	.90	44	44
Dallas, Tex	1.00	1.00	44	44	Providence, R. I	1.00	.....	44	.....
Dayton, Ohio	.85	.85	44	44	Richmond, Va	.80	.80	48	48
Denver, Colo	1.00	1.00	44	44	Rochester, N. Y	1.00	.85	44	44
Des Moines, Iowa	1.00	.93¾	44	44	Rock Island, Ill. district[1]	1.00	.90	44	44
Detroit, Mich	1.00	1.00	44	44	St. Louis, Mo	1.25	1.25	44	44
Erie, Pa	.90	.....	44	.....	St. Paul, Minn	1.00	.90	44	44
Fall River, Mass	1.00	.85	44	44	Salt Lake City, Utah	.90	.90	44	44
Grand Rapids, Mich	.85	.85	50	50	San Francisco, Calif	1.25	1.15⅝	44	44
Houston, Tex	1.12½	1.12½	44	44	Scranton, Pa	.87½	.87½	44	44
Indianapolis, Ind	1.00	.92½	44	44	Seattle, Wash	1.00	.93¾	44	44
Kansas City, Mo	1.00	1.00	44	44	Spokane, Wash	.87½	.87½	44	44
Little Rock, Ark	1.00	1.00	44	44	Springfield, Mass	.95	.85	44	44
Los Angeles, Calif	1.12½	1.12½	44	44	Toledo, Ohio	.90	.75	44	44
Louisville, Ky	.80	.80	44	44	Washington, D. C	1.00	1.00	44	44
Manchester, N. H	.90	.90	44	44	Wichita, Kans	1.00	1.00	44	44
Memphis, Tenn	1.00	1.00	44	44	Worcester, Mass	1.00	.87½	44	44
Milwaukee, Wis	1.00	85	44	44	York, Pa	.75	.75	44	50
Minneapolis, Minn	1.00	.90	44	44	Youngstown, Ohio	1.12½	.90–1.00	44	44
Muskegon, Mich	.90	.75	44	44					

[1] Includes Davenport, Iowa, and Moline and Rock Island, Ill.

UNION SCALE OF WAGES AND HOURS OF LABOR, MAY 15, 1921, AND RATES OF WAGES PAID AND HOURS WORKED, NOVEMBER 15, 1921—Continued.

Slate and tile roofers.

City.	Rate per hour, 1921.		Hours per week, 1921.		City.	Rate per hour, 1921.		Hours per week, 1921.	
	May 15.	Nov. 15.	May 15.	Nov. 15.		May 15.	Nov. 15.	May 15.	Nov. 15.
Baltimore, Md	$1.00	.....	44	.....	Newark, N. J	$1.25	$1.25	44	44
Bridgeport, Conn	1.25	$1.00	44	44	New Haven, Conn	1.25	1.00	44	44
Buffalo, N. Y	1.00	1.25	48	44	New York, N. Y	1.12½	1.12½	44	44
Chicago, Ill	1.25	1.25	44	44	Philadelphia, Pa	1.10	.....	44	.....
Cincinnati, Ohio	1.00	.87½	44	44½	Pittsburgh, Pa	1.25	1.10	44	44
Cleveland, Ohio	1.25	1.04	44	44	Portland, Me	.80	.70	48	48
Dayton, Ohio	.85	.85	44	44	St. Louis, Mo	1.25	1.25	44	44
Denver, Colo	1.00	1.00	44	44	San Francisco, Calif	1.12½	1.04⅜	44	44
Des Moines, Iowa	.90	.90	44	44	Scranton, Pa	.87½	.87½	44	44
Detroit, Mich	1.00	.....	44	.....	Seattle, Wash	1.00	1.00	44	44
Kansas, City, Mo	1.00	.....	44	.....	Springfield, Mass	1.10	1.00	44	44
Milwaukee, Wis	1.00	.....	44	.....	Washington, D. C	1.15	1.15	44	44

Steam fitters.

Baltimore, Md	$1.00	$0.90	44	44	Newark, N. J	$1.25	$1.12½	44	44
Birmingham, Ala	1.50	1.50	44	44	New Haven, Conn	1.00	.87½	44	44
Boston, Mass	1.00	.....	44	.....	New Orleans, La	1.00	1.00	44	44
Bridgeport, Conn	1.00	.85	44	44	New York, N. Y	1.12½	1.12½	44	44
Buffalo, N. Y	.90	.90	44	44	Norfolk, Va	1.00	1.00	44	44
Butte, Mont	1.25	1.25	44	44	Omaha, Nebr	1.25	1.12½	44	44
Charleston, S. C	1.00	1.00	44	44	Peoria, Ill	1.00	1.00	44	44
Chicago, Ill	1.25	.....	44	.....	Philadelphia, Pa	1.10	.90	44	44
Cincinnati, Ohio	1.00	.....	44	.....	Pittsburgh, Pa	1.25	1.12½	44	44
Cleveland, Ohio	1.25	1.04	44	44	Portland, Me	1.00	.....	44	.....
Columbus, Ohio	1.00	.....	44	.....	Portland, Oreg	1.12½	1.06¼	44	44
Dallas, Tex	1.37½	1.25	44	44	Providence, R. I	1.00	.90	44	44
Dayton, Ohio	1.00	1.00	44	44	Reading, Pa	1.00	1.00	44	44
Denver, Colo	1.06¼	1.06¼	44	44	Richmond, Va	.75	.....	44	.....
Des Moines, Iowa	1.25	1.25	44	44	Rochester, N. Y	1.06¼	.93½	44	44
Detroit, Mich	1.00	1.00	44	44	Rock Island, Ill., district[1]	1.00	1.00	44	44
Erie, Pa	1.12½	.97	44	44	Saginaw, Mich	1.00	.....	44	.....
Fall River, Mass	1.00	.85	44	44	St. Louis, Mo	1.25	.....	44	.....
Grand Rapids, Mich	1.00	.90	44	44	St. Paul, Minn	1.00	.....	44	.....
Houston, Tex	1.25	1.25	44	44	Salt Lake City, Utah	1.00	1.00	44	44
Indianapolis, Ind	1.15	1.15	44	44	San Francisco, Calif	1.25	1.15⅝	44	44
Jacksonville, Fla	1.12½	1.00	44	44	Scranton, Pa	.87½	.87½	44	44
Kansas City, Mo	1.25	1.12½	44	44	Seattle, Wash	1.12½	1.00	40	40
Little Rock, Ark	1.12½	1.12½	44	44	Spokane, Wash	1.00	1.00	44	44
Los Angeles, Calif	1.12½	1.12½	44	44	Springfield, Mass	.95	.85	44	44
Louisville, Ky	1.12½	1.06¼	44	44	Toledo, Ohio	1.00	1.00	44	44
Manchester, N. H	.90	.90	44	44	Washington, D. C	1.06¼	1.06¼	44	44
Memphis, Tenn	1.25	1.12½	44	44	Wichita, Kans	1.12½	1.12½	44	44
Milwaukee, Wis	1.00	.90	44	44	Worcester, Mass	.87½	.....	44	.....
Minneapolis, Minn	1.00	.87½	44	44	York, Pa	.75	.75	44	44
Muskegon, Mich	1.00	90	44	44	Youngstown, Ohio	1.25	1.25	44	44
Nashville, Tenn	1.12½	1.00	44	44					

Steam fitters' helpers.

Baltimore, Md	$0.75	$0.67½	44	44	Newark, N. J	$0.87½	.....	44	.....
Boston, Mass	.70	.....	44	.....	New York, N. Y	.87½	$0.87½	44	44
Buffalo, N. Y	.45	.45	44	44	Norfolk, Va	.50	.50	44	44
Butte, Mont	.68½	.....	44	.....	Omaha, Nebr	.62½	.....	44	.....
Chicago, Ill	.75	.....	44	.....	Peoria, Ill	.62½	.42–.62½	44	44
Cincinnati, Ohio	.60	.....	44	.....					
Cleveland, Ohio	.75	.62½	44	44	Philadelphia, Pa	.80	.60	44	44
Dallas, Tex	.75	.75	44	44	Pittsburgh, Pa	.80	.....	44	.....
Denver, Colo	.67½	.62½	44	44	Portland, Me	.62½	.....	44	.....
Detroit, Mich	.62½	.62½	44	44	Providence, R. I	.56¼	.58½	44	44
Fall River, Mass	.75	.57½	44	44	St. Louis, Mo	.75	.....	44	.....
Grand Rapids, Mich	.60	.50	44	44	St. Paul, Minn	.60	.....	44	.....
Indianapolis, Ind	.65	.65	44	44	San Francisco, Calif	.75	.....	44	.....
Kansas City, Mo	.68¾	.68¾	44	44	Scranton, Pa	.62½	.62½	44	44
Louisville, Ky	.55	.55	44	44	Seattle, Wash	.75	.....	40	.....
Memphis, Tenn	.62½	.56¼	44	44	Springfield, Mass	.60	.55	44	44
Milwaukee, Wis	.62½	.62½	44	44	Washington, D. C	.65	.65	44	44
Minneapolis, Minn	.62½	.62½	44	44	Worcester, Mass	.75	.....	44	.....

[1] Includes Davenport, Iowa, and Moline and Rock Island, Ill.

UNION SCALE OF WAGES AND HOURS OF LABOR, MAY 15, 1921, AND RATES OF WAGES PAID AND HOURS WORKED, NOVEMBER 15, 1921—Continued.

Stone cutters.

City.	Rate per hour, 1921.		Hours per week, 1921.		City.	Rate per hour, 1921.		Hours per week, 1921.	
	May 15.	Nov. 15.	May 15.	Nov. 15.		May 15.	Nov. 15.	May 15.	Nov. 15.
Atlanta, Ga	$1.00	$1.00	44	44	Nashville, Tenn	$0.80	$0.80	44	44
Baltimore, Md	1.00	1.00	44	44	Newark, N. J	1.12½	1.12½	44	44
Boston, Mass	1.00	.90	44	44	New Haven, Conn	1.00	1.00	44	44
Bridgeport, Conn	1.00	1.00	44	44	New Orleans, La	1.25	1.25	44	44
Buffalo, N. Y	1.00	1.00	44	44	New York, N. Y	1.12½	1.12½	44	44
Chicago, Ill	1.25	1.02½	44	44	Omaha, Nebr	1.12½	1.00	44	44
Cincinnati, Ohio	1.25	1.25	44	44	Peoria, Ill	.87½	.87½	44	44
Cleveland, Ohio	1.25	1.04	44	44	Philadelphia, Pa	1.20	1.00	44	44
Columbus, Ohio	1.10	1.10	44	44	Pittsburgh, Pa	1.00	1.00	44	44
Dallas, Tex	1.25	1.25	44	44	Reading, Pa	1.00	1.00	44	44
Denver, Colo	1.12½	1.12½	44	44	Richmond, Va	1.00	1.00	44	44
Des Moines, Iowa	1.00	.92	44	44	Rochester, N. Y	1.00	1.00	44	44
Detroit, Mich	1.12½	1.12½	44	44	Rock Island, Ill., district[1]	.87½	.87½	44	44
Erie, Pa	1.00	1.00	44	44	St. Louis, Mo	1.00	1.00	44	44
Grand Rapids, Mich	1.00	1.00	44	44	St. Paul, Minn	1.12½	1.00	44	44
Houston, Tex	1.25	1.25	44	44	San Francisco, Calif	1.12½	1.00	44	44
Indianapolis, Ind	1.00	1.00	44	44	Scranton, Pa	1.00	1.00	44	44
Kansas City, Mo	1.00	.....	44	.....	Seattle, Wash	1.25	1.12½	44	44
Little Rock, Ark	1.00	.80	44	44	Springfield, Mass	1.00	.95	44	44
Louisville, Ky	1.00	1.00	44	44	Toledo, Ohio	1.10	1.04	44	44
Memphis, Tenn	1.12½	.....	44	.....	Washington, D. C	1.00	1.00	44	44
Milwaukee, Wis	.90	.90	44	44	Youngstown, Ohio	1.00	1.00	44	44
Minneapolis, Minn	1.12½	1.00	44	44					

Stone masons.

Atlanta, Ga	$1.00	$1.00	44	44	New Orleans, La	$1.25	$1.00	44	44
Baltimore, Md	1.25	1.25	45	45	New York, N. Y	1.25	1.25	44	44
Birmingham, Ala	1.00	1.00	44	44	Norfolk, Va	1.12½	1.12½	44	44
Boston, Mass	1.00	1.00	44	44	Omaha, Nebr	1.12½	1.00	44	44
Bridgeport, Conn	1.00	1.00	44	44	Peoria, Ill	1.25	1.10	44	44
Buffalo, N. Y	1.00	1.00	44	44	Philadelphia, Pa	1.30	1.00	44	44
Butte, Mont	1.25	1.25	44	44	Pittsburgh, Pa	1.25	1.00	44	44
Chicago, Ill	1.25	1.10	44	44	Portland, Me	1.10	.90	44	44
Cincinnati, Ohio	1.00	1.00	45	45	Portland, Oreg	1.25	1.12½	44	44
Cleveland, Ohio	1.25	1.04	44	44	Providence, R. I	1.15	1.00	44	44
Columbus, Ohio	1.15	1.12½	44	44	Reading, Pa	1.15	1.00	44	44
Denver, Colo	1.12½	1.25	44	44	Rochester, N. Y	1.25	.....	44	.....
Detroit, Mich	1.00	1.00	44	44	Rock Island, Ill., district[1]	1.12½	1.00	44	44
Erie, Pa	1.25	.....	44	.....	St. Louis, Mo	1.00	1.25	44	44
Fall River, Mass	1.15	.95	44	.....	St. Paul, Minn	1.12½	1.00	44	44
Indianapolis, Ind	1.15	1.15	44	44	San Francisco, Calif	1.12½	1.25	44	44
Kansas City, Mo	1.00	1.00	44	44	Scranton, Pa	1.10	1.10	44	44
Little Rock, Ark	1.25	.....	44	.....	Seattle, Wash	1.12½	1.12½	44	44
Louisville, Ky	1.25	1.25	44	44	Spokane, Wash	1.00	1.00	44	44
Memphis, Tenn	1.12½	1.12½	44	44	Springfield, Mass	1.05	.95	44	44
Milwaukee, Wis	1.00	1.00	44	44	Toledo, Ohio	1.25	1.00	44	44
Minneapolis, Minn	1.12½	1.00	44	44	Washington, D. C	1.12½	1.12½	44	44
Nashville, Tenn	.75	.....	50	.....	Wichita, Kans	1.12½	1.12½	44	44
Newark, N. J	1.25	1.25	44	44	Worcester, Mass	.97½	.97½	44	44
New Haven, Conn	1.00	1.00	44	44	York, Pa	.80	.80	44	44

Structural ironworkers.

Atlanta, Ga	$0.95	$0.95	44	44	Detroit, Mich	$1.25	$1.12½	44	44
Baltimore, Md	1.25	1.12½	44	44	Erie, Pa	1.00	1.00	44	44
Boston, Mass	1.00	.90	44	44	Houston, Tex	1.06¼	1.06¼	44	44
Bridgeport, Conn	1.06¼	1.00	44	44	Indianapolis, Ind	1.25	1.15	44	44
Buffalo, N. Y	1.25	1.00	44	44	Kansas City, Mo	1.10	1.07½	44	44
Butte, Mont	1.12½	1.12½	44	44	Los Angeles, Calif	1.00	1.00	44	44
Chicago, Ill	1.25	1.05	44	44	Louisville, Ky	1.00	1.00	44	44
Cincinnati, Ohio	.90	.90	44	44	Manchester, N. H	1.00	.....	44	.....
Cleveland, Ohio	1.25	1.04	44	44	Milwaukee, Wis	1.00	1.00	44	44
Columbus, Ohio	1.00	1.00	44	44	Minneapolis, Minn	1.00	1.00	44	44
Dallas, Tex	1.00	1.00	44	44	Newark N. J	1.12½	1.00	44	44
Dayton, Ohio	.95	.95	44	44	New Haven, Conn	1.06¼	1.00	44	44
Denver, Colo	1.03⅛	1.03⅛	44	44	New Orleans, La	1.00	1.00	44	44
Des Moines, Iowa	.90	.90	44	44	New York, N. Y	1.12½	1.12½	44	44

[1] Includes Davenport, Iowa, and Moline and Rock Island, Ill.

UNION SCALE OF WAGES AND HOURS OF LABOR, MAY 15, 1921, AND RATES OF WAGES PAID AND HOURS WORKED, NOVEMBER 15, 1921—Continued.

Structural ironworkers—Concluded.

City.	Rate per hour, 1921.		Hours per week, 1921.		City.	Rate per hour, 1921.		Hours per week, 1921.	
	May 15.	Nov. 15.	May 15.	Nov. 15.		May 15.	Nov. 15.	May 15.	Nov. 15.
Norfolk, Va	$1.00	$1.00	44	44	St. Paul, Minn	$1.00	$1.00	44	44
Omaha, Nebr	1.12½	1.00	44	44	Salt Lake City, Utah	1.00	.90	44	44
Peoria, Ill	1.25	.87½	44	44	San Francisco, Calif	1.25	1.15⅝	44	44
Philadelphia, Pa	1.12½	1.00	44	44	Scranton, Pa	1.12½	1.00	44	44
Pittsburgh, Pa	1.25	1.00	44	44	Seattle, Wash	1.12½	1.12½	44	44
Portland, Me	1.00	.90	44	44	Spokane, Wash	1.12½	1.00	44	44
Portland, Oreg	1.01¼	1.01¼	44	44	Springfield, Mass	1.06¼	.96¼	44	44
Providence, R. I	1.00	.92½	44	44	Toledo, Ohio	1.10	1.00	44	44
Richmond, Va	1.00	1.00	44	44	Washington, D. C	1.25	1.25	44	44
Rochester, N. Y	1.25	1.06¼	44	44	Worcester, Mass	1.06¼	.96¼	44	44
Rock Island, Ill., district[1]	1.00	1.00	44	44	Youngstown, Ohio	1.25	.90	44	44
St. Louis, Mo	1.25	1.25	44	44					

Tile layers.

Atlanta, Ga	$1.00	$1.00	44	44	Nashville, Tenn	$1.00	$1.00	44	44
Baltimore, Md	1.00	1.00	44	44	Newark, N. J	1.12½	1.12½	44	44
Boston, Mass	1.00	.....	44	.....	New Haven, Conn	1.00	1.00	44	44
Bridgeport, Conn	1.00	1.00	44	44	New Orleans, La	1.00	1.00	44	44
Buffalo, N. Y	1.00	1.00	44	44	New York, N. Y	1.12½	1.12½	44	44
Butte, Mont	1.25	1.25	44	44	Norfolk, Va	1.00	1.00	44	44
Chicago, Ill	1.25	1.02½	44	44	Omaha, Nebr	1.06¼	1.00	44	44
Cincinnati, Ohio	1.00	1.25	44	45	Peoria, Ill	1.25	1.10	44	44
Cleveland, Ohio	1.00	1.00	44	44	Philadelphia, Pa	1.00	1.00	44	44
Dallas, Tex	1.25	1.00	44	44	Pittsburgh, Pa	1.00	1.00	44	44
Dayton, Ohio	1.06½	.....	44	.....	Portland, Oreg	1.00	1.00	44	44
Denver, Colo	1.00	1.00	44	44	Providence, R. I	1.00	1.00	44	44
Des Moines, Iowa	1.00	.....	44	.....	Rochester, N. Y	1.00	1.00	44	44
Detroit, Mich	1.00	1.00	44	44	St. Louis, Mo	1.00	1.00	44	44
Erie, Pa	1.00	1.00	44	44	St. Paul, Minn	1.00	1.00	44	44
Houston, Tex	1.00	.....	44	.....	Salt Lake City, Utah	1.00	1.12½	44	44
Indianapolis, Ind	1.00	1.00	44	44	San Francisco, Calif	1.12½	1.04⅝	44	44
Kansas City, Mo	1.00	1.00	44	44	Scranton, Pa	1.00	1.00	44	44
Little Rock, Ark	1.00	.....	44	.....	Seattle, Wash	1.00	1.00	44	44
Los Angeles, Calif	1.00	1.00	44	44	Springfield, Mass	1.05	1.00	44	44
Louisville, Ky	1.25	1.00	44	44	Toledo, Ohio	1.00	1.00	44	44
Memphis, Tenn	1.00	1.00	44	44	Washington, D. C	.85	1.00	44	44
Milwaukee, Wis	1.00	1.00	44	44	Wichita, Kans	1.12½	.....	44	.....
Minneapolis, Minn	1.00	.....	44	.....	Youngstown, Ohio	1.00	1.00	44	44
Muskegon, Mich	1.00	1.00	44	44					

Wage Scales of Employees in the Printing Trades, November 15, 1921.

THE Department of Industrial Information of the United Typothetae of America, Chicago, Ill., issues each month a statement of the wage scales paid employees in the printing trades in the United States and Canada. The statement for November 15, 1921, is given in the following tables.

The first table shows the scales paid in the various printing and binding occupations, together with emergency bonuses where such are reported and the minimum hours of work per week. The table shows whether the shops are operated as open or union shops and also the population of the cities for which reports are made.

The second table indicates the extent of wage reductions in the various occupations specifying both the old and new scales and the date the reduction was made.

The third table shows the union wage scales in electrotype foundries.

WAGE SCALES (WITH EMERGENCY BONUSES) WHERE REPORTED, NOV. 15, 1921.

Location.	Population.	Open shop or union scale.	Minimum hours per week.	Compositors.		Compositor machine operators.		Proofreaders.		Job pressmen.		Cylinder pressmen.		Job feeders.	
				Wage scale.	Emergency bonus.	Wage scale.	Emergency bonus.	Wage scale.	Emergency bonus.	Wage scale.	Emergency bonus.	Wage scale.	Emergency bonus.	Wage scale.	Emergency bonus.
Alabama:															
Birmingham [1]	178,270			$38.40		$40.00		$38.40		$36.50		$39.00		$19.50	
Mobile [2]	60,151		48	36.00		36.00		30.00		33.00		38.00		12.00	
Arkansas: Fort Smith [1]	28,811		48	[3] 34.00-45.00		[3] 34.00-50.00				21.00		33.00		18.00	
California:															
Los Angeles [2]	576,673	Open	48	42.00		45.50				36.00		42.00		27.00	
Oakland [4]	216,361	Union	44	46.00		46.00		46.00		46.00		46.00		26.00	
Sacramento [2]	65,857	Union	44	46.00		46.00		46.00		43.00		46.00		25.00	
San Francisco [2]	508,410	Union	44	[3] 46.00		[3] 46.00		[5] 46.00		43.00		46.00		25.00	
Colorado: Denver [1]	256,369	Open	48	39.00-45.00		39.00-55.00		39.00		39.00		39.00-42.00		10.00-18.00	
Connecticut:															
Bridgeport [1]	143,538		48	38.00		38.00		38.00		28.50-32.00		34.00		21.00	
New Haven [2]	162,519	Open	48	30.00		30.00		30.00		30.00		35.00		18.00	
Delaware: Wilmington [1]	110,168		48	38.00	$3-$6.00	38.00	$3-$6.00	36.00	$4.00	35.00	$3-$6.00	40.00	$3-$6.00	15.00-20.00	$3-$6.00
District of Columbia:															
Washington [2]	437,571	Union	44	[5] 40.00		42.00		40.00		30.00		40.00		19.00	
Florida:															
Jacksonville [1]	91,558			36.00		36.00		36.00		25.00		30.00-36.00		16.00	
Pensacola [6]	31,035			36.00		36.00		36.00		33.00		33.00		12.00	
Tampa [2]	51,252		44	40.33		40.33				37.50		40.00		20.00	
Georgia: Atlanta	200,616	Open	48	38.00		40.00		25.00		37.50		37.50		16.25	
Illinois:															
Bloomington [1]	28,725			36.00		36.00		14.00-29.00		34.00		36.00		15.00-17.00	
Chicago [1]	2,701,705	Union	44	46.65		48.05		46.65		40.65-44.15		47.65		24.90	
Rockford [1]	65,651	Open	48	38.00		40.00				36.00		42.00		25.00	
Rock Island	35,177	Open	48	38.40		42.00		38.40		33.40		40.00		21.00	
Do		Union	44	38.50		40.50		38.50		33.40		38.40		24.00	
Indiana:															
Fort Wayne [1]	86,549			24.00	10.80	24.00	12.00	24.00	10.80	21.00	13.80	23.00	11.80		
Indianapolis	314,194	Union	44	44.00		45.00		44.00		38.00		38.00		15.00-21.00	
South Bend [2]	70,983	Union	48	26.00	11.00	28.00	12.00			35.00		38.00		18.00	
Terre Haute [1]	66,083	Open	48	39.00		39.00				36.00		39.00		17.50	
Iowa: Des Moines [1]	126,468	Union	44	39.42		39.42		39.42		35.00		39.50		21.00	
Kansas:															
Hutchinson [1]	23,298		48	39.00		41.50				33.00		35.00		19.00-20.00	
Topeka [1]	50,022		48	40.00		40.00		40.00		32.50		40.00			
Wichita [1]	72,128			39.00		38.00		39.00		24.00-30.00		30.00-45.00		16.00-21.00	

Louisiana:																
New Orleans	387,219	Open	48–52	36.00		37.50		34.50		26.50		30.00		16.00		
Do		Union	44–48	34.50		36.00		34.50		26.50		29.50		15.00–17.00		
Maine: Portland [2]	69,272	Open	48	34.00		35.00		20.00		32.00		34.00		21.00		
Maryland: Baltimore [2]	733,826	Open	48	40.00		40.00		40.00		27.16–32.01		37.84		21.35		
Massachusetts:																
Boston [2]	748,060	Open	48	37.00		37.00		25.00–30.00		34.50		39.50				
Haverhill [2]	53,884		48	33.00		33.00						[3] 30.00				
Worcester [6]	179,754			29.00	2.50	29.00	2.50	29.00	2.50	22.50	2.50	27.50	2.50	14.00	2.50	
Michigan:																
Battle Creek [1]	36,164			32.00		40.00				30.00		32.50–40.00		20.00		
Detroit [2]	993,739	Open	48	46.50				46.50		39.00		45.00		25.00		
Do		Union	48	46.50		[5]		46.50		39.00		45.00		25.00		
Flint [1]	91,599			35.00		35.00		35.00		35.00		35.00		25.00		
Grand Rapids [2]	137,634	Open	48	35.00		40.00				30.00		35.00				
Kalamazoo [1]	48,858	Open		[5] 32.00		[5] 35.00				27.50–32.00		32.00–35.00		18.00–23.00		
Muskegon [1]	36,570	Open	48	35.00	3.00	35.00	3.00			25.00		30.00		19.00		
Saginaw [6]	61,903	Open	48	27.00		30.00				23.00		26.00		16.00		
Minnesota:																
Duluth [2]	98,917	Open	48	42.00		42.00		42.00		31.00–37.00		42.00		12.00–20.00		
Minneapolis [2]	380,582	Open	48	33.60	8.40	33.60	11.40			31.20–36.00		42.00–47.40		19.80		
St. Paul [2]	234,595	Open	48	33.60	8.40	45.00				28.80–36.00		36.00	6.00	12.95–17.76		
Missouri:																
Kansas City [2]	324,410	Open	48	39.00		36.00		37.00		36.00		39.75		20.75		
Do		Union	48	40.50		43.00		40.50		39.00–42.00		44.00		23.00		
St. Louis [2]	772,897	Open	48	44.52		48.52		44.52		36.00–39.50		41.00–46.00		20.50		
Montana: Billings [1]	15,100			43.50		43.50		43.50		39.00		42.00		22.50		
Nebraska:																
Lincoln [2]	54,934	Union	48	39.00		39.00				30.00–32.00		39.00		17.00		
Omaha [2]	191,601	Open	48	42.00		42.00		42.00		30.00		35.00		22.00		
New Jersey:																
Camden [2]	116,309		48	37.00		37.00				38.00		44.00				
Jersey City [2]	299,864	Union	44	49.00		49.00		49.00		37.50		45.00		27.00		
Newark [2]	414,216	Union	44	49.00		49.00		49.00		37.50–41.50		45.00		23.00		
Trenton [2]	119,289	Union	44	44.00		44.00				44.00		44.00				
New York:																
Albany [2]	113,344	Open	48	36.00								36.00				
Do		Union	44	38.00		38.00		38.00		30.00		38.00		15.00		
Buffalo [2]	506,775	Open	48	40.00		40.00				34.00		40.00		21.00		
Do		Union	44	40.00		40.00				34.00		40.00		21.00		
Elmira [1]	45,305			39.00		39.00				[5]		[6]		[5]		
Jamestown [1]	38,917			33.00		33.00				30.00		35.00		16.00		
New York	5,621,151	Open	48	44.95				43.50		42.35		48.15		27.46		
Do		Union	44	50.00				50.00		38.50		46.00		28.00		
Rochester [2]	295,750	Open	48	41.00		41.00		41.00		36.96–38.88		41.00		24.00		
Do		Union	44	41.00		41.00		41.00		36.96–38.88		41.00		24.00		
Syracuse [2]	171,717	Open	48	38.00		38.00		38.00		32.00		38.00		22.50		
Do		Union	44	38.00		38.00		38.00		32.00		38.00		22.50		
Troy [1]	72,013		44	33.92		33.92		33.92				33.92				
Utica [1]	94,156		48	32.00–40.00		37.00–40.00		32.00–40.00		28.00–32.00		32.00–36.00				

[1] No report; old scale given. [2] No change reported. [3] No contract signed. [4] No contract signed; old scale given. [5] Negotiations in progress. [6] Negotiations in progress; old scale given.

WAGE SCALES (WITH EMERGENCY BONUSES) WHERE REPORTED, NOV. 15, 1921—Concluded.

Location.	Population.	Open shop or union scale.	Minimum hours per week.	Compositors.		Compositor machine operators.		Proof readers.		Job pressmen.		Cylinder pressmen.		Job feeders.	
				Wage scale.	Emergency bonus.	Wage scale.	Emergency bonus.	Wage scale.	Emergency bonus.	Wage scale.	Emergency bonus.	Wage scale.	Emergency bonus.	Wage scale.	Emergency bonus.
North Carolina:															
Charlotte [2]	46,338	.....	48	40.00	.....	47.50	.....	.....	.....	40.00	.....	47.50	.....	20.00	.....
Raleigh [1]	24,418	.....	48	42.50	.....	42.50	.....	40.00	.....	32.50	.....	37.50	.....	16.50	.....
Wilmington [1]	33,372	.....	48	40.00	.....	45.00	.....	40.00	.....	34.50-38.00	.....	40.00	.....	16.00-17.00	.....
Winston-Salem	48,395	Open...	48	30.00	.....	40.00-44.00	.....	35.00	.....	23.00-37.00	.....	30.00-40.00	.....	15.00-22.00	.....
North Dakota:															
Fargo [2]	21,961	Open...	48	40.00	.....	40.00	.....	37.00	.....	30.00	.....	42.00	.....	15.00	.....
Do	.....	Union..	44	40.00	.....	40.00	.....	37.00	.....	30.00	.....	42.00	.....	15.00	.....
Ohio:															
Cincinnati	401,274	Open...	48-52	46.00	.....	46.00	.....	[7] 40.00	.....	33.50-36.50	.....	42.25	.....	.....	.....
Do	.....	Union..	44	46.00	.....	46.00	.....	40.00	.....	33.50-36.50	.....	42.25	.....	.....	.....
Cleveland [2]	796,836	Open...	48	45.00	.....	45.00	.....	45.00	.....	44.00	.....	44.00	.....	28.50	.....
Do	.....	Union..	44	45.00	.....	45.00	.....	45.00	.....	44.00	.....	44.00	.....	28.50	.....
Columbus [2]	237,031	Open...	48-49½	38.75	.....	38.75	.....	38.75	.....	38.00	.....	39.00	.....	15.00-18.00	.....
Do	.....	Union..	48	31.00	11.00	31.00	11.00	31.00	11.00	31.00	11.00	31.00	11.00	15.00-18.00	.....
Dayton [2]	152,559	.....	48	42.00	.....	42.00	.....	42.00	.....	30.00-36.00	.....	36.00-40.00	.....	18.00	.....
Marietta [1]	15,100	.....	48	33.00	.....	34.50	.....	.....	.....	30.00	.....	34.50	.....	15.00-20.00	.....
Springfield [2]	60,840	Union..	44	40.00	.....	36.00	.....	39.00	.....	25.00-35.00	.....	35.00	.....	12.00-15.00	.....
Toledo [1]	243,109	Open...	48	24.00	16.00	27.00	16.00	24.00	16.00	23.00	16.00	24.00	16.00	.....	.....
Do	.....	Union..	44	24.00	16.00	27.00	16.00	24.00	16.00	23.00	16.00	24.00	16.00	.....	.....
Oklahoma:															
Muskogee [1]	30,277	Open..	48	33.00	4.00	33.00	4.00	.....	.....	27.50	3.50	33.00	4.00	15.00	2.00
Oklahoma City [1]	91,258	Open..	48	36.75	.....	37.50	.....	40.00	.....	32.00	.....	42.00	.....	20.00	.....
Tulsa [2]	72,075	Union..	44	45.00	.....	45.00	.....	45.00	.....	38.00	.....	45.00	.....	22.00	.....
Do	.....	Open...	48	40.00	.....	45.00	.....	45.00	.....	32.00	.....	40.00	.....	22.00	.....
Oregon: Portland [1]	258,288	.....	44	42.17	.....	48.40	.....	42.17	.....	36.67	.....	41.25	.....	22.92	.....
Pennsylvania:															
Erie [2]	93,372	Open...	48	41.00	.....	41.00	.....	.....	.....	35.00	.....	42.00	.....	16.00	.....
Harrisburg [1]	75,917	Open...	48	35.00	.....	37.00	.....	36.00	.....	24.00	.....	34.00-40.00	.....	.....	.....
Do	.....	Union..	44	35.00	.....	37.00	.....	36.00	.....	24.00	.....	34.00-40.00	.....	.....	.....
Philadelphia [2]	1,823,158	Open...	48	43.00	.....	45.00	.....	43.00	.....	38.00	.....	44.00	.....	.....	.....
Do	.....	Union..	44	43.00	.....	45.00	.....	43.00	.....	38.00	.....	44.00	.....	.....	.....
Pittsburgh [2]	588,193	.....	48	45.00	.....	48.00	.....	45.00	.....	40.00	.....	44.00	.....	23.00	.....
Scranton [1]	137,783	.....	.....	25.00-26.00	12.50	26.00-29.00	13.00	26.00-29.00	12.50	30.00	.....	36.00	.....	18.00	.....
Wilkes-Barre [1]	73,833	.....	48	39.00	.....	42.00	.....	39.00	.....	22.00-30.00	.....	39.00	.....	.....	.....
Rhode Island: Providence [2]	237,595	Open...	48	32.00	.....	.....	.....	.....	.....	30.00-32.00	.....	35.00	.....	25.00	.....
South Carolina: Columbia [1]	37,524	Open...	48	[7] 38.00	.....	[7] 38.00	.....	38.00	.....	[7] 33.00	.....	33.00	.....	[7] 16.00	.....

South Dakota: Mitchell [1]	8,478	Open...	48	36.00	.....	36.00	.....	.....	.....	35.00	.....	35.00	.....	.....	.....
Tennessee:															
Chattanooga [2]	57,895	Open...	48	34.00	.....	34.00	.....	34.00	.....	31.50	.....	31.50	.....	19.00	.....
Knoxville [2]	77,818	Open...	48	32.50	.....	32.50	.....	20.00	.....	23.00	.....	27.50	.....	15.00	.....
Nashville [2]	118,343	Open...	48	35.00–40.00	.....	35.00–50.00	.....	35.00–45.00	.....	25.00–35.00	.....	35.00–40.00	.....	12.00–18.00	.....
Do	.....	Union..	44	38.40	.....	36.00–39.00	.....	38.40	.....	.....	.....	.....	.....	.....	.....
Texas:															
Austin [2]	34,876	Union..	44	37.55	.....	37.55	.....	37.55	.....	37.55	.....	37.55	.....	[3] 12.00-18.00	.....
Dallas [2]	158,976	Open...	48	44.00	.....	.....	.....	.....	.....	36.50	.....	43.00	.....	.....	.....
Fort Worth [1]	106,482	Union..	44	38.00	.....	38.00	.....	38.00	.....	37.50–43.50	.....	43.50–50.00	.....	20.00	.....
Galveston [1]	44,255	Union..	44	36.00	.....	38.40	.....	36.00	.....	30.00–33.00	.....	36.00	.....	.....	.....
Houston [1]	138,076	Union..	44	40.00	.....	46.00	.....	40.00	.....	30.00–36.00	.....	40.00	.....	.....	.....
San Antonio [8]	161,379	Open...	48	30.00	.....	36.00	.....	30.00	.....	22.50	.....	36.00	.....	16.00	.....
Virginia:															
Norfolk [1]	115,777	.....	.....	39.50	.....	42.00	.....	39.50	.....	28.00–35.00	.....	36.00	.....	18.00–20.00	.....
Richmond	171,667	Open...	48	35.00	.....	42.50	.....	33.00	.....	27.50	.....	32.50	.....	17.50	.....
Do	.....	Union..	48	27.00	.....	30.00	.....	27.50	.....	.....	.....	.....	.....	.....	.....
Washington:															
Everett [1]	27,644	.....	48	42.00	.....	.....	.....	.....	.....	36.00	.....	42.00	.....	26.00	.....
Seattle [1]	315,652	.....	48	42.00	.....	45.00	.....	42.00	.....	39.00	.....	42.00	.....	26.00	.....
Spokane [2]	104,437	Open...	48	42.00	.....	42.00–45.00	.....	42.00	.....	38.64–40.88	.....	42.00	.....	24.92	.....
Tacoma [1]	96,965	Open...	48	40.60	.....	40.60	.....	40.60	.....	37.92	.....	40.60	.....	23.04	.....
Wisconsin:															
Appleton [4]	19,561	.....	48	27.00–45.00	.....	.....	.....	20.00	.....	27.00	.....	35.00	.....	.....	.....
Fond du Lac [1]	23,427	.....	44	34.00	.....	33.00	.....	.....	.....	25.00	.....	34.00	.....	14.00	.....
Green Bay [1]	31,017	.....	48	27.00	5.00	29.00	.....	.....	.....	20.00	.....	.....	.....	.....	.....
Kaukauna [1]	4,717	.....	44	36.66	.....	36.66	.....	.....	.....	15.00	.....	.....	.....	.....	.....
Madison [2]	38,378	Open...	48	35.00	.....	37.00	.....	25.00	.....	33.00	.....	35.00–40.00	.....	15.00–20.00	.....
Manitowoc [1]	17,563	.....	44	35.00	.....	37.00	.....	.....	.....	32.50	.....	32.50	.....	12.00	.....
Milwaukee [2]	457,147	Open...	48	41.00	.....	42.00	.....	.....	.....	38.00	.....	43.00	.....	32.00	.....
Do	.....	Union..	44	41.00	.....	42.00	.....	.....	.....	38.00	.....	43.00	.....	32.00	.....
Oshkosh [1]	33,162	.....	.....	[3] 32.16	.....	32.16	.....	26.00	.....	25.92	.....	26.88	.....	.....	.....
Racine [2]	58,593	.....	.....	37.00	.....	43.00	.....	19.00	.....	32.00	.....	39.00	.....	18.00	.....
Canada:															
Montreal [2]	473,712	Open...	48	32.00	4.00	32.00	4.00	32.00	4.00	26.00	3.25	32.00	4.00	15.00	1.85
Ottawa [2]	87,062	Open...	48	35.00	.....	35.00	.....	35.00	.....	35.00	.....	35.00	.....	.....	.....
Quebec [1]	103,246	.....	48	24.00	2.00	26.00	2.00	.....	.....	18.00	2.00	22.00	2.00	12.00	.....
Summerland, B. C.	1,300	.....	.....	39.00	.....	39.00	.....	39.00	.....	.....	.....	.....	.....	.....	.....
Toronto [2]	376,538	Open...	48	36.00	.....	36.00	.....	.....	.....	28.00–36.00	.....	36.00	.....	.....	.....
Vancouver, B. C.	114,220	Open...	48	40.50	.....	40.50	.....	40.50	.....	37.50	.....	40.50	.....	22.50	.....
Do	.....	Union..	44	39.60	.....	39.60	.....	39.60	.....	36.70	.....	39.60	.....	22.00	.....
Winnipeg [2]	163,000	Open...	48	36.00	.....	36.00	.....	36.00	.....	31.20	.....	36.00	.....	.....	.....
Do	.....	Union..	44	39.60	.....	39.60	.....	39.60	.....	34.20	.....	36.00	.....	20.35	.....

[2] No change reported. [1] No report; old scale given. [7] Average. [8] No change reported; average. [4] No contract signed; old scale given.

WAGE SCALES (WITH EMERGENCY BONUSES) WHERE REPORTED, NOV. 15, 1921.

Location.	Population.	Open shop or union scale.	Minimum hours per week.	Cylinder feeders.		Men binders.		Cutters.		Rulers.		Bindery girls.		Bindery forelady.	
				Wage scale.	Emergency bonus.	Wage scale.	Emergency bonus.	Wage scale.	Emergency bonus.	Wage scale.	Emergency bonus.	Wage scale.	Emergency bonus.	Wage scale.	Emergency bonus.
Alabama:															
Birmingham [1]	178,270			$25.50		$36.00		$36.00		$36.00		$18.50			
Mobile [2]	60,151		48	19.00		35.00		25.00		40.00		12.00		18.00	
Arkansas: Fort Smith [1]	28,811		48	21.00		40.00				40.00		15.00			
California:															
Los Angeles [2]	576,673	Open	48	33.00		42.00		33.00		42.00		18.00			
Oakland [4]	216,361	Union	44	30.00		46.00		46.00		46.00		21.00		26.00	
Sacramento	65,857	Union	44	30.00		46.00		46.00		46.00		21.00			
San Francisco [2]	508,410	Union	44	30.00		46.00		46.00		46.00		21.00		26.00	
Colorado: Denver [1]	256,369	Open	48	30.00–35.00		39.00–42.00		39.00–42.00		39.00–42.00					
Connecticut:															
Bridgeport [1]	143,538		48	23.00		30.00		24.00		30.00		15.00		18.00	
New Haven [2]	162,519	Open	48	23.00		35.00		30.00		35.00		15.00		18.00	
Delaware: Wilmington [1]	110,168		48	25.00	$3–$6.00	35.00		35.00		35.00		15.00		18.00	
District of Columbia:															
Washington [2]	437,571	Union	44	30.00		35.00		35.00		35.00		18.00			
Florida:															
Jacksonville	91,558			18.00											
Pensacola [6]	31,035			33.00				36.00		36.00					
Tampa [2]	51,252		44	25.00		40.35		40.35		40.35		15.00–18.00		27.50	
Georgia: Atlanta	200,616	Open	48			37.50		37.50		37.50		16.00		20.00	
Illinois:															
Bloomington [1]	28,725			19.00–30.00		36.00		36.00		36.00		12.00–17.00		27.00	
Chicago [1]	2,701,705	Union	44	39.65		42.90		42.90		46.65		22.00		28.00	
Rockford [1]	65,651	Open	48	22.00				32.00				16.00		18.00	
Rock Island	35,177	Open	48	30.00		40.00		36.00		40.00		15.00		20.00	
Do		Union	44	30.00		38.40		36.00		38.40		18.00		24.00	
Indiana:															
Fort Wayne [1]	86,549			18.00	7.60	24.00	$10.80	24.00	$10.80	24.00	$10.80	10.00–17.50		19.00	
Indianapolis	314,194	Union	44	30.80		44.00		44.00		44.00		22.00			
South Bend [2]	70,983	Union	48	29.00–34.00		36.00		36.00		36.00		12.00–16.00		[3] 25.00	
Terre Haute [1]	66,083	Open	48	29.00		40.00		40.00		40.00		16.00			
Iowa: Des Moines [1]	126,468	Union	44	28.00		37.00		37.00		37.00		19.00			
Kansas:															
Hutchinson [1]	23,298		48	27.50											
Topeka [1]	50,022		48	30.00		40.00		40.00		40.00		20.00			
Wichita [4]	72,128			20.00–30.00		37.50		37.50		37.50		10.00–20.00			
Louisiana:															
New Orleans	387,219	Open	48–52	25.00		38.00		38.00		38.00		17.50			
Do		Union	44–48	25.00		38.00		38.00		38.00		18.00			

Maine: Portland [2]	69,272	Open...	48	28.00		27.00		26.00		34.00		12.00		20.00		
Maryland: Baltimore [2]	733,826	Open...	48	29.11		38.00		38.00		38.00		20.00		23.00		
Massachusetts:																
Boston [2]	748,060	Open...	48	30.00		33.50–37.50		35.50				19.20				
Haverhill [2]	53,884		48													
Worcester [6]	179,754			19.50	2.50											
Michigan:																
Battle Creek [1]	36,164			20.00–26.00		28.00–35.00		28.00		38.00		14.00–18.00		20.00		
Detroit [2]	993,739	Open...	48	35.00		40.00		40.00		40.00		20.00				
Do		Union..	48	35.00		40.00		40.00		40.00		20.00				
Flint [1]	91,599			25.00				35.00				16.00–20.00		20.00–25.00		
Grand Rapids [2]	137,634	Open...	48	27.00		35.00		35.00		35.00		18.00		20.00		
Kalamazoo [1]	48,858	Open...		25.00								15.00				
Muskegon [1]	36,570	Open...	48	20.00				27.00		35.00		18.00		20.00		
Saginaw [6]	61,903	Open...	48	20.00		25.00		25.00		30.00		12.00–16.00				
Minnesota:																
Duluth [2]	98,917	Open...	48	12.00–27.00		41.00		38.50		41.00		12.00–18.00		18.00		
Minneapolis [2]	380,582	Open...	48	33.00		28.80	9.60	28.80		28.80	9.60	14.40–19.80				
St. Paul [2]	234,595	Open...	48			[5] 38.40		[5] 38.40		[5] 38.40		11.00–18.00				
Missouri:																
Kansas City [2]	324,410	Open...	48	28.00		34.25		35.25		38.50		18.00		21.00		
Do		Union..	48	35.00		40.00		40.00		40.00		20.00		23.00		
St. Louis [2]	772,897	Open...	48	35.50		44.50		43.50		44.50		20.50		23.00–25.00		
Montana: Billings [1]	15,100			27.00		35.00		30.00		35 00		15.00		17.50		
Nebraska:																
Lincoln [2]	54,934	Union..	48	28.00		39.00		39.00		39.00		15.00		17.00		
Omaha [2]	191,601	Open...	48	28.00		40.00		40.00		40.00		18.00		25.00		
New Jersey:																
Camden [2]	116,309		48	35.00		38.00		30.00–32.00		38.00		16.00–18.00				
Jersey City [2]	297,864	Union..	44	36.50		41.00		39.00								
Newark [2]	414,216	Union..	44	36.50		38.00		38.00		38.00		19.00				
Trenton [2]	119,289	Union..	44			44.00		44.00		44.00		9.00–20.00				
New York:																
Albany [2]	113,344	Open...	48	23.00				36.00								
Do		Union..	44	27.00		38.00		38.00		38.00		21.00				
Buffalo [2]	506,775	Open...	48	30.00		38.00		38.00		38.00		16.50				
Do		Union..	44	30.00		38.00		38.00		38.00		16.50				
Elmira [1]	45,305			[3]		30.00	5.00	25.00	5.00	30.00	5.00	13.00	$5.00	15.00	$5.00	
Jamestown [1]	38,917			21.00												
New York	5,621,151	Open...	48	33.37				41.00		40.00		26.10		28.00		
Do		Union..	44	37.50				40.00				26.00				
Rochester [2]	295,750	Open...	48	30.24		40 00		40.00		40 00		20.00				
Do		Union..	44	30.24		40 00		40.00		40.00		20.00				
Syracuse [2]	171,717	Open...	48	27.00												
Do		Union..	44	27.00												
Troy [1]	72,013		44			33.92		33.92		33.92						
Utica [1]	94,156		48			32 00–40.00		30.00–40.00		32.00–40.00		12.00–16.00				

[1] No report; old scale given.
[2] No change reported.
[3] No contract signed.
[4] No contract signed; old scale given.
[5] Negotiations in progress.
[6] Negotiations in progress; old scale given.

WAGE SCALES (WITH EMERGENCY BONUSES) WHERE REPORTED, NOV. 15, 1921—Concluded.

Location.	Population.	Open shop or union scale.	Minimum hours per week.	Cylinder feeders.		Men binders.		Cutters.		Rulers.		Bindery girls.		Bindery forelady.	
				Wage scale.	Emergency bonus.	Wage scale.	Emergency bonus.	Wage scale.	Emergency bonus.	Wage scale.	Emergency bonus.	Wage scale.	Emergency bonus.	Wage scale.	Emergency bonus.
North Carolina:															
Charlotte [2]	46,338	.....	48	25.00	.....	40.00	.....	30.00	.....	40.00	.....	16.00	.....	18.00	.....
Raleigh [1]	24,418	.....	48	22.50	.....	40.00	.....	35.00	.....	40.00	.....	20.00	.....	22.50	.....
Wilmington [1]	33,372	.....	48	16.00–27.00	.....	36.00	.....	30.00	.....	36.00	.....	10.00–15.00	.....	15.00	.....
Winston-Salem	48,395	Open...	48	15.00	.....	32.00–36.00	.....	18.00–40.00	.....	32.00–36.00	.....	10.00–15.50	.....	15.00	.....
North Dakota:															
Fargo [2]	21,961	Open...	48	25.00	.....	40.00	.....	37.00	.....	37.00	.....	14.00–20.00	.....	.....	.....
Do	.....	Union..	44	25.00	.....	40.00	.....	37.00	.....	37.00	.....	14.00–20.00	.....	.....	.....
Ohio:															
Cincinnati	401,274	Open...	48–52	33.50	.....	34.00	.....	34.00	.....	34.00	.....	18.00	.....	20.00	.....
Do	.....	Union..	44	33.50	.....	34.00	.....	34.00	.....	34.00	.....	18.00	.....	20 00	.....
Cleveland [2]	796,836	Open...	48	36.00	.....	42.00	.....	42.00	.....	42.00	.....	21.50–24.00	.....	.....	.....
Do	.....	Union..	44	36.00	.....	42.00	.....	42.00	.....	42.00	.....	21.50–24.00	.....	.....	.....
Columbus [2]	237,031	Open...	48–49½	30.00	.....	40.00	.....	40.00	.....	40.00	.....	12.00–18.00	.....	18.00–20.00	.....
Do	.....	Union..	48	24.00	11.00	31.00	11.00	31.00	11.00	31.00	11.00	12.00–18.00	.....	18.00–22.00	.....
Dayton [2]	152,559	.....	48	25.00	.....	36.00	.....	36.00	.....	36.00	.....	15.00–17.00	.....	20.00	.....
Marietta [1]	15,100	.....	48	23.00–27.00	.....	.....	.....	27.50	.....	.....	.....	12.00	.....	15.00	.....
Springfield [2]	60,840	Union..	44	25.00	.....	35.00–37.00	.....	27.00–30.00	.....	35.00	.....	12.00–15.00	.....	15.00	.....
Toledo [1]	243,109	Open...	48	18.00	16.00	24.00	16.00	21.00	16.00	24.00	16.00	18.00	.....	.....	.....
Do	.....	Union..	44	18.00	16.00	24.00	16.00	21.00	16.00	24.00	16.00	18.00	.....	.....	.....
Oklahoma:															
Muskogee [1]	30,277	Open...	48	20.00	2.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Oklahoma City [1]	91,258	Open...	48	25.00	.....	45.00	.....	45.00	.....	45.00	.....	15.00	.....	20.00	.....
Tulsa [2]	72,075	Union..	44	30.00	.....	40.00	.....	40.00	.....	40.00	5.00	22.00	.....	24.00	.....
Do	.....	Open...	48	30.00	.....	40.00	.....	40.00	.....	45.00	.....	20.00	.....	24.00	.....
Oregon: Portland [1]	258,288	.....	44	27.50	.....	41.25	.....	38.96	.....	41.25	.....	22.00	.....	.....	.....
Pennsylvania:															
Erie [2]	93,372	Open...	48	18.00	.....	41.00	.....	34.00	.....	.....	.....	16.00	.....	17.00	.....
Harrisburg [1]	75,917	Open...	48	.....	.....	35.00	.....	.....	.....	.....	.....	15.00	.....	30.00	.....
Do	.....	Union..	44	.....	.....	35.00	.....	.....	.....	.....	.....	15.00	.....	30.00	.....
Philadelphia [2]	1,823,158	Open...	48	35.00	.....	40.00	.....	40.00	.....	40.00	.....	20.00	.....	.....	.....
Do	.....	Union..	44	35.00	.....	40.00	.....	40.00	.....	40.00	.....	20.00	.....	.....	.....
Pittsburgh [2]	588,193	.....	48	31.00	.....	36.00	.....	40.00	.....	36.00	.....	12.50–20.00	.....	20.00	.....
Scranton [1]	137,783	.....	48	24.50	.....	38.00	.....	38.00	.....	38.00	.....	14.00–20.00	.....	.....	.....
Wilkes-Barre [1]	73,833	.....	48	30 00	.....	38.00	.....	38.00	.....	38.00	.....	20.00	.....	.....	.....
Rhode Island: Providence [2]	237,595	Open...	48	27.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
South Carolina: Columbia [1]	37,524	Open...	48	25.00	.....	40.00	.....	40.00	.....	40.00	.....	20.00	.....	.....	.....
South Dakota: Mitchell [1]	8,478	Open...	48	18.00	.....	.....	.....	.....	.....	36.00	.....	10.00–16.00	.....	16.00	.....

Tennessee:															
Chattanooga [2]	57,895	Open...	48	24.00	.....	25.00	.....	20.00	.....	25.00	.....	18.50	.....	16.50	.....
Knoxville [2]	77,818	Open...	48	30.00	.....	30.00	.....	26.00	.....	33.50	.....	14.75	.....	.....	.....
Nashville [2]	118,343	Open...	48	18.00–28.00	.....	35.00–40.00	.....	25.00–35.00	.....	35.00–42.50	.....	15.00–18.00	.....	20.00–27.50	.....
Do	.....	Union..	44	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Texas:															
Austin [2]	34,876	Union..	44	22.25	.....	37.55	.....	37.55	.....	37.55	.....	18.75	.....	.....	.....
Dallas [2]	158,976	Open...	48	29.50	.....	37.50	.....	37.50	.....	37.50	.....	18.75	.....	22.50	.....
Fort Worth [1]	106,482	Union..	44	32.00	.....	38.00	.....	38.00	.....	38.00	.....	19.50	.....	22.50	.....
Galveston [1]	44,255	Union..	44	.....	.....	36.00	.....	36.00	.....	36.00	.....	17.00	.....	20.00	.....
Houston [1]	138,076	Union..	44	27.50	.....	40.00	.....	40.00	.....	40.00	.....	20.00	.....	22.50	.....
San Antonio [8]	161,379	Open...	48	22.50	.....	30.00	.....	30.00	.....	36.00	.....	14.00	.....	22.50	.....
Virginia:															
Norfolk [1]	115,777	.....	.....	25.00–30.00	.....	35.00–40.00	.....	35.00–40.00	.....	35.00–40.00	.....	15.00–22.00	.....	20.00–30.00	.....
Richmond	171,667	Open...	48	22.50	.....	32.50	.....	32.50	.....	35.00	.....	14.00	.....	20.00	.....
Do	.....	Union..	48	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Washington:															
Everett [1]	27,644	.....	48	27.50	.....	42.00	.....	42.00	.....	42.00	.....	24.00	.....	.....	.....
Seattle [1]	315,652	.....	48	30.00	.....	42.00	.....	42.00	.....	42.00	.....	24.00	.....	.....	.....
Spokane [2]	104,437	Open...	48	28.28	.....	42.00	.....	42.00	.....	42.00	.....	21.00	.....	24.00	.....
Tacoma [1]	96,965	Open...	48	25.92	.....	40.60	.....	40.60	.....	40.60	.....	21.60	.....	.....	.....
Wisconsin:															
Appleton [4]	19,561	.....	48	18.00	.....	40.00	.....	35.00	.....	.....	.....	17.00	.....	.....	.....
Fond du Lac [1]	23,427	.....	44	.....	.....	.....	.....	.....	.....	.....	.....	15.00	.....	.....	.....
Green Bay [1]	31,017	.....	48	26.00	.....	32.00	.....	.....	.....	32.00	.....	14.00	.....	16.00	.....
Kaukauna [1]	4,717	.....	44	32.50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Madison [2]	38,378	Open...	48	15.00–20.00	.....	30.00–38.00	.....	30.00–38.00	.....	30.00–38.00	.....	.....	.....	.....	.....
Manitowoc [1]	17,563	.....	44	32.50	.....	35.00	.....	.....	.....	35.00	.....	13.00	.....	15.00	.....
Milwaukee [2]	457,147	Open...	48	36.00	.....	38.00	.....	38.00	.....	38.00	.....	.....	.....	.....	.....
Do	.....	Union..	44	36.00	.....	38.00	.....	38.00	.....	38.00	.....	.....	.....	.....	.....
Oshkosh [1]	33,162	.....	.....	30.00	.....	24.00	.....	30.00	.....	20.16	.....	10.56	.....	12.48	.....
Racine [2]	58,593	.....	.....	30.00	.....	40.00	.....	37.00	.....	32.00	.....	15.00	.....	20.00	.....
Canada:															
Montreal [2]	473,712	Open...	48	22.00	2.75	30.00	3.75	30.00	3.75	30.00	3.75	13.00	1.65	.....	.....
Ottawa [2]	87,062	Open...	48	22.00	.....	34.00	.....	34.00	.....	34.00	.....	13.50	.....	.....	.....
Quebec [1]	103,246	.....	48	17.00	.....	24.00	2.00	26.00	2.00	26.00	2.00	10.00	.....	15.00	.....
Summerland, B. C. [1]	1,300	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Toronto [2]	376,538	Open...	48	28.00	.....	36.00	.....	36.00	.....	36.00	.....	16.80	.....	.....	.....
Vancouver, B. C.	114,220	Open...	48	24.50	.....	40.50	.....	40.50	.....	40.50	.....	20.25	.....	.....	.....
Do	.....	Union..	44	24.00	.....	39.60	.....	39.60	.....	39.60	.....	19.80	.....	.....	.....
Winnipeg [2]	163,000	Open...	48	.....	.....	36.00	.....	36.00	.....	36.00	.....	15.36	.....	.....	.....
Do	.....	Union..	44	27.90	.....	39.00	.....	39.00	.....	39.00	.....	9.00–14.00	.....	20.00	.....

[2] No change reported. [1] No report; old scale given. [7] Average. [8] No change reported; average. [4] No contract signed; old scale given

WAGE REDUCTIONS IN THE VARIOUS OCCUPATIONS OF THE PRINTING TRADE.

Location.	Date reduction reported.	Occupation.	Old scale.	New scale.	Amount of reduction.
Alabama: Birmingham	May 15	Electrotypers	$42.50	$39.50	$3.00
California: San Francisco	Nov. 15	.....do	54.00	50.00	4.00
Colorado: Denver [1]	Aug. 15	Compositors	45.50	39.00–45.00	6.50– 0.50
		Cylinder pressmen	45.50	39.00–42.00	6.50– 3.50
		Binders	45.50	39.00–42.00	6.50– 3.50
		Cylinder feeders	36.50	30.00–35.00	6.50– 1.50
		Job feeders	23.00	10.00–18.00	5.00–13.00
		Bindery girls	22.50	15.00	7.50
		Cutters	45.50	39.00–42.00	6.50– 3.50
Dist. of Columbia: Washington	June 15	Binders	38.00	35.00	3.00
		Bindery girls	20.00	18.50	1.50
Illinois: Chicago	May 15	Compositors	51.00	46.65	4.35
		Cylinder pressmen	52.00	47.65	4.35
		Cylinder feeders	44.00	39.65	4.35
		Job pressmen	45.00	40.65	4.35
		Binders	46.50	42.15	4.35
		Rulers	51.00	46.65	4.35
		Cutters	46.00	41.65	4.35
		Job feeders	27.50	24.90	2.60
		Bindery girls	23.50	22.00	1.50
Indiana: Indianapolis	Nov. 15	Cylinder pressmen	44.00	38.00	6.00
		Cylinder feeders	36.80	30.80	6.00
Iowa: Des Moines	July 15	.....do	29.00	28.00	1.00
Maine: Portland [1]	Apr. 15	Cylinder pressmen	37.00	34.00	3.00
		Cylinder feeders	32.00	29.00	3.00
Maryland, Baltimore	Apr. 15	Cylinder pressmen	42.04	37.84	4.20
		Job pressmen	30.18–35.57	27.16–32.01	3.01– 3.56
		Cylinder feeders	32.34	29.11	3.23
		Job feeders	23.72	21.35	2.37
Massachusetts: Boston [1]	Apr. 15	Compositors	41.00	37.00	4.00
		Cylinder pressmen	43.50	39.50	4.00
		Job pressmen	38.50	34.50	4.00
		Binders	39.50	35.50	4.00
		Cylinder feeders	36.50	30.00	6.50
		Bindery girls	22.20	19.20	3.00
		Electrotypers	43.50	39.50	4.00
Missouri: Kansas City [1]	Oct. 15	Compositors	40.50	39.00	1.50
		Job pressmen	39.00	36.00	3.00
		Cylinder pressmen	44.00	39.75	4.25
		Job feeders	23.00	20.75	2.25
		Cylinder feeders	35.00	28.00	7.00
		Binders	40.00	34.25	5.75
		Bindery girls	20.00	18.00	2.00
New Jersey:					
Newark	June 15	Job pressmen	43.00	37.50	5.50
		Cylinder feeders	42.00	36.50	5.50
		Cylinder pressmen	50.00	45.00	5.00
		Job feeders	27.00	23.00	4.00
		Binders	40.00	38.00	2.00
		Bindery girls	20.50	19.00	1.50
Trenton	May 15	Compositors	46.00	44.00	2.00
New York:					
Albany [1]	Oct. 15	.....do	38.00	36.00	2.00
		Cylinder pressmen	38.00	36.00	2.00
		Cylinder feeders	25.00	23.00	2.00
		Cutters	38.00	36.00	2.00
New York City	May 15	Cylinder pressmen	51.00	46.00	5.00
		Job pressmen	44.00	38.50	5.50
		Cylinder feeders	43.00	37.50	5.50
		Cutters and rulers	45.50	40.00	5.50
		Job feeders	32.00	28.00	4.00
	Aug. 15	Binders	42.00	40.00	2.00
		Bindery girls	30.00	26.00	4.00
Troy	July 15	Compositors	37.00	33.92	3.08
		Cylinder pressmen	36.00	33.92	2.08
		Binders	36.00	33.92	2.08
North Carolina: Winston-Salem [1]	Nov. 15	Compositors	40.00	30.00–40.00	5.00–10.00
		Cylinder pressmen	40.00–45.00	30.00–40.00	5.00–10.00
		Binders	40.00	32.00–36.00	4.00– 8.00
		Bindery girls	18.00–20.00	10.00–15.50	4.50– 8.00
Ohio:					
Columbus [1]	Oct. 15	Compositors	42.00	38.75	3.25
		Job pressmen	42.00	38.00	4.00
		Cylinder pressmen	42.00	39.00	3.00
		Cylinder feeders	35.00	30.00	5.00
		Binders	42.00	40.00	2.00
Marietta	June 15	Cylinder pressmen	40.00	34.50	5.50

[1] Open shop scale.

WAGE REDUCTIONS IN THE VARIOUS OCCUPATIONS OF THE PRINTING TRADE—Concluded.

Location.	Date reduction reported.	Occupation.	Old scale.	New scale.	Amount of reduction.
Oregon, Portland	Aug. 15	Compositors	46.00	42.17	3.83
		Cylinder pressmen	45.00	41.25	3.75
		Job pressmen	40.00	36.67	3.33
		Cylinder feeders	30.00	27.50	2.50
		Job feeders	25.00	22.92	2.08
		Binders	45.00	41.25	3.75
		Rulers	45.00	41.25	3.75
		Cutters	42.50	38.96	3.54
		Bindery girls	24.00	22.00	2.00
South Dakota: Mitchell [1]	Sept. 15	Compositors	38.00	36.00	2.00
		Cylinder pressmen	38.00	35.00	3.00
		Cylinder feeders	25.00	18.00	7.00
		Rulers	40,00	36.00	4.00
		Bindery girls	18.00	10.00–16.00	2.00– 8.00
Texas:					
Austin	July 15	Compositors	40.00	37.55	2.45
		Cylinder pressmen	40.00	37.55	2.45
		Cylinder feeders	27.50	26.00	1.50
		Binders	40.00	37.55	2.45
		Bindery girls	20.00	18.75	1.25
Dallas	June 15	Electrotypers	50.00	37.50	12.50
	Nov. 15	do	37.50	35.00	2.50
Fort Worth	Aug. 15	Compositors	43.50	38.00	5.50
		Machine operators	45.00	38.00	7.00
		Binders	43.50	38.00	5.50
		Bindery forelady	26.50–27.50	22.50	4.00– 5.00
San Antonio [1]	Sept. 15	Compositors	33.00	30.00	3.00
		Cylinder pressmen	40.00	36.00	4.00
		Binders	33.00	30.00	3.00
		Job feeders	24.00	22.50	1.50
		Cylinder feeders	25.00	20.00	5.00
		Job pressmen	25.00	22.50	2.50
Tennessee: Chattanooga	May 15	Electrotypers	48.00	44.00	4.00
	Nov. 15	do	44.00	40.00	4.00
Virginia: Richmond [1]	do	Compositors	37.50	35.00	2.50
		Job pressmen	32.50	27.50	5.00
		Cylinder pressmen	35.00	32.50	2.50
		Job feeders	19.50	17.50	2.00
		Cylinder feeders	27.00	22.50	4.50
		Binders	35.00	32.50	2.50
Washington: Tacoma [1]	Sept. 15	Compositors	45.00	40.60	4.40
		Job pressmen	42.00	37.92	4.08
		Cylinder pressmen	45.00	40.60	4.40
		Job feeders	25.50	23.04	2.46
		Cylinder feeders	28.50	25.92	2.08
		Binders	45.00	40.60	4.40
		Bindery girls	24.00	21.60	2.40
Canada:					
Toronto	do	Electrotypers	50.00	45.00	5.00
	Nov. 15	do	45.00	43.00	2.00
Vancouver	Oct. 15	Compositors	40.50	39.60	.90
		Job Pressmen	37.50	36.70	.80
		Cylinder pressmen	40.50	39.60	.90
		Job feeders	22.50	22.00	.50
		Cylinder feeders	24.50	24.00	.50
		Binders	40.50	39.60	.90
Winnipeg [1]	Aug. 15	Compositors	44.09	36.00	8.09
		Job pressmen	38.00	31.20	6.80
		Cylinder pressmen	44.00	36.00	8.00
		Binders	39.00	36.00	3.00

[1] Open shop scale.

Location.	Population.	Hours per week.	Molders.		Finishers.		Builders.		Casters.		Batterymen.		Branchmen.	
			Wage scale.	Emergency bonus.	Wage scale.	Emergency bonus.	Wage scale.	Emergency bonus.	Wage scale.	Emergency bonus.	Wage scale.	Emergency bonus.	Wage scale.	Emergency bonus.
Alabama: Birmingham [1]	178,270	44	$39.50	.....	$39.50	.....	$37.00	.....	$37.00	.....	$37.00	.....	$37.00	.....
California:														
Los Angeles [1]	576,673	.....	38.00	$10.00	38.00	$6.00	38.00	$6.00	38.00	$6.00	38.00	$6.00	.....	.....
Oakland [2]	216,361	.....	50.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
San Francisco [3]	508,410	44	50.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Colorado: Denver [1]	256,369	.....	36.00	.....	32.00	.....	29.00	.....	29.00	.....	29.00	.....	29.00	.....
District of Columbia: Washington [4]	437,571	44	40.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Indiana: Terre Haute [5]	66,083	.....	26.00	2.00	26.00	2.00	20.00	2.00	21.00	2.00	21.00	2.00	20.00	$2.00
Kansas: Topeka [1]	50,022	.....	45.00–47.00	.....	41.00–45.00	.....	.....	.....	40.00	.....	.....	.....	.....	.....
Louisiana: New Orleans [4]	387,219	.....	40.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	31.00	4.00
Maryland: Baltimore [5]	733,826	48	36.00	4.00	36.00	4.00	31.00	4.00	31.00	4.00	31.00	4.00	32.50	.....
Massachusetts: Boston [5]	748,060	48	39.50	.....	39.50	.....	36.00	.....	36.00	.....	32.50	.....	36.00	.....
Nebraska:														
Lincoln [1]	54,934	.....	39.00	.....	39.00	.....	39.00	.....	36.00	.....	36.00	.....	36.00	4.00
Omaha [1]	119,601	.....	40.00	5.00	40.00	5.00	38.00	4.00	36.00	4.00	36.00	4.00	32.50	.....
New Hampshire: Concord [1]	22,164	.....	39.50	.....	39.50	.....	36.00	.....	36.00	.....	32.50	.....	.....	.....
New Jersey: Rahway [2]	11,042	44	59.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New York:														
Albany [2]	113,344	44	38.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Buffalo [5]	506,775	.....	37.00	.....	37.00	.....	35.00	.....	35.00	.....	35.00	.....	35.00	.....
Rochester [1]	295,750	.....	38.00	.....	38.00	.....	30.00	.....	27.00–30.00	.....	27.00–30.00	.....	27.00–30.00	.....
Oregon: Portland [4]	258,288	.....	46.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pennsylvania:														
Franklin [2]	.....	.....	38.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Harrisburg [5]	75,917	.....	38.40	.....	38.40	.....	38.40	.....	26.40	.....	.....	.....	.....	.....
Philadelphia [2]	1,823,158	44	50.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pittsburgh [1]	588,193	48	42.00	.....	42.00	.....	39.00	.....	39.00	.....	39.00	.....	39.00	.....
Reading [4]	107,784	.....	45.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Scranton [4]	137,783	.....	40.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
York [1]	47,521	48	36.00	.....	36.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rhode Island: Providence [1]	237,595	.....	43.50	.....	43.50	.....	30.00	.....	30.00	.....	.....	.....	.....	.....
Tennessee: Chattanooga	57,895	44	40.00	.....	40.00	.....	40.00	.....	40.00	.....	40.00	.....	15.00	.....
Texas:														
Dallas	158,976	40	35.00	.....	38.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Worth [6]	106,482	44	40.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Houston [4]	138,076	44	50.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Virginia: Richmond [1]	171,667	.....	40.00	.....	50.00	.....	24.00	.....	.....	.....	49.50	.....	30.00	.....
Washington: Seattle [4]	315,652	.....	46.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Wisconsin:														
Menasha [1]	6,081		36.75		36.75		32.68		32.68		31.75		32.68	
Milwaukee [1]	457,147		39.00		39.00		34.00–39.00		39.00		24.00			
Racine [1]	58,593	44	40.00		40.00–50.00		30.00		28.00		30.00		30.00	
Canada:														
Toronto, Ont	376,538	48	43.00		40.00		43.00		40.00		30.00		35.00	
Winnipeg [5]	163,000		50.00		43.00				35.20		35.20		35.20	

[1] Not reported; old scale given.
[2] No classification; reports no change.
[3] No contract signed.
[4] No classification; not reported; old scale given.
[5] Reports no change.
[6] No contract signed; no classification; old scale given.

Wages of Coal Miners in Germany, First Six Months of 1921.[1]

DURING the first quarter of 1921 wages of all groups of workers in German coal mines continued their upward trend. During the second quarter they remained stationary in most instances and in a few instances they even underwent a slight decrease. During the second half of the present year coal miners' wages will, however, show a very considerable increase. A collective agreement concluded on September 1, 1921, and becoming effective on that date, provides that the wage rates per shift shall on the average be increased by 10 marks ($2.38, par) in the Ruhr district and in the Rhenish-Westphalian lignite mines, by 8.50 marks ($2.02, par) in the district of Aix-la-Chapelle, and by 7.50 marks ($1.79, par) in the Waldenburg district and in the central German lignite mines.

The following table shows the average wage rates per shift of various groups of coal mine workers during the first and second quarter of 1921 and compares the rates for the second quarter of 1921 with the average rates for the year 1913:

AVERAGE WAGE RATES OF COAL MINE WORKERS IN GERMANY, FIRST AND SECOND QUARTER, 1921.

[One mark, at par = 23.8 cents.]

Mining district.	Miners proper.			Other workers below ground.			Male workers above ground.		
	Average rate per shift.		Index for second quarter, 1921 (1913=100).	Average rate per shift.		Index for second quarter, 1921 (1913=100).	Average rate per shift.		Index for second quarter, 1921 (1913=100).
	First quarter, 1921.	Second quarter, 1921.		First quarter, 1921.	Second quarter, 1921.		First quarter, 1921.	Second quarter, 1921.	
Hard coal:	*Marks.*	*Marks.*		*Marks.*	*Marks.*		*Marks.*	*Marks.*	
Lower Silesia	51.08	51.03	1329	46.28	46.15	1353	43.37	44.11	1428
Dortmund	71.61	69.65	1077	54.20	54.53	1201	49.78	54.83	1263
Aix-la-Chapelle	61.34	58.14	1035	47.33	45.24	1045	14.33	44.32	1089
Left bank of Rhine	75.12	74.00	1069	53.79	54.44	1045	48.99	54.37	1244
Bavaria[1]	42.37	.....	.....	36.76	.....	.....	35.03	.....	.....
Total	60.30	63.21	1135	47.67	50.09	1146	44.30	49.41	1245
Lignite:									
Halle	50.10	52.56	1245	46.74	48.71	1361	46.17	48.71	1404
Left bank of Rhine	58.73	57.57	1204	57.04	58.09	1329	57.51	58.69	1478
Thuringia	59.28	60.80	1322	46.85	49.70	1284	45.93	48.63	1300
Total	56.04	56.98	1258	50.21	52.17	1324	49.87	52.01	1394
Grand total	58.17	60.10	1190	48.94	51.13	1229	47.09	50.71	1317

[1] Returns for Bavaria are still outstanding for the second quarters. No returns were made by the Upper Silesian district since the beginning of 1921 owing to the disturbances caused by the plebiscite.

[1] Wirtschaft und Statistik. Vol. 1, No. 10, pp. 480–482. Berlin, October, 1921.

Wages in the Printing Trade, in Germany, October 1, 1921.

IN CONTRAST to most other branches of German industry, in which collective bargaining has been introduced but recently, wages in the German printing trade have been regulated by collective agreements since May 9, 1873. Although the wage rates fixed in these agreements are only minimum rates, they nevertheless give an accurate picture of the development of wages if compared from period to period. The wage rates fixed in the collective agreements of the German printing trade are especially suited for such a comparison owing to the concise and uniform character of the provisions relating to wage regulation. The wage regulations in the printing trade group themselves around the minimum weekly wage rate for journeymen printers, which in the last collective agreement concluded before the war and in the agreement effective at the present date has been fixed as follows:

MINIMUM WAGE RATES FOR JOURNEYMEN PRINTERS OF GERMANY, UNDER AGREEMENTS OF 1912 AND 1921.

Agreement of—	Minimum weekly wage rate for journeymen printers of specified ages.		
	Under 21 years.	21 to 24 years.	Over 24 years.
	Marks.	*Marks.*	*Marks.*
Jan. 1, 1912	25	26	27.50
Jan. 1, 1921	125	130	137.50

To these basic minimum rates is added a cost-of-living bonus, fixed from time to time. The present cost-of-living bonus became effective on October 1, 1921. Married workers in each of the three age classes receive a family allowance of 12 marks ($2.86, par) per week. In most localities the basic wage rates are further augmented by a local allowance which now as before the war varies between 2½ and 25 per cent of the basic wage and is fixed according to the cost of living in the individual localities.

The following are considered as journeymen printers in the meaning of the collective agreement: Compositors, machine operators, proof readers, pressmen, stereotypers, electrotypers, and typefounders. As a consequence of this very comprehensive classification of the individual trades the wage schedule of the German printing trade is very simple. It does not consider the occupation of the worker but only his age, conjugal condition, and locality of employment. Accordingly the weekly earnings of married journeymen, effective October 1, 1921, were the following.

MINIMUM WEEKLY EARNINGS OF MARRIED WORKERS IN THE GERMAN PRINTING TRADE, OCT. 1, 1921.

[One mark, at par=23.8 cents.]

Local allowance (percentage of basic wage).	Married workers.								
	Under 21 years (class A).			22 to 24 years (class B).			Over 24 years (class C).		
	Basic wage.	Cost-of-living bonus.	Total earnings.	Basic wage.	Cost-of-living bonus.	Total earnings.	Basic wage.	Cost-of-living bonus.	Total earnings.
	Marks.	*Marks.*	*Marks.*	*Marks.*	*Marks.*	*Marks.*	*Marks.*	*Marks.*	*Marks.*
None	125.00	115.00	240.00	130.00	135.00	265.00	137.50	137.50	275.00
2½ per cent	128.10	116.90	245.00	133.25	136.75	270.00	140.95	139.05	280.00
5 per cent	131.25	123.75	255.00	136.50	143.50	280.00	144.35	145.65	290.00
7½ per cent	134.25	130.65	265.00	139.75	150.25	290.00	147.80	152.20	300.00
10 per cent	137.50	137.50	275.00	143.00	157.00	300.00	151.25	158.75	310.00
12½ per cent	140.60	144.40	285.00	146.25	163.75	310.00	154.70	165.30	320.00
15 per cent	143.75	151.25	295.00	149.50	170.50	320.00	158.10	171.90	330.00
17½ per cent	146.85	158.15	305.00	152.75	177.25	330.00	161.55	178.45	340.00
20 per cent	150.00	165.00	315.00	156.00	184.00	340.00	165.00	185.00	350.00
25 per cent	156.25	163.75	320.00	162.50	182.50	345.00	171.90	183.10	355.00
Hamburg	156.25	185.75	342.00	162.50	204.50	367.00	171.90	205.10	377.00
Berlin	156.25	193.75	350.00	162.50	212.50	375.00	171.90	213.10	385.00

In the fixing of wage rates for the printing trade the occupation is considered in only two instances. The first is that of journeymen who have just finished their apprenticeship. These receive during the first year after the completion of their apprenticeship a lower weekly rate than that of full-fledged journeymen. Before the war their weekly minimum wage (exclusive of local allowance) was 19.50 marks ($4.64, par). In the agreement of January 1, 1921, their minimum weekly wage, inclusive of cost-of-living bonus, was fixed at 150.50 marks ($35.82, par). Beginning with October 1, 1921, their minimum wage (exclusive of local allowance) is 203 marks ($48.31, par). In localities in which a local allowance is granted their weekly earnings vary now between 208 and 308 marks ($49.50 and $73.30, par), as compared with 19.99 to 24.38 marks ($4.76 to $5.80, par) before the war.

The second exception from the general wage regulation is made in the case of machine operators. Owing to the nature of their work these receive a higher wage than other journeymen. According to the agreement now in force their weekly earnings are augmented by an amount varying between 23 and 27 marks ($5.74 and $6.43, par) according to locality.

The increase in the minimum weekly earnings of journeymen printers and machine operators on October 1, 1921, as compared with their earnings in 1913, is shown in the following table:

WEEKLY MINIMUM EARNINGS OF MARRIED AND SINGLE JOURNEYMEN PRINTERS AND MACHINE OPERATORS OVER 24 YEARS OF AGE, 1913 AND 1921.

[1 mark, at par=23.8 cents.]

Local allowance (percentage of basic wage).	Journeymen printers.					Machine operators.				
	Minimum weekly earnings.			Index Oct. 1, 1921 (1913=100).		Minimum weekly earnings.			Index Oct. 1, 1921 (1913=100).	
	1913	Oct. 1, 1921.		Married workers.	Single workers.	1913	Oct. 1, 1921.		Married workers.	Single workers.
		Married workers.	Single workers.				Married workers.	Single workers.		
	Marks.	*Marks.*	*Marks.*			*Marks.*	*Marks.*	*Marks.*		
None	27.50	275.00	263.00	1000	956	34.37	298.00	286.00	867	832
2½ per cent	28.19	280.00	268.00	993	951	35.23	303.00	291.00	860	826
5 per cent	28.87	290.00	278.00	1005	963	36.09	313.00	301.00	867	834
7½ per cent	29.56	300.00	288.00	1015	974	36.95	323.00	311.00	874	842
10 per cent	30.25	310.00	298.00	1025	985	37.81	335.00	323.00	886	854
12½ per cent	30.94	320.00	308.00	1034	995	38.67	345.00	333.00	892	861
15 per cent	31.62	330.00	318.00	1044	1006	39.53	355.00	343.00	898	868
17½ per cent	32.31	340.00	328.00	1052	1015	40.38	365.00	353.00	904	874
20 per cent	33.00	350.00	338.00	1061	1024	41.25	377.00	365.00	914	885
25 per cent	34.38	355.00	343.00	1033	998	42.96	382.00	370.00	889	861
Hamburg	34.38	377.00	365.00	1097	1062	42.06	404.00	392.00	940	912
Berlin	34.38	385.00	373.00	1120	1085	42.96	412.00	400.00	959	931

According to the preceding table the minimum weekly earnings of married journeymen printers were from 10 to 11 times greater on October 1, 1921, than in 1913, and those of machine operators $8\frac{2}{3}$ to $9\frac{3}{5}$ times greater.

Beginning with November 15, 1921, all weekly minimum wage rates in the age classes A, B, and C have been further increased by 25 marks ($5.95, par) and those of journeymen who have just finished their apprenticeship by 20 marks ($4.76, par).

Wages and Cost of Living in Latvia.

A REPORT from the United States consul at Riga relative to the cost of living in Latvia shows that from July, 1919, to June, 1921, there had been an increase of 830 per cent in the cost of living. This increase has been accompanied by a great depreciation in the currency. In March, 1920, 65 rubles were equivalent to $1 in United States currency, while on May 15, 1921, 500 rubles were equal to $1, the rate falling from that time to 360 rubles on September 1, 1921. While wages show considerable increases they have failed, it is stated, to keep pace with rising living costs. The following table shows minimum and maximum wage rates in important industries at different periods from July 1920, to June, 1921.

DAILY RATES OF WAGES IN LATVIA, BY INDUSTRIES AND BY OCCUPATIONS, JULY, 1920, TO JUNE, 1921.

Occupation and industry.	July, 1920 ($1=90 rubles).	December, 1920 ($1=180 rubles).	February, 1921 ($1=200 rubles).	March, 1921 ($1=200 rubles).	April, 1921 ($1=300 rubles).	May, 1921 ($1=500 rubles).	June, 1921 ($1=450 rubles).
Woodworking industry:	*Rubles.*	*Rubles.*	*Rubles.*	*Rubles.*	*Rubles.*	*Rubles.*	*Rubles.*
Laborers	40- 50	45- 70	30- 76	32- 80	45-120	60-150	73-150
Masters	40	.....	52-180	80-160	80-200	100-300	100-320
Stokers	32- 70	.....	64-130	52-130	64-125	80-160	97-176
Textile industry:							
Laborers	16- 30	30- 80	30- 70	30- 70	40-100	60-140	70-140
Spinners	28	50- 75	83	60- 65	50- 80	84- 90	87-110
Mineral industry:							
Laborers	11- 52	25- 80	30-150	33- 80	33-101	33-101	60-128
Potters	60	60-150	75	50- 60	.....	150	150-200
Glass blowers	70-120	100-230	130-350	130-300	130-240	130-390	160-400
Foodstuff industry:							
Laborers	8- 80	50- 80	40-100	30- 80	40- 95	40-120	60-128
Masters	30- 60	64-200	72-200	74-240	75-200	68-240	100-337
Printing work:							
Laborers	26- 46	28- 79	50- 90	50- 85	74-100	56-146	117-200
Typesetters	81-122	114-155	120-225	135-250	120	216-338	270-283
Bookbinders	54- 80	100-166	80-149	60-163	70-166	72-300	125-283
Paper industry:							
Laborers	.....	41	50- 90	65- 70	65-135	106-130	40-195
Masters	75-125	40-280	100	50- 70	80-100	.....	.....
Cardboard work	17- 50	40- 45	40- 55	40- 80	40- 80	90	65- 96
Chemical industry:							
Laborers	28- 46	20- 80	20- 80	36- 80	36- 95	40-100	50-118
Soapmakers	35	54- 70	48	.....	.....	450	.....
Building:							
Laborers	20- 45	48- 80	50-100	40-100	45-100	55-100	70-100
Carpenters	48	60- 90	65-120	72-125	70-150	70-130	100-165
Bricklayers	30- 70	43-100	90	50-100	91-110	100-150	107-165
Masters	.....	.....	80-140	88-140	.....	136-240	132-200
Transportation:							
Shipmasters	28- 40	48	48- 50	48- 63	63-100	140-156	.....
Mates	31- 35	44- 60	44	44- 60	50- 80	120-126	.....
Engineers	28- 42	48	46- 48	48- 62	52-100	128-140	110-120
Stokers	25- 38	44- 84	44- 80	44- 84	60-112	96-166	105-208
Sailors	24- 35	40- 56	40- 56	40- 56	56- 60	80	.....
Dredgers	15- 28	.....	.....	80	80	136	.....
Laborers	32- 38	44	40- 64	.....	45-119	55-136	95-165
Various lines:							
Laundry work	16- 34	34- 56	44- 48	44- 48	50- 60	60- 80	50- 90
Hatmakers	16- 25	20- 40	.....	.....	50-152	80-122	64-100
Dressmakers	37	50	.....	.....	50-152	80-152	136-152

New Wage Rate in New South Wales.

THE Board of Trade of New South Wales on October 8, 1921, "after public inquiry as to the increase or decrease in the average cost of living," fixed the rate of living wages for adult male employees in the State at £4 2s. ($19.95, par) per week; 13s. 8d. ($3.33, par) per day; and 1s. 8½d. (42 cents, par) per hour. Excepted from this is the county of Yancowinna, where presumably the former rate remained. This rate superseded the rate of £4 5s. ($20.68, par), per week, the Board of Trade finding a sufficient reduction in the cost of living to warrant this change, two members dissenting.

The methods of determining the living wage and factors to be considered are discussed at some length in a communication accompanying the declaration of the rate. The purpose of Parliament in directing the board to declare living wages from year to year "after public inquiry as to the increase or decrease in the average cost of living," was said not to be merely to establish a vicious circle of operations, but to have regard rather to the effect of the determinations of the board on the economic balance of industry. An inflexible rate might

so reduce employment as to make the wage fixed unrealizable. It is not enough merely to name a standard which would be satisfactory for those "fortunate enough, in a general state of economic disturbance, to get wages." Interchanges of products between various countries must take place, and the main factors of the economic situation must be considered, i. e., taxation, profits, wages, and credits. The board regrets the lack of cooperation by financial institutions in determining the relation of wages and credits, also the insistence on the part of certain groups "that the first essential to economic recovery is a substantial reduction of wage rates." The experience of the board was convincing that the rapid increase of prices of commodities affecting the cost of living generally arose from causes other than increasing labor cost; therefore its policy announced November, 1914, that the presumption was against claims for increases in wages as liable merely to increase costs had to be reconsidered, and a succession of increases became necessary to meet the decreases in the purchasing power of money.

Influences lying beyond the boundaries of the country, and influences within the country entirely beyond the control of the board had to be reckoned with. However, a study of costs of living for the average family, estimated in New South Wales as a man and wife and two children, led to the conclusion that there is now a real and continuing fall in the curve of prices warranting the reduction made.

"The board's function exceeds the mere derivation of prices and costs for times past and extends to the prelegislation of a wage for a period of time to come, which the statute under which it operates is generally regarded as having fixed at one year." This is the first experience of the board on a falling market, with a probability of further falls during the year for which the new rate will be valid. The contingency, however, can not be anticipated, but an equitable rate for the present time must be established, with a possibility that it will not be in harmony with costs during a considerable portion of the year. The board therefore recommends an amendment to the act, permitting a quarterly review of the wage rate in the light of the statistics which are being procured from month to month. This would permit the maintenance of a strictly effective wage level and remove the necessity for the violent alterations that have been made in times past by the annual declarations.

One of the dissenting members was unable to find ground for the decrease, but rather for an increase of 1s. (24 cents, par) on the weekly wage; while another found that the old standard of housing should now be advanced, the cost of which would absorb other commodity reductions, leaving the living wage unchanged.

Eight-Hour Day on Spanish Railways.

A RECENT consular report states that the 8-hour law was made effective on Spanish railways by a decree of October 12, 1921. According to this order all work in excess of 8 hours in workshops is classed as voluntary overtime and in connection with the operation of trains as obligatory overtime. Obligatory labor can

not exceed 14 hours a day and is limited to two consecutive days or 10 days a month. A minimum rate of 20 per cent more than the day rate is allowed for voluntary overtime and for obligatory overtime there is an increase of 25 per cent over the day rate for the first 2 hours and 50 per cent for each additional hour.

Wages and Cost of Living in Switzerland.

A CONSULAR report of recent date reviewing the economic situation of Switzerland states that in the past two or three years there has developed a dangerous lack of balance between wages and the cost of living, the former having risen much more rapidly than the latter, with the result that manufacturers have found their costs of production greatly increased. A study of wages and cost of living by the Union of Swiss Machinery and Metal Manufacturers shows in the following tables the variations in wages and cost of living and the index numbers for the various items in the cost of living budget at different periods from June, 1912, to December, 1920:

AVERAGE WEEKLY WAGES OF ADULT LABORERS IN SWITZERLAND AND INDEX NUMBERS OF WAGES AND COST OF LIVING, JUNE, 1912, TO DECEMBER, 1920.

[June, 1912=100. 1 franc, at par=19.3 cents.]

Date.	Average weekly earnings of adult laborers.	Index numbers of income of adult laborers.	Index numbers of cost of living.
	Francs.		
June, 1912	35.34	100	100
June, 1914	37.50	105	95
June, 1918	61.30	174	180
June, 1919	74.20	210	205–210
December, 1919	77.85	220	205–210
June, 1920	83.52	236	218
December, 1920	84.48	239	211

INDEX NUMBERS OF COST OF LIVING IN SWITZERLAND FROM JUNE, 1912, TO JULY, 1921.

[June, 1912=100.]

Date.	Food.	Clothing.	Rent.	Other expenses.	Total.
June, 1912	100	100	100	100	100
June, 1913	96	100	100	100	98
June, 1914	94	100	98	100	97
June, 1915	113	120	90	110	110
June, 1916	133	140	95	120	125
June, 1917	170	170	100	140	150
June, 1918	219	200	115	160	185
September, 1918	239	220	120	170	200
June, 1919	249	240	135	180	212
June, 1920	237	240	150	180	210
October, 1920	254	240	155	190	220
January, 1921	236	195	160	190	208
April, 1921	224	195	160	185	200
July, 1921	208	190	160	180	191

LABOR AGREEMENTS, AWARDS, AND DECISIONS.

Railroad Labor Board Decision on Railroad Shop Rules and Working Conditions.

THE Railroad Labor Board, by the promulgation of Addendum No. 6 to Decision No. 222, issued November 29 and effective December 1, has completed its revision of the agreement governing rules and working conditions, made in 1919, between the United States Railroad Administration and the shop employees represented by the Railway Employees' Department of the American Federation of Labor.

The new rules are more elastic than those effective under the Railroad Administration, and the divisions of duty between crafts are less rigid. The principle of collective bargaining and union recognition have not been abandoned, however.

These rules apply to all carriers who are parties to the dispute, except in instances where any particular carrier may have already agreed with its employees upon any one or more rules. Although the rules in many cases are similar to those in the agreement operating under the Railroad Administration, the board specifies that they are not to be understood or construed as carrying with them the interpretations placed on them by the Railroad Administration or by the adjustment boards or other agencies acting under that administration, but as new rules adopted by the Labor Board in accordance with the transportation act and subject to interpretation according to that act.

Believing that certain "matters now regulated by rules of the national agreement may not well be covered in all localities by rules of general application, and require further consideration by the parties directly concerned," the board has omitted four of the rules previously effective and remanded them to the individual carriers and their employees for adjustment under section 301 of the transportation act.

The revised regulations as set forth in this decision of the board include those published in its Decision No. 222 and Addendum No. 3 thereto, effective August 16 and October 16, 1921, respectively. The rules previously issued, together with the regulations they modify, appeared in the October and December, 1921, issues of the MONTHLY LABOR REVIEW. The rules which have not been published heretofore in the REVIEW appear in the following pages.

These rules appear in their revised form, as recently determined by the board. Changes are indicated by italics and notes. Italics indicate additions only. Omissions and other changes are explained in the notes following the rules altered. Rules with no italicized portions and unaccompanied by notes remain unchanged in content.

GENERAL RULES.

DISTRIBUTION OF OVERTIME.

Rule 11.

When it becomes necessary for employees to work overtime they shall not be laid off during regular working hours to equalize the time.

At points where sufficient number of employees are employed, employees shall not (*except as provided in rule 6 of Decision 222*) work two consecutive Sundays (holidays to be considered as Sundays).

Record will be kept of overtime worked and men called with the purpose in view of distributing the overtime equally.

OVERTIME CHANGING SHIFTS.

Rule 13.

Employees changed from one shift to another will be paid overtime rates for the first shift of each change. Employees working two shifts or more on a new shift shall be considered transferred. *This will not apply when shifts are exchanged at the request of the employees involved.*

FILLING VACANCIES.

Rule 16.

When an employee is required to fill the place of another employee receiving a higher rate of pay, he shall receive the higher rate; but if required to fill temporarily the place of another employee receiving a lower rate, his rate will not be changed.

Rule 17.

Employees serving on night shifts desiring day work shall have preference when vacancies occur, according to their seniority.

Rule 19.

Mechanics in service will be considered for promotion to positions of foremen.

When vacancies occur in positions of gang foremen, men from the respective crafts will have preference in promotion.

Rule 20.

Employees transferred from one point to another, with a view to accepting a permanent transfer, will, after 30 days, lose their seniority at the point they left, and their seniority at the point to which transferred will begin on date of transfer, seniority to govern. Employees will not be compelled to accept a permanent transfer to another point.

Rule 21.

When the requirements of the service will permit, employees, on request, will be granted leave of absence for a limited time with privilege of renewal. An employee absent on leave who engages in other employment will lose his seniority, unless special provisions shall have been made therefor by the proper official and committee representing his craft.

The arbitrary refusal of a reasonable amount of leave to employees when they can be spared, or failure to handle promptly cases involving sickness or business matters of serious importance to the employee, is an improper practice and may be handled as unjust treatment under this agreement.

Rule 22.

In case an employee is unavoidably kept from work he will not be discriminated against. An employee detained from work on account of sickness or for any other good cause shall notify his foreman as early as possible.

FAITHFUL SERVICE.

Rule 23.

Employees who have given long and faithful service in the employ of the company and who have become unable to handle heavy work to advantage, will be given preference of such light work in their line as they are able to handle.

PAYING OFF.

Rule 25.

Employees will be paid off during their regular working hours, semi-monthly, except where existing State laws provide a more desirable paying-off condition.

Should the regular pay day fall on holiday or days when the shops are closed down, men will be paid on the preceding day.

Where there is a shortage equal to one day's pay or more in the pay of an employee, a voucher will be issued to cover the shortage.

Employees leaving the service of the company will be furnished with a time voucher covering all time due within twenty-four (24) hours where time vouchers are issued and within *sixty (60)* hours at other points, or earlier when possible (*Sundays and holidays excepted*).

(The old rule provided for payment of vouchers within 48 hours at other points.)

Rule 26.

During inclement weather provision will be made where buildings are available to pay employees under shelter.

REDUCTION OF FORCES.

Rule 27.

When it becomes necessary to reduce expenses, *the hours may be reduced to forty (40) per week before reducing the force.* When the force is reduced, seniority as per rule 31 will govern, the men affected to take the rate of the job to which they are assigned.

Forty-eight (48) hours' notice will be given before hours are reduced. If the force is to be reduced, *four* days' notice will be given the men affected before reduction is made, and lists will be furnished the local committee.

In the restoration of forces, senior laid-off men will be given preference in returning to service, if available within a reasonable time, and shall be returned to their former positions *if possible, regular hours to be reestablished prior to any additional increase in force.*

The local committee will be furnished a list of men to be restored to service. In the reduction of the force the ratio of apprentices shall be maintained.

(Reduction of the force is facilitated under this rule. Under the old agreement there was no provision for a reduction in working hours and five days' notice had to be given the men before they could be laid off. Under the new rule hours may be reduced to 40 per week before reducing the force and only 48 hours' notice need be given before such reduction in hours is effected. Only four days' notice instead of five need be given the men affected, in case of reduction of the force. The old agreement rigidly provided that senior laid off men be given preference in reemployment and returned to their former positions, the new regulation specifies that they shall be returned to their former positions if possible.)

Rule 28.

Employees laid off on account of reduction in force, who desire to seek employment elsewhere, will, upon application, be furnished with a pass to any point desired on the same railroad.

Rule 29.

When reducing forces, if men are needed at any other point, they will be given preference to transfer to nearest point, with privilege of returning to home station when force is increased, such transfer to be made without expense to the company. Seniority to govern all cases.

Rule 30.

Employees required to work when shops are closed down, due to breakdown in machinery, floods, fires, and the like, will receive straight time for regular hours, and overtime for overtime hours.

ASSIGNMENT OF WORK.

Rule 32.

None but mechanics or apprentices regularly employed as such shall do mechanics' work as per special rules of each craft, except foremen at points where no mechanics are employed.

This rule does not prohibit foremen in the exercise of their duties to perform work.

At outlying points (to be mutually agreed upon) where there is not sufficient work to justify employing a mechanic of each craft, the mechanic or mechanics employed at such points will, so far as capable, perform the work of any craft that may be necessary.

Rule 33.

In compliance with the special rules included in this agreement, none but mechanics and their apprentices in their respective crafts shall operate oxyacetylene, thermit, or electric welders. Where oxyacetylene or other welding processes are used, each craft shall perform the work which was generally recognized as work belonging to that craft prior to the introduction of such processes, except the use of the cutting torch when engaged in wrecking service *or in cutting up scrap.*

When performing the above work for four (4) hours or less in any one day, employees will be paid the welders' rate of pay on the hourly basis with a minimum of one (1) hour; for more than four (4) hours in any one day, welders' rate of pay will apply for that day.

FOREMANSHIP, FILLING TEMPORARILY.

Rule 34.

Should an employee be assigned temporarily to fill the place of a foreman, he will be paid his own rate—straight time for straight-time hours and overtime rate for overtime hours—if greater than the foreman's rate; if it is not, he will get the foreman's rate. Said positions shall be filled only by mechanics of the respective craft in their departments.

GRIEVANCES.

Rule 35.

Should any employee subject to this agreement believe he has been unjustly dealt with, the case shall be taken to the foreman, general foreman, master mechanic, or shop superintendent, each in their respective order, by the duly authorized local committee or their representative. *Nothing herein contained shall infringe upon the right of employees not members of the organization representing the majority to present grievances in person or by representatives of their own choice.*

If stenographic report of the investigation is taken, the *aggrieved employee or his* representatives shall be furnished a copy.

If the result still be unsatisfactory, the right of appeal shall be granted; the appeal to be made, preferably in writing, to the higher officials designated to handle such matters in their respective order and conferences will be granted within ten days of application.

All conferences between local officials and local committees to be held during regular working hours without loss of time to committeemen *or other employee representation.*

(The important change in this rule is the specific provision authorizing employees who are not members of the shop crafts organizations to present grievances in person or by representatives of their own choice. This in effect does not alter the status quo.)

Rule 36.

Should the highest designated railroad official, or his duly authorized representative, and aggrieved employee, or his representative, as provided in first paragraph of rule 35, fail to agree, the case shall then be handled in accordance with the transportation act, 1920.

Prior to the assertion of grievances as herein provided, and while questions of grievances are pending, there will neither be a shutdown by the employer nor a suspension of work by the employees.

(The arrangement under the Railroad Administration as provided in the first paragraph of this rule in the old agreement was as follows:
"Should the highest designated railroad official or his duly authorized representative and the duly authorized representative of the employees fail to agree, the case shall then be jointly submitted in writing to the chief executive officer of the railroad and the chief executive officer of the Railway Employees' Department of the American Federation of Labor for adjudication or final disposition. The methods of procedure will be those prescribed by the Railroad Administration. To the extent that these rules may remain in force after the expiration of Federal operation, the methods of procedure will thereafter be such as may be agreed to by the representatives of the railroads and the representatives of the organizations herein specified.")

Rule 37.

No employee shall be disciplined without a fair hearing by a designated officer of the carrier. Suspension in proper cases pending a hearing, which shall be prompt, shall not be deemed a violation of this rule. At a reasonable time prior to the hearing such employee will be apprised of the precise charge against him. The employee shall have reasonable opportunity to secure the presence of necessary witnesses and shall have the right to be there represented by counsel of his choosing. If it is found that an employee has been unjustly suspended or dismissed from the service, such employee shall be reinstated with his seniority rights unimpaired, and compensated for the wage loss, if any, resulting from said suspension or dismissal.

(The old rule provided that: "An employee who has been in the service of the railroad 30 days shall not be dismissed for incompetency, neither shall an employee be discharged for any cause without first being given an investigation.")

Rule 38.

Included in rule 37.

(This rule under the old agreement reads as follows: "If it is found that an employee has been unjustly discharged or dealt with, such employee shall be reinstated with full pay for all time lost.")

COMMITTEES.

Rule 39.

The company will not discriminate against any committeemen who, from time to time, represent other employees, and will grant them leave of absence and free transportation when delegated to represent other employees.

APPRENTICES.

Rule 40.

There will be three recognized classes of apprentices—namely, regular, helper, and special.
All apprentices must be able to speak, read, and write the English language and understand at least the first four rules of arithmetic.
Applicants for regular apprenticeship shall be between 16 and 21 years of age, and, if accepted, shall serve four years of 290 days each calendar year. If retained in the service at the expiration of their apprenticeship, they shall be paid not less than the minimum rate established for journeymen mechanics of their respective crafts.
In selecting helper apprentices, *ability and seniority* will govern, and all selections will be made in conjunction with the respective craft shop committees.
NOTE.—See special rules of each craft for additional apprentice rules.

(This rule creates a new class of apprentices to be known as special apprentices, to be selected, trained, apportioned, paid, etc., as set forth in the following rule:)

Rule 40½.

Special apprentices shall be selected from young men between the ages of 18 and 26 years who have had a technical school education, and shall serve three years of 290 days each calendar year.
Special apprentices shall receive training in the various departments in the different classes of work of the different crafts in the maintenance of equipment departments, and may be moved from place to place or on any class of work at the discretion of the management.
In computing the ratio of apprentices to mechanics, special apprentices will be included, the number of same not to exceed 5 per cent of the total.
If retained in the service at the completion of the three-year course, the apprentice may choose the craft he desires employment in and shall receive a special rate for the period of

one year, at the expiration of which time he shall be classified and receive the minimum rate of the craft employed in.

The rate of pay for special apprentices for the first three years shall be not less than that of helper apprentices.

Rule 41.

All apprentices must be indentured and shall be furnished with a duplicate of indenture by the company, who will also furnish every opportunity possible for the apprentice to secure a complete knowledge of the trade.

No apprentice will be started at points where there are not adequate facilities for learning the trade.

Rule 40 shall govern in the employment of apprentices.

FORM OF INDENTURE.

This will certify that.....was employed as.....apprentice by the..... railroad at.....on.....19...., to serve four years, a minimum of 290 days each.

.....
(Title of officer in charge.)

SERVICE PERFORMED DURING APPRENTICESHIP.

.....
.....
This will certify that on.....19...., ...
.....completed the course of apprenticeship specified above and is entitled, if employed by the..... railroad, to the rates of pay and conditions of service of .....

.....
(Title of officer in charge.)

NOTE.—The above form is to be used both for regular and helper apprentices. (Helper apprentices to serve three years.)

Rule 42.

The ratio of apprentices in their respective crafts shall not be more than one to every five mechanics.

Two apprentices will not be worked together as partners.

The distribution of apprentices among shops where general repairs are made on the division shall be as nearly as possible in proportion to the mechanics in the respective trades employed therein.

In computing the number of apprentices that may be employed in a trade on a division, the total number of mechanics of that trade employed on the division will be considered.

If within six months an apprentice shows no aptitude to learn the trade, he will not be retained as an apprentice.

An apprentice shall not be dismissed or leave the service of his own accord, except for just and sufficient cause, before completing his apprenticeship.

Apprentices shall not be assigned to work on night shifts. An apprentice shall not be allowed to work overtime during the first three years of his apprenticeship.

If an apprentice is retained in the service upon completing the apprenticeship, his seniority rights as a mechanic will date from the time of completion of apprenticeship.

Preference will be given to sons of employees in the selection of apprentices to the extent of at least 80 per cent of the number employed.

RATES OF PAY.

Rule 43.

The minimum rates of pay are the rates established by the Labor Board's Decision No. 147 and addenda thereto and therefore do not apply to the carrier named in Decision No. 290 or any other carrier where wage adjustments have been made in accordance with the provisions of the transportation act, 1920, and the decisions of the

Labor Board; these rates shall be incorporated in and become a part of this agreement or schedule, and shall remain in effect until or unless changed in the manner provided by the transportation act, 1920.

(Rules 43, 44, and 45 under the old agreement, specified changes in rates of wages for mechanics, apprentices, helpers and others, whose wages had been designated in Supplement No. 4 to General Order No. 27 of the Railroad Administration.)

Rule 44.

Included in rule 43.

Rule 45.

Included in rule 43.

CONDITION OF SHOPS.

Rule 47.

Good drinking water and ice will be furnished. Sanitary drinking fountains will be provided where necessary. Pits and floors, lockers, toilets, and wash rooms will be kept in good repair and in clean, dry, and sanitary condition.

Shops, locker rooms, and wash rooms will be lighted and heated in the best manner possible consistent with the source of heat and light available at the point in question.

NOTICES.

Rule 49.

A place will be provided inside all shops and roundhouses where proper notices of interest to employees may be posted.

FREE TRANSPORTATION.

Rule 51.

Employees covered by this agreement and those dependent upon them for support will be given the same consideration in granting free transportation as is granted other employees in service.

General committees representing employees covered by this agreement to be granted the same consideration as is granted general committees representing employees in other branches of the service.

PROTECTION OF EMPLOYEES.

Rule 52.

Employees will not be required to work on engines or cars outside of shops during inclement weather, if shop room and pits are available. This does not apply to work in engine cabs or emergency work on engines or cars set out for or attached to trains.

When it is necessary to make repairs to engines, boilers, tanks, and tank cars, such parts shall be cleaned before mechanics are required to work on same. This will also apply to cars undergoing general repairs.

Employees will not be assigned to jobs where they will be exposed to sand blast and paint blowers while in operation.

All acetylene or electric welding or cutting will be protected by a suitable screen when its use is required.

The following paragraph, which appears in the old agreement, is omitted from the new rule:

"Should it become necessary to establish a regular night shift in shops, such men will not be used on running repair work unless work is brought to shop."

EMERY WHEELS AND GRINDSTONES.

Rule 53.

Emery wheels and grindstones will be installed at convenient places in the shop and will be kept true and in order.

Help to Be Furnished.

Rule 54.

When experienced helpers are available, they will be employed in preference to inexperienced men.

Laborers when used as helpers will be paid the helpers' rate.

(The following sentence is omitted from the new rule: "Craftsmen and apprentices will be furnished sufficient competent help, when needed to handle the work, if available.")

Miscellaneous.

Rule 56.

No employee will be required to work under a locomotive or car without being protected by proper signals. Where the nature of the work to be done requires it, locomotives or passenger cars will be placed over a pit, if available.

Rule 57.

In shops and roundhouses not now equipped with connections for taking the steam from engines, arrangements will be made to equip them so that steam from locomotives will not be blown off inside the house.

Rule 58.

All engines will be placed under smokejacks in roundhouses, where practicable, when being fired up.

Rule 59.

At shops and roundhouses equipped with electricity, electric light globes and extensions will be kept in tool rooms available for use.

Machinists' Special Rules.

Classification of Work.

Rule 62.

Machinists' work shall consist of laying out, fitting, adjusting, shaping, boring, slotting, milling, and grinding of metals used in building, assembling, maintaining, dismantling, and installing locomotives and engines (operated by steam or other power), pumps, cranes, hoists, elevators, pneumatic and hydraulic tools and machinery, scale building, shafting and other shop machinery, ratchet and other skilled drilling and reaming; tool and die making, tool grinding and machine grinding, axle truing, axle, wheel, and tire turning and boring; engine inspecting; air equipment; lubricator and injector work; removing, replacing, grinding, bolting, and breaking of all joints on superheaters; oxyacetylene, thermit, and electric welding on work generally recognized as machinists' work; the operation of all machines used in such work, including drill presses and bolt threaders using a facing, boring or turning head or milling apparatus; and all other work generally recognized as machinists' work. *On running repairs, machinists may connect or disconnect any wiring, coupling, or pipe connections necessary to make or repair machinery or equipment.*

This rule shall not be construed to prevent engineers, firemen, and cranemen of steam shovels, ditchers, clam shells, wrecking outfits, pile drivers, and other similar equipment requiring repairs on line of road from making any repairs to such equipment as they are qualified to perform.

Machinist Apprentices.

Rule 63.

Include regular and helper apprentices in connection with the work defined by rule 62.

MACHINIST HELPERS.

Rule 64.

Helpers' work shall consist of helping machinists and apprentices, operating drill presses (*plain drilling*) and bolt threaders not using facing, boring, or turning head or milling apparatus, wheel presses (*on car, engine truck, and tender truck wheels*), nut tappers and facers, bolt pointing and centering machines, *car brass boring machine twist drill grinders;* cranemen helpers *on locomotive and car work;* attending tool room, machinery oiling, locomotive oiling, box packing, *applying and removing trailer and engine-truck brasses, assisting in dismantling locomotives and engines,* applying all couplings between engine and tender; locomotive tender and draft-rigging work except when performed by carmen, *and all other work generally recognized as helpers' work.*

(This rule specifies somewhat more minutely the work which shall be assigned to machinist helpers and makes the classification more elastic by the final inclusion of "all other work generally recognized as helpers' work.")

APPRENTICES, CLASSIFICATION OF WORK.

Rule 69.

Apprentices shall be instructed in all branches of the machinists' trade. They will serve three years on machines and special jobs. Apprentices will not be required to work more than four months on any one machine or special job. During the last year of their apprenticeship they will work on the floor. Apprentices shall not work on oxyacetylene, thermit, electric, or other welding process until they are in their last year.

HELPER APPRENTICES.

Rule 70.

Helpers who have had not less than two consecutive years' experience as machinist helpers at the point where employed, at the time application for apprenticeship is made, may become helper apprentices. When assigned as helper apprentices they must not be over 25 years of age.

Rule 71.

Helper apprentices shall serve three years, a minimum of 290 days each calendar year, and shall be governed by the same laws and rules as govern regular apprentices.

Rule 72.

The number of helper apprentices must not at any time exceed 50 per cent of the combined number of regular and helper apprentices assigned.

Rule 73.

Helper apprentices shall receive the minimum helper rate for the first six months, with an increase of two cents (2c.) per hour for every six months thereafter until they have served three years.

Rule 74.

Helpers, when used in any way in connection with machinists' work, shall in all cases work under the orders of the machinist, both under the direction of the foreman.

Rule 75.

When vacancies occur under classification of machinist helper (temporarily or permanent), machinist helpers in the service will be given preference in promotion to position paying either same or higher rate at station employed, seniority to govern.

Rule 76.

Eliminated.

(The rule eliminated read as follows: "Laborers, or similar class of workmen, shall not be permitted to do helpers' work as outlined in rule 64 if regular machinist helpers are available.")

Boiler Makers' Special Rules.

CLASSIFICATION OF WORK.

Rule 79.

Boiler makers' work shall consist of laying out, cutting apart, building, or repairing boilers, tanks, and drums; inspecting, patching, riveting, chipping, calking, flanging, and flue work; building, repairing, removing and applying steel cabs and running boards; laying out and fitting up any sheet-iron or sheet-steel work made of 16 gauge or heavier (present practice between boiler makers and sheet-metal workers to continue relative to gauge of iron), including fronts and doors; ash pans, front end netting and diaphragm work, engine tender steel underframe and *pressed* steel tender truck frames, except where other mechanics perform this work; removing and applying all stay bolts, radials, flexible caps, sleeves, crown bolts, stay rods, and braces in boilers, tanks, and drums; applying and removing arch tubes; operating punches and shears for shaping and forming, pneumatic stay-bolt breakers, air rams and hammers; bull, jam, and yoke riveters; boiler makers' work in connection with building and repairing of steam shovels, derricks, booms, housing, circles, and coal buggies, I-beam, channel iron, angle iron, and T-iron work; all drilling, cutting, and tapping and operating rolls in connection with boiler makers' work; oxyacetylene, thermit, and electric welding on work generally recognized as boiler makers' work, and all other work generally recognized as boiler makers' work. It is understood that present practice in the performance of work between boiler makers and carmen will continue. *On running repairs, boiler makers may connect or disconnect any wiring, coupling, or pipe connections necessary to make or repair machinery or equipment.*

This rule shall not be construed to prevent engineers, firemen, and cranemen of steam shovels, ditchers, clamshells, wrecking outfits, pile drivers, and other similar equipment requiring repairs on line of road from making any repairs to such equipment as they are qualified to perform.

(The work of removing and applying grates and grate rigging assigned to boiler makers under the old agreement is omitted in this classification and assigned to boiler makers' helpers.)

BOILER-MAKER APPRENTICES.

Rule 80.

Include regular and helper apprentices in connection with the work as defined by rule 79.

BOILER-MAKER HELPERS.

Rule 81.

Employees assigned to help boiler makers and their apprentices, operators of drill presses, and bolt cutters in the boiler shop, boiler washers, punch and shear operators (cutting only bar stock and scrap), *and employees removing and applying grates and grate rigging, and all other work properly recognized as boiler-maker helpers' work.*

RUNNING-REPAIR WORK.

Rule 82.

Boiler makers assigned to running repairs may be used to perform other work.

Boiler makers assigned to locomotive general repair work may be used to perform running-repair work when the regular assigned running-repair forces are unable to get engines out to meet service requirements.

Boiler makers who have been working on hot work will not be required to work on cold work until given sufficient time to cool off.

(The old rule read as follows: "Running repair work for boiler makers shall consist o fsuch boiler makers' work as is necessary to fit locomotive to make a successful trip. It shall include stay-bolt inspection, ordinary repairs to ash pan and front end nettings, calking and repairing leaks in fire boxes and exterior of boiler or tanks. The application of stay-bolts, patches, and flues, will be done by dead-work forces, but at points where no dead-work forces are employed, the roundhouse men will be expected to do such work as will be necessary to fit engine to return to main terminal.")

SPECIAL SERVICES.

Rule 83.

Flange turners, layer outs, and fitter ups shall be assigned in shops where flue sheets and half side sheets or fire boxes are flanged, removed, and applied. One man may perform all these operations where the service does not require more than one man. *If not fully engaged on the above work, these employees may be assigned to any work of their craft.*

Boiler inspectors—stay-bolt inspectors will be assigned to all points where monthly stay bolt and boiler inspection of 15 or more engines is required. When such employees have no inspection work to perform, they may be assigned to other boilermakers' work.

PROTECTION FOR EMPLOYEES.

Rule 84.

Boiler makers, apprentices, and helpers will not be required to work on boilers of tanks while electric or other welding processes are in use or when tires are being heated, unless proper protection is provided.

Rule 85.

Not more than one oxyacetylene welding or cutting operator or electric operator will be required to work in fire box or shell of boiler at the same time, unless proper protection is provided.

Rule 86.

Oxyacetylene welding or cutting operator or electric operator will be furnished with helper when necessary, or when it is essential for personal safety.

(Under the old rule the last phrase reads: "When *in the opinion of the operator*, it is essential for personal safety.")

Rule 87.

Should it become necessary to send oxyacetylene welder or cutter or electric operator out of the shop in cold weather, he will be given ample time to dry off before being sent out.

Rule 88.

When it is necessary to renew, remove, or replace flue, door, side, or crown sheets by means of oxyacetylene or other cutting or welding processes, such portion of the ash-pan wings and grates as interfere with the operator, will be removed. Dome caps will be removed and front ends opened up if required for proper ventilation.

Rule 89.

Boilers will have steam blown off and be reasonably cooled before boiler makers or apprentices are required to work in them; blowers will be furnished when possible to do so.

Fire boxes, front ends, and ash pans will be properly cleaned out before boiler makers or apprentices are required to work in them. Fire brick interfering with the work to be performed will be removed.

(The following provision appearing in the old agreement is omitted here: "Front ends and fire boxes of engines held in for other than running repairs will be washed out before boiler makers or apprentices are required to work in them.")

Rule 90.

Two boiler makers, or one boiler maker and a competent apprentice with at least two years' experience, will be used to operate a long-stroke hammer, that is, an air hammer capable of driving stay bolts or rivets ⅝ inch diameter or larger, or of expanding flues or tubes. Double-gun work will not be permitted. *Air jacks not to be considered double guns.*

When rolling or expanding superheater flues, two boiler makers, or one boiler maker and a competent apprentice with at least two years' experience, will be used.

Rule 91.

No tapping or reaming will be done in fire boxes when same is near enough to endanger the men working on inside of fire box. A space of 10 rows of stay bolts will be considered sufficient, it being understood that the helper will protect the men with a sleeve over a tap when tapping is being done.

FURNISHING HELP.

Rule 92.

Boiler makers engaged on running-repair work will be furnished a helper when necessary, or when it is essential for personal safety.

Rule 93.

Boiler makers sent out on the road to do boiler makers' work will have helper furnished when necessary.

(The old agreement required that a boiler maker sent out on the road to do boiler makers' work must be accompanied by a helper when such work requires a helper at the home point.)

REMOVAL OF FLUES.

Rule 94.

When flues (other than burst flues) are to be removed, the front end will be opened and such parts of the draft appliances as interfere with the boiler maker will be removed. Center arch pipes in engine, other than those equipped with combustion chambers, which interfere with boiler makers in the performance of their work, will be removed.

HELPERS ON FLANGE FIRES.

Rule 95.

Regular assigned help will be furnished on flange fires.

(The old rule provided that *sufficient competent* help should be furnished.)

Rule 96.

Helpers on flange fires will not be asked to go outside of shop to handle fuel during cold weather.

Rule 97.

Eliminated.

(The eliminated rule reads as follows: "Helpers while engaged on flange fires will not be requested to do other work than that in connection with flanging, and, as far as practicable, regularly assigned men will be used on flange fires.")

HELPERS.

Rule 98.

There will be sufficient help furnished boiler makers or apprentices in breaking down stay bolts with hand ram.

(The old agreement provided that two helpers be used in helping a boiler maker or apprentice in breaking down 10 or more stay bolts with a hand ram.)

Rule 99.

(The following rule, which appeared in the old agreement, was eliminated: "Classified boiler-maker helpers will attend tool room in boiler shop.")

Rule 100.

Holding on all stay bolts and rivets, striking chisel bars, side sets, and backing-out punches, and heating rivets (except when performed by apprentices) will be considered boiler-maker helpers' work.

(The work of scaling boilers appeared in this classification in the old agreement.)

Rule 101.

When rivets are to be cut off or backed out, a barrier or sufficient help will be furnished to prevent accidents or personal injury.

(The old rule read: "When rivets larger than five-eighths inch are to be cut off or backed out, sufficient help will be furnished.")

Rule 102.

Boiler makers or apprentices when using compound motors will be furnished sufficient competent help.

Rule 103.

Sufficient help will be furnished when holding on rivets with wedge bars.

(The old agreement required that two helpers be furnished for this work.)

Rule 104.

(This rule, providing that helpers shall do all other work generally recognized as boiler-maker helpers' work, is included in rule 81 above.)

HELPER APPRENTICES.

Rule 105.

Fifty per cent of the apprentices may consist of boiler-maker helpers who have had not less than two consecutive years' experience as boiler-maker helper at the point where employed at the time application for apprenticeship is made.

They shall be between the ages of 21 and 40 years and shall serve three years, a minimum of 290 days each calendar year.

Helper apprentices shall be governed by the same laws and rules as regular apprentices.

Apprentices shall not work on oxyacetylene, thermit, electric, or other welding processes until they are in their last year.

They shall receive the minimum helpers' rate for the first six months, with an increase of two cents (2c.) per hour for every six months thereafter until they have served their apprenticeship.

SCHEDULE OF WORK, REGULAR APPRENTICES.

Rule 106.

The following schedule for regular apprentices showing the division of time on the various classes of work is designed as a guide and will be followed as closely as the conditions will permit:

Six months—Heating rivets and helping boiler makers.
Six months—Tank repairing and sheet-iron work.
Six months—Rolling flues; ash-pan work.
Six months—Stay bolts and setting flues.
Fifteen months—General boiler work.
Three months—Electric or oxyacetylene welding.
Six months—Laying out and flanging.

SCHEDULE OF WORK, HELPER APPRENTICES.

Rule 107.

The following schedule for helper apprentices, showing the division of time on the various classes of work is designed as a guide and will be followed as closely as the conditions will permit:

Six months—Tank repairing and sheet-iron work.
Six months—Rolling flues; ash-pan work.
Six months—Stay bolts and setting flues.
Nine months—General boiler work.
Three months—Electric or oxyacetylene welding.
Six months—Laying out and flanging.

Differentials for Boiler Makers

Rule 108.

Boiler makers assigned as boiler inspectors, also flangers, layer outs, and autogenous welders, shall receive five cents (5c.) per hour above the minimum rate paid boiler makers at the point employed.

At points or on shifts where no inspector is assigned and boiler makers are required to inspect boilers, they will be paid five cents (5c.) per hour above the boiler makers' minimum rate at the point employed for the days on which such inspections are made.

Rule 109.

Helpers on flange fires shall receive five cents (5c.) per hour above the helpers' rate at point employed.

Blacksmiths' Special Rules.

Qualifications

Rule 110.

Any man who has served an apprenticeship or who has had four years' varied experience at the blacksmiths' trade shall be considered a blacksmith. He must be able to take a piece of work pertaining to his class and, with or without the aid of drawings, bring it to a successful completion within a reasonable length of time.

Classification of Work.

Rule 111.

Blacksmiths' work shall consist of welding, forging, heating, shaping, and bending of metal; tool dressing and tempering, springmaking, tempering and repairing, potashing, case and bichloride hardening; flue welding under blacksmith's foreman; operating furnaces, bulldozers, forging machines, drop-forging machines, bolt machines, and Bradley hammers; hammersmiths, drop-hammer men, trimmers, rolling mill operators; operating punches and shears doing shaping and forming in connection with blacksmiths' work; oxyacetylene, thermit, and electric welding on work generally recognized as blacksmiths' work.

Blacksmith Apprentices.

Rule 112.

Include regular and helper apprentices in connection with the work as defined by rule 111.

Blacksmith Helpers.

Rule 113.

Helpers' work shall consist of helping blacksmiths, and apprentices, heating, operating steam hammers, punches and shears (cutting only bar stock and scrap), drill presses and bolt cutters; *straightening old bolts and rods, cold; building fires; lighting furnaces, and all other work properly recognized as blacksmith helpers' work.*

(The work of "Machine helpers" included in the old rule is omitted here.)

Helper Apprentices.

Rule 114.

Fifty per cent of the apprentices may consist of helpers who have had not less than two consecutive years' experience in shop on the division where advanced.

Seniority shall prevail in the selection of helper apprentices; those selected to be not over 30 years of age.

Apprentices selected from helpers shall serve three years, a minimum of 290 days each calendar year. When started as an apprentice they shall receive the minimum

helpers' rate of pay for the first six months; at the end of that time they shall receive two cents (2c) per hour increase, and two cents (2c) per hour increase each succeeding six months while serving their apprenticeship.

Helper apprentices shall be governed by the same laws and rules as regular apprentices.

If after the first three months they show no aptitude to learn the trade, they shall be set back to helping and retain their former seniority as a helper.

After completing their apprenticeship they shall receive prevailing rate paid blacksmiths if retained in the service.

Apprentices, Miscellaneous.

Rule 115.

Apprentices shall be given an opportunity to learn all branches of the trade and will not be kept on any one class of work longer than four months. Apprentices shall not work on oxyacetylene, thermit, electric, or other welding processes until they are in their last year.

Rule 116.

Eliminated.

(The eliminated rule read: "A rate established on a certain class of work shall remain the same, and the men placed on such work shall receive such rate.")

Helpers Building Fires.

Rule 117.

Blacksmith helpers required to prepare or build *coal or coke* fires outside of their regular working hours, shall be allowed thirty (30) minutes straight time for each fire built or furnace prepared. *Helpers assigned to start oil or gas furnaces outside their regular working hours will receive one and one-half time for such service, on the minute basis.*

Rule 118.

Eliminated.

(Under the old agreement rule 118 provided that: "Regularly assigned blacksmiths and helpers engaged on running repair work located at engine houses will work the same hours as other crafts in engine houses.")

Coal and Oil to be Furnished.

Rule 120.

Coal and oil suitable for smithing purposes will be furnished *whenever possible.*

(The old agreement provided that coal and oil would be furnished "at all times.")

Steam-hammer Operators.

Rule 121.

Competent steam-hammer operators will be furnished.

Road Work.

Rule 122.

Blacksmiths sent out on the road to do blacksmitn's work will be accompanied by helper *when necessary.*

Rule 123.

Included in Rule 113.

(The old rule providing that helpers should do all other work generally recognized as blacksmith helpers' work has been included in new rule 113.)

Sheet-Metal Workers' Special Rules.

QUALIFICATIONS.

Rule 125.

Any man who has served an apprenticeship, or has had four or more years' experience at the various branches of the trade, who is qualified and capable of doing sheet-metal work or pipe work as applied to buildings, machinery, locomotives, cars, et cetera, whether it be tin, sheet iron, or sheet copper, and capable of bending, fitting, and brazing of pipe, shall constitute a sheet-metal worker.

CLASSIFICATION OF WORK.

Rule 126.

Sheet-metal workers' work shall consist of tinning, coppersmithing and pipefitting in shops, yards, buildings, on passenger coaches and engines of all kinds; the building, erecting, assembling, installing, dismantling (*for repairs only*), and maintaining parts made of sheet copper, brass, tin, zinc, white metal, lead, black, planished, pickled and galvanized iron of 10 guage and lighter (present practice between sheet-metal workers and boilermakers to continue relative to gauge of iron), including brazing, soldering, tinning, leading, and babbitting (*except car and tender truck journal bearings*), the bending, fitting, cutting, threading, brazing, connecting and disconnecting of air, water, gas, oil and steampipes; the operation of babbitt fires (*in connection with sheet-metal workers' work*); oxyacetylene, thermit and electric welding on work generally recognized as sheet-metal workers' work, and all other work generally recognized as sheet-metal workers' work.

In running repairs, other mechanics than sheet-metal workers may remove and replace jackets, and connect and disconnect pipes where no repairs are necessary to the jackets or pipes in question.

SHEET-METAL WORKER APPRENTICES.

Rule 127.

Include regular and helper apprentices in connection with the work as sheet-metal workers' helpers.

SHEET-METAL WORKER HELPERS.

Rule 128.

Employees regularly assigned as helpers to assist sheet-metal workers and apprentices in their various classification of work, shall be known as sheet-metal workers' helpers.

PROTECTION FOR EMPLOYEES

Rule 129.

Sheet-metal workers shall not be required to remove or apply blow-off or surface pipes or ash-pan blowers on boilers under steam.

ROAD WORK.

Rule 130.

Sheet-metal workers will be sent out on line of road and to outlying points, when their services are required, but not for small, unimportant running-repair jobs.

ASSIGNMENT OF RUNNING-REPAIR FORCE TO DEAD WORK.

Rule 131.

Sheet-metal workers assigned to running repairs shall not be required to work on dead work at points where dead-work forces are maintained, except when there is not sufficient running repairs to keep them busy.

(The old rule provided that: "The assignment of running repair sheet metal workers to dead work, shall not be the recognized practice; but at points where no dead work sheet metal workers are employed, they may be so assigned if the needs of the service require it.")

ASSIGNMENT OF DEAD-WORK FORCE TO RUNNING REPAIRS.

Rule 132.

Dead-work forces will not be assigned to perform running-repair work, except when the regularly assigned running-repair forces are unable to get engines out in time to prevent delay to train movement.

MISCELLANEOUS.

Rule 133.

Sheet-metal workers will not be assigned to work not applicable to them, except in emergency cases.

HELPER APPRENTICES.

Rule 134.

Fifty per cent of the apprentices may be selected from helpers of this craft who have had not less than two consecutive years' experience as a sheet-metal worker helper at the point where employed, and shall not be more than thirty years of age; such apprentice shall serve three calendar years, a minimum of 290 days each calendar year, seniority to govern.

Rule 135.

Helper apprentices will start at the third classification of regular apprentices' schedule when entering their apprenticeship, and continue through as regular apprentices. Helper apprentices will receive the minimum helpers' rate for the first six months, with an increase of two cents (2c) per hour for every six months thereafter until they have served three years.

Rule 136.

Eliminated.

(Rule 136 under the old regulations, here eliminated, read: "Laborers or similar class of workmen shall not be permitted to do helpers' work as outlined in rule 128 if regular sheet-metal worker helpers are available.")

APPRENTICE SCHEDULE OF WORK.

Rule 137.

Regular apprentices' schedule and division of time:

6 months—Helping.
6 months—Light pipe work.
12 months—Tinning, babbitting, and brazing, laying out and forming.
12 months—Engine and car work.
12 months—General work, including one month's experience with the oxy-acetylene torch.

DIFFERENTIALS FOR SHEET-METAL WORKERS.

Rule 138.

Autogenous welders shall receive five cents (5c) per hour above the minimum rate paid sheet-metal workers at point employed.

Electrical Workers' Special Rules.

QUALIFICATIONS.

Rule 139.

Any man who has served an apprenticeship or who has had four years' practical experience in electrical work and is competent to execute same to a successful conclusion *within a reasonable time* will be rated as an electrical worker.

An electrician will not necessarily be an armature winder.

Classification of Electricians.

Rule 140.

Electricians' work shall include electrical wiring, maintaining, repairing, rebuilding, inspecting and installing of all generators, switchboards, *meters*, motors and controls, rheostats and controls, static and rotary transformers, motor generators, electric headlights and headlight generators, electric welding machines, storage batteries (*work to be divided between electricians and helpers as may be agreed upon locally*), axle lighting equipment, *all inside telegraph and telephone equipment, electric clocks and electric lighting fixtures;* winding armatures, fields, magnet coils, rotors, transformers and starting compensators; inside *and outside* wiring at shops, *buildings, yards, and on structures and all conduit work in connection therewith* (*except outside wiring provided for in rule 141*), steam and electric locomotives, passenger train and motor cars, *electric tractors and trucks;* include cable splicers, *high-tension power house and substation operators, high-tension linemen*, and all other work properly recognized as electricians' work.

(Electric crane operators for cranes of 40 tons' capacity or over are transferred from this classification to that for linemen. See rule 141.)

Classification of Linemen, etc.

Rule 141.

Linemen's work shall consist of the building, repairing, and maintaining of pole lines and supports for service wires and cables; catenary and monorail conductors; *trolley* and feed wires, overhead and underground, *together with their supports; maintaining, inspecting, and installing third rail and cables for third rail that carry current to or from third rail and track rail; pipe lines or conduits for these cables; bonding of third rail or cables;* all outside wiring in yards, *and other work properly recognized as linemen's work not provided for in rule 140.*

Signal maintainers who, for 50 per cent or more of their time, perform work as defined in rules 140 and 141.

Men employed as generator attendants, motor attendants (*not including water service motors*), and substation attendants who start, stop, oil, and keep their equipment clean and change and adjust brushes for the proper running of their equipment; *power* switchboard operators, coal-pier car dumpers and coal-pier conveyor-car operators in connection with loading and unloading vessels.

This to include operators of electric traveling cranes, capacity 40 tons and over.

(Under the old agreement operators of electric traveling cranes with a capacity of 40 tons and over now classed as linemen were classed as electricians. Operators of cranes of less than 40 tons capacity formerly classed as linemen are now classed as groundmen.)

Classification of Groundmen, etc.

Rule 142.

Groundmen's work shall consist of assisting linemen in their duties, when said work is performed on the ground, *but shall not include those who perform common labor in connection with linemen's or groundmen's work. Electric crane operators for cranes of less than 40-ton capacity.*

Rule 143.

Coal-pier elevator operators and coal-pier electric hoist operators in connection with loading and unloading vessels.

Apprenticed Electrical Workers.

Rule 144.

Include regular and helper apprentices in connection with electrical workers.

Electrical Worker Helpers.

Rule 145.

Employees regularly assigned as helpers to assist electrical workers and apprentices, including electric lamp trimmers who do no mechanical work, *also to perform such battery work as may be agreed upon locally as being helpers' work.*

HELPER APPRENTICES.

Rule 146.

Fifty per cent of the apprentices may consist of electrical workers' helpers who have had two years' continuous service at the point where employed. When assigned as helper apprentices, they must not be over 25 years of age, and shall serve three years, a minimum of 290 days each calendar year.

REGULAR APPRENTICE SCHEDULE OF WORK.

Rule 147.

The following schedule for regular apprentices, showing the division of time on the various classes of work, is designed as a guide and will be followed as closely as possible:

12 months—Inside wiring and electrical repairing.
6 months—Outside linework.
6 months—Locomotive headlight work.
6 months—Car-lighting department.
6 months—Armature winding.
12 months—General electrical work.

HELPER APPRENTICE SCHEDULE OF WORK.

Rule 148.

Helper apprentices will receive the minimum helpers' rate for the first six months, with an increase of two cents (2c) per hour for every six months thereafter until their apprenticeship is completed. If within six months they show no ability to acquire the trade, they will be set back to helping and retain their former seniority as a helper. After completing their apprenticeship, they shall receive the minimum rate paid for the work to which they are assigned, if retained in the service.

Rule 149.

The following schedule for helper apprentices, showing the division of time on the various classes of work, is designed as a guide and will be followed as closely as possible:

6 months—Inside wiring and electrical repairing.
6 months—Outside linework.
6 months—Locomotive headlight work.
6 months—Car-lighting department.
6 months—Armature winding.
6 months—General electrical work.

MISCELLANEOUS.

Rule 150.

Laborers or similar class of workmen shall not be permitted to do helpers' work as outlined in rule 145 if regular electrical-worker helpers are available.

Rule 151.

Men engaged in the handling of storage batteries and mixing acid must be provided with acid-proof rubber gloves, hip boots, and aprons.

Rule 152.

Autogenous welders shall receive five cents (5c) per hour above the minimum rate paid electrical workers at point employed.

Carmen's Special Rules.

QUALIFICATIONS.

Rule 153.

Any man who has served an apprenticeship or who has had four years' practical experience at car work, and who with the aid of tools, with or without drawings, can lay out, build, or perform the work of his craft or occupation in a mechanical manner, shall constitute a carman.

CLASSIFICATION OF WORK.

Rule 154.

Carmen's work shall consist of building, maintaining, dismantling (*except all-wood freight-train cars*), painting, upholstering and inspecting all passenger and freight cars, both wood and steel; planing mill, cabinet, and bench carpenter work, pattern and flask making, and all other carpenter work in shops and yards, *except work generally recognized as bridge and building department work;* carmen's work in building and repairing motor cars, lever cars, hand cars, and station trucks, building, repairing and removing and applying locomotive cabs, pilots, pilot beams, running boards, foot and headlight boards, tender frames and trucks; pipe and inspection work in connection with air-brake equipment on freight cars; applying patented metal roofing; operating punches and shears, doing shaping and forming; work done with hand forges and heating torches in connection with carmen's work; painting with brushes, varnishing, surfacing, decorating, lettering, cutting of stencils and removing paint (*not including use of sand blast machine or removing in vats*); all other work generally recognized as painters' work under the supervision of the locomotive and car departments, *except the application of blacking to fire and smoke boxes of locomotives in engine houses;* joint car inspectors, car inspectors, safety appliance and train-car repairers; oxyacetylene, thermit, and electric welding on work generally recognized as carmen's work; and all other work generally recognized as carmen's work.

It is understood that present practice in the performance of work between the carmen and boilermakers will continue.

(Repairing steam-heat hose for locomotives and cars; safety appliance and train car repairing, wrecking derrick engineers and wheel record keepers, which appeared in this classification under the old agreement are omitted from this classification under the new rule.)

CARMEN APPRENTICES.

Rule 155.

Include regular and helper apprentices in connection with the work as defined by rule 154.

CARMEN HELPERS.

Rule 156.

Employees regularly assigned to help carmen and apprentices, employees engaged in washing and scrubbing the inside and outside of passenger coaches preparatory to painting, *removing of paint on other than passenger cars preparatory to painting,* car oilers and packers, stock keepers (car department), operators of bolt threaders, nut tappers, drill presses, and punch and shear operators (cutting only bar stock and scrap), holding on rivets, striking chisel bars, side sets, and backing out punches, using backing hammer and sledges in assisting carmen in straightening metal parts of cars, *rebrassing of cars in connection with oilers' duties,* cleaning journals, *repairing steam and air hose,* assisting carmen in erecting scaffolds, and all other work generally recognized as carmen's helpers' work, shall be classed as helpers.

("Material carriers, rivet heaters [except when performed by apprentices]," which appeared in the old classification, are omitted in the new rule.)

WRECKING CREWS.

Rule 157.

Regularly assigned wrecking crews, *not including engineers*, will be composed of carmen, *where sufficient men are available*, and will be paid for such service *under rule 10, Decision No. 222.* Meals and lodging will be provided by the company while crews are on duty in wrecking service.

When needed, men of any class may be taken as additional members of wrecking crews to perform duties consistent with their classification.

(Engineers were included in the old rule. Carmen were "regularly assigned.")

Rule 158.

When wrecking crews are called for wrecks or derailments outside of yard limits, *a sufficient number of* the regularly assigned crew will accompany the outfit. For wrecks or derailments within yard limits, sufficient carmen will be called to perform the work.

INSPECTORS.

Rule 159.

Men assigned to inspecting must be able to speak and write the English language, and have a fair knowledge of the *A. R. A.* (*American Railway Association*) rules and safety appliance laws.

(The old rule required a fair knowledge of the M. C. B. [Master Car Builders] rules, practically identical with those adopted by the American Railway Association.)

Rule 160.

Inspectors and other carmen in train yards will not be required to take record, for conducting transportation purposes, of seals, commodities, or destination of cars *where record clerks, yardmasters, agents or yard clerks are employed.*

SAFETY APPLIANCE MEN.

Rule 161.

Men assigned to follow inspectors in yards to make safety appliance and light running repairs, shall not be required to work on cars taken from trains to repair tracks, *except when there is not sufficient work in train yards to fully occupy their time.*

PROTECTION FOR REPAIRMEN.

Rule 162.

Switches of repair tracks will be kept locked with special locks and men working on such tracks shall be notified before any switching is done. A competent person will be regularly assigned to perform this duty and held responsible for seeing that it is performed properly.

Rule 163.

Trains or cars while being inspected or worked on by train yard men will be protected by blue flag by day and blue light by night, which will not be removed except by men who place same.

MISCELLANEOUS.

Rule 165.

Air hammers, jacks, and all other power driven machinery and tools, operated by carmen or their apprentices, will be furnished by the company and maintained in safe working condition.

Rule 166.

Crayons, soapstone, marking pencils, tool handles, saw files, motor bits, brace bits, cold chisels, bars, steel wrenches, steel sledges, hammers (not claw hammers), reamers, drills, taps, dies and lettering and striping pencils and brushes will be furnished by the company.

Rule 167.

Included in rule 154.

(The rule in the previous agreement providing that "the application of blacking to fireboxes and smoke boxes of locomotives in roundhouses will not be considered painters' work" is included in rule 154.)

Rule 168.

When necessary to repair cars on the road or away from the shops, carman, *and helper when necessary*, will be sent out to perform such work as putting in couplers, draft rods, draft timbers, arch bars, center pins, putting cars on center, truss rods, and wheels, and work of similar character.

(The old agreement provided that 2 carmen would be sent to perform such work as putting in couplers, etc.)

MISCELLANEOUS.

Rule 169.

Shops, repair yards, and train yards, where carmen are employed, shall be kept clean of all rubbish.

APPRENTICES.

Rule 170.

Regular apprenticeships will be established in all branches of the trade. Apprentices shall be governed by the general rules covering apprentices.

Rule 171.

Apprentices shall not work on oxyacetylene, thermit, electric, or other welding processes until they are in their last year.

HELPER APPRENTICES.

Rule 172.

Fifty per cent of the apprentices may be selected from carmen's helpers who have had not less than two consecutive years' experience at the point employed at the time application for apprenticeship is made.

Helper apprentices shall not be over 30 years of age and will serve three years, a minimum of 290 days each calendar year.

Helper apprentices shall be governed by the same laws and rules as regular apprentices.

Helper apprentices shall receive the minimum helpers' rate for the first six months, with an increase of two cents (2c) per hour each succeeding six months until they have served three years. At the completion of their apprenticeship period, if retained in the service, they shall receive the mechanics' rate of pay.

PAINTER APPRENTICES, REGULAR.

Rule 173.

Regular apprentices—Division of time for painter apprentices:

The following schedule for regular apprentices, painter, showing the division of time on the various classes of work, is designed as a guide and will be followed as closely as the conditions will permit:

6 months—Freight-car painting.
6 months—Color room, mixing paint.
6 months—General locomotive painting.
12 months—Brush work, passenger equipment.
18 months—Lettering, striping, varnishing, and such laying out and designing as the shop affords.

SCHEDULE OF WORK, PAINTER HELPER APPRENTICES.

Rule 174.

Helper apprentices—Division of time for painter apprentices:

The following schedule for helper apprentices, painter, showing the division of time on the various classes of work, is designed as a guide and will be followed as closely as the conditions will permit:

4 months—Freight-car painting.
4 months—Color room, mixing paint.
4 months—General locomotive painting.
10 months—Brush work, passenger equipment.
14 months—Lettering, striping, varnishing, and such laying out and designing as the shop affords.

REGULAR APPRENTICES, CARMEN SCHEDULE OF WORK.

Rule 175.

The following schedule for regular apprentices, showing the division of time on the various classes of work, is designed as a guide and will be followed as closely as the conditions will permit. Where sufficient passenger car department work is not available without exceeding the regular ratio of apprentices in the passenger car department, apprentices will complete their apprenticeship in the freight car department:

18 months—General freight work, wood and steel.
6 months—Air-brake work.
6 months—Mill machine work.
18 months—General coach work, wood and steel.

HELPER APPRENTICE, CARMEN SCHEDULE OF WORK.

Rule 176.

The following schedule for helper apprentices, showing the division o time on the various classes of work, is designed as a guide and will be followed as closely as the conditions will permit. Where sufficient passenger car department work is not available without exceeding the regular ratio of apprentices in the passenger car department, apprentices will complete their apprenticeship in the freight car department.

12 months—General freight work, wood and steel.
6 months—Air-brake work.
6 months—Mill machine work.
12 months—General coach work, wood and steel.

Rule 177.

In the event of not being able to employ carmen with four years' experience, regular and helper apprentices will be advanced to carmen in accordance with their seniority. If more men are needed helpers will be promoted. If this does not provide sufficient men to do the work, men who have had experience in the use of tools may be employed. They will not be retained in service when four-year carmen become available.

NOTE.—Helpers advanced as above will retain their seniority as helpers.

(The old agreement provided the following specific manner of increasing the force in case the supply of carmen with four years' experience was insufficient, and regular and helper apprentice schedule did not provide men to do the work:—

"Regular apprentices who have served two years and helper apprentices who have served two years may be promoted to mechanics at point employed and will be paid the minimum rate for carmen, seniority to govern.

"Helpers who have had four or more years' experience at point employed may be promoted to mechanics, they to receive the minimum rate for carmen and be given an opportunity to learn the trade, seniority to govern.

"The duly authorized committee in each shop covered by this agreement will be consulted and mutual understanding arrived at in promoting helpers. The ratio of helpers to be promoted to the number of mechanics in any one shop shall not exceed 20 per cent.

"The general chairman on each railroad affected shall be furnished a complete record of the men promoted.

"When a reduction is made in force of mechanics, promoted helpers, in accordance with their seniority, shall be set back first, then advanced apprentices. No mechanics to be laid off until all such promoted helpers and apprentices have been set back.

"Promoted apprentices and promoted helpers who have not served four years as mechanics will be set back at any time that mechanics with four or more years' experience make application for employment.")

DIFFERENTIALS FOR CARMEN.

Rule 178.

Autogenous welders shall receive five cents (5c) per hour above the minimum rate paid carmen at point employed.

COACH CLEANERS.

Rule 179.

Coach cleaners to be included in this agreement and will receive overtime as provided herein. *Coach cleaners at outlying points may be worked eight (8) hours within a period of ten (10) consecutive hours. They may be assigned to any other unskilled work during their eighth-hour period of service.*

(This rule under the old agreement provided for the minimum rate of wage for coach cleaners.)

Miscellaneous.

SCOPE OF GENERAL AND SPECIAL RULES.

Rule 180.

Except as provided for under the special rules of each craft, the general rules shall govern.

Rule 181.

Eliminated.

Rule 182.

Eliminated.

(Rules 181 and 182 under the old agreement dealt with the effect of the agreement on previous contracts and with its duration.)

REVISION OF AGREEMENT.

Rule 183.

Should either of the parties to this agreement desire to revise *or modify* these rules, 30 days' written advance notice, containing the proposed changes, shall be given and conferences shall be held immediately on the expiration of said notice *unless another date is mutually agreed upon.*

Rule 184.

Eliminated.

(This rule dealt with the application and interpretation of the provisions of the national agreement during Federal control.)

Rule 185.

This agreement shall be effective as provided in the several decisions of the United States Railroad Labor Board hereon and shall continue in effect until it is changed as provided for in rule 183 or under the provisions of the transportation act, 1920.

The four rules on which the Railroad Labor Board made no decision and which were remanded to the carriers and their employees for settlement are as follows;

Rule 24.

When attending court as witnesses for the railroad, employees will receive pay for all time lost at home station, with a minimum of eight hours' time each week day and eight hours at rate and one-half for Sundays and holidays, either at home station, away from home, or traveling. Time and one-half will be paid for traveling during overtime hours where employees are unable to secure sleeping-car accommodation. Actual expenses will be allowed when away from home station and necessary expenses will be allowed when at home. When necessary the company will furnish transportation and will be entitled to certificate for witness fees in all cases.

Rule 119.

Furnace operators (heaters) will be assigned to operate furnaces making or working material 6 inches or over and heating it for forgemen.

Heaters will be assigned to operate furnaces used in connection with forging machines 4 inches and over or to heat any material 4 inches and over to be forged.

Heaters will also be assigned to heavy fires.

When operators are required on other furnaces, helpers will be used.

Rule 124.

Blacksmiths working or making material 6 inches or over shall be classified as hammersmiths and shall receive 10 cents per hour above the minimum rate paid blacksmiths at the point employed.

Blacksmiths working material 4 inches or over shall be classified as heavy-fire blacksmiths and shall receive 5 cents per hour above the minimum rate paid blacksmiths at the point employed.

Heaters on heavy fires shall receive 10 cents per hour above the minimum rate paid helpers at point employed.

Hammer operators and helpers working with hammersmiths or heavy-fire blacksmiths shall receive 5 cents per hour above the minimum rate paid helpers at the point employed.

Furnace operators (heaters) operating furnaces for hammersmiths shall receive the minimum rate paid blacksmiths at the point employed.

Autogenous welders shall receive 5 cents per hour above the minimum rate paid blacksmiths at the point employed.

Rule 164.

A "one-man point" is an outlying point where there is employed one carman, day, and one, night, or where there is only one carman employed. Carmen stationed at one-man points shall be paid by the hour and under the rules governing running repair forces, except that the eight hours constituting a day's work may be worked within a spread of 10 consecutive hours.

Agreement Creating Train Service Board of Adjustment for Southeastern Region.

AN AGREEMENT creating a "Train Service Board of Adjustment for the Southeastern Region" has been concluded by the Brotherhood of Locomotive Engineers, the Brotherhood of Locomotive Firemen and Enginemen, the Order of Railway Conductors, the Brotherhood of Railroad Trainmen, and the following 16 southeastern railroads:

Atlanta & West Point Railroad Co.
The Western Railway of Alabama.
Atlantic Coast Line R. R. Co.
Central of Georgia Railway Co.
Charleston & Western Carolina Ry. Co.
Chesapeake & Ohio Railway Co.
Florida East Coast Railway Co.
Georgia Railroad.
Louisville & Nashville R. R. Co.
Louisville, Henderson & St. Louis Ry. Co.
The Nashville, Chattanooga & St. Louis Ry.
Norfolk & Western Ry. Co.
Norfolk Southern R. R. Co.
Richmond, Fredericksburg & Potomac Railroad Co.
Seaboard Air Line Railway Co.
Winston-Salem Southbound Ry. Co.
Gulf & Ship Island R. R. Co.

This agreement is similar to that negotiated by the four train service brotherhoods and the railroads of the western region, noted in the MONTHLY LABOR REVIEW for November, 1921 (p. 114).

The board consists of 8 members, 4 chosen by the railroads signatory to the agreement and 1 by each of the four brotherhoods. Only

disputes growing out of personal grievances or out of interpretation or application of the schedules, agreements or practices now or hereafter established, which can not be adjusted by direct conference between representatives of the individual railroad and its respective employees, can be considered by this board. Disputes arising out of proposed changes in rules, working conditions or rates of pay are specifically excluded from its jurisdiction. Failing a majority vote, a dispute, upon the request of either party, can be certified to the Railroad Labor Board.

The agreement is to remain in force for the period of one year from the date of organization of the board and thereafter for successive periods of one year. Any party may withdraw at the end of any year, upon serving written notice of intention to withdraw, not less than 90 days prior to the expiration of such year.

Agreement as to Wages and Working Conditions of New York Longshoremen.

AGREEMENTS entered into between the United States Shipping Board, Deepwater Steamship Lines and Contracting Stevedores of the Port of Greater New York and Vicinity, and the International Longshoremen's Association and its affiliated locals, fix wages and working conditions for workers on general and bulk cargo, for checkers and for cargo repairmen for a period of one year, beginning October 1, 1921. Wages of general and bulk cargo workers are reduced 15 cents per hour for regular time and 20 cents per hour for overtime work.

The following rates of wages prevail under the new schedule:

HOURLY RATE OF WAGES.

Class of work.	Regular time.	Overtime.
General cargo	$0.65	$1.00
Bulk cargo, ballast, and all coal cargoes	.70	1.05
Handling wet hides	.80	1.15
Kerosene, gasoline and naphtha in cases, when loaded by case oil gangs and with a fly	.85	1.30
Handling explosives down the bay [1]	1.30	2.00
Checkers and tallymen	.62½	1.00
Checking and tallying ammunition and explosives down the bay [1]	1.25	.....
Cargo repairmen in charge of piers as foremen for hiring or supervising [2]	.75	1.30

[1] Time starts from time of leaving pier until time of returning to pier. Men to supply own meals, but 80 cents per meal to be allowed by employer.

[2] Cargo repairmen on deep-water vessels not in supervisory positions maintain work under same conditions and maintain same differentials as do the deep-water longshoremen.

Double rate is to be paid for handling at a pier explosives customarily handled down the bay. Disputes arising as to what constitutes explosives are to be settled by the Bureau of Explosives.

Checkers and tallymen working on cargo damaged by fire or water, when working under distress conditions; or working offshore or tallying from dock into ship on cargo calling for double time under the longshoremen's agreement, are to be compensated for double time.

The union agrees that it will "not try to uphold incompetency, shirking of work, pilfering or poaching of cargo." Anyone guilty of

such offenses is to be dealt with as the employer sees fit. Any man convicted of theft is to be expelled from the union.

The provision for settlement of disputes which operated under the previous agreement is continued under the new contract.[1]

When the workers' organization can not furnish a sufficient number of men to perform the work in a satisfactory manner, the employer may employ such men as are available.

No hiring is to be done by hatch bosses. Only stevedores or underforemen can hire cargomen. Shaping time is fixed for 7.55 a. m., 12.55 p. m., and 6.55 p. m.

It is further understood and agreed that men may be ordered out for any other hour providing, that men wanted between the hours of 8 a. m. and 12 o'clock, noon, receive notice at the 8 a. m. shape. Men wanted between the hours of 1 p. m. and 5 p. m. shall receive notice at the 1 p. m. shape, and such men, or gangs, shall be paid from the hour they report for work whether work begins or not. In event men so ordered do not work they shall receive the minimum of two (2) hours pay.

Men "knocked off work" 15 minutes after the hour are to be paid for one-half hour. If knocked off 45 minutes after the hour, they are to be paid for 1 hour.

The employers are to furnish suitable shelter for men working on deck in bad weather, rubbers when required for handling wet cargo or explosives, and leather hand pads or gloves for handling barb wire.

The minimum number of men in the gang when loading general cargo off a lighter alongside shall be 18 men. When working off the pier the additional number of men is to be left to the discretion of the foreman in charge.

The agreement is to operate for a period of one year, but either party may give one month's notice on March 1, 1922, asking for reconsideration of wages for the second six months.

Printing Trades Awards.

New York Book and Job.

TWO important arbitration decisions recently have been handed down in the New York book and job printing trade. One affects the pressmen (Pressmen's Union No. 51), the other the compositors (Typographical Union No. 6) employed by the closed shop (printers' league) branch of the Association of Employing Printers of New York City.

Dr. William F. Ogburn acted as impartial arbitrator in the pressmen's arbitration case and handed down on November 14, 1921, his decision reducing printing pressmen's scale from $46 to $44 per week. The new scale went into effect on December 1. This decision was the result of a dispute arising on October 1. The agreement between the employers and the pressmen covering the period January 1, 1920, to September 30, 1922, provided for readjustment of the rate of wages, on October 1, 1920, and at the end of each six months thereafter, such readjustment to be based on the cost of living and the economic conditions of the industry at the date of readjustment.

[1] This clause, together with other details of the previous agreement, governing conditions in this port, are published in the MONTHLY LABOR REVIEW for May, 1921, pp. 22, 23.

The decision in the arbitration case of Typographical Union No. 6, handed down on November 28, 1921, by Dr. John L. Elliott, arbitrator, dealt with wages, overtime, and apprenticeship. It affected about 6,000 compositors. It went into effect on December 1 and will remain in force until October 1, 1923. Provision was made, however, for a readjustment on October 1, 1922, if either party desires it. By the terms of this decision wage scales maintain their status quo. Day workers receive $50 per week, night workers $53 per week, and the night shift $56 per week. Provisions for overtime remain the same. The only change in the contract affects rules regulating apprenticeship. The employers' request that apprentices be allowed to set live matter on the machine during the last six months of their apprenticeship, instead of the restriction to three months favored by the unions, was granted.

Concerning this part of his decision, the arbitrator says:

> While it has been urged with truth by the union that the period of apprenticeship should be used for the best educational interests of the apprentice, he is aware that the apprentice during these last six months is in attendance at the school; that he is there receiving instruction which should give him the needed "finishing touches." The work of the apprentice in the shop so far as education goes is largely determined by the interest which he takes in his work. He will naturally be more interested if the matter which he sets up is not only for practice but is live matter. His education therefore will not be interfered with. In addition if the apprentice can set up live matter satisfactorily to the management it is uneconomic to have this destroyed.

Indianapolis Pressmen.

IN THE arbitration proceedings between the closed-shop division of the Indianapolis Typothetæ of Indianapolis, Ind., and the Indianapolis Printing Press Union No. 17 and the Indianapolis Press Assistants' Union No. 39, the employers asked for a reduction in wages of $14 per week, arriving at this figure by subtracting from the prevailing rate $3.67, the amount of wages for the four hours curtailed (the 44-hour week having been established); $6.05, which would represent a 15 per cent reduction on account of cost of living; and a reduction of $4.28 based on the economic condition of the business.

In his decision Arbitrator Frank S. C. Wicks accepts the reduction based on the reduction in hours, "since it is not proved that the same amount of work was done in 44 as in 48 hours." In the matter of cost of living, the arbitrator says:

> Since it was not denied that wages have been increased on the ground of increased cost of living, it is just that there should be a decrease on the same ground. The last figures presented by the employers show a 12.6 per cent reduction in Indianapolis. I do not think it fair that employees should alone be affected by this fact. I feel it should be shared, since the employers themselves shared the advantage. So I have taken off 6.3 per cent on this ground, or $2.54.

The claim for reduction based on economic conditions of the business was ruled out.

The new scale, effective from November 1, 1921, to September 1, 1922, is as follows:

Pressmen:	Per week.
Operating one or two flat-bed presses	$38.00
Rotary web press, one machine	42.20
Auto presses, same as flat-bed scale	38.00
Kelly presses, same as flat-bed scale)	38.00
One double cylinder or two-color press	42.00

	Per week.
Job pressmen:	
Job pressmen operating five presses	38.00
Job pressmen operating four presses	36.80
Job pressmen operating three presses	34.40
Job pressmen operating one or two presses	32.00
Assistants and helpers:	
Cylinder assistants	30.80
Newspaper assistants (blanket presses or patent inside)	32.60
Helpers	33.20
Rotary web (book and job room) first and second assistant	33.20
Third assistant	19.00
Assistants on two-color presses, Cox Duplex or Goss Comet	33.20
Pony press:	
Pony press assistants (24 by 36 and under)	27.20

Award in Canadian Railway Dispute.

A DECISION in a railway dispute was given November 8, 1921, by a board of arbitration in Ottawa, Canada, in which the recommendations are based upon four principles. Summarized these are:

1. At a time of generally falling prices and wages no class of workers can reasonably expect to maintain their former rates undiminished.
2. The financial conditions of the railroads can not be taken as a determining factor in fixing wages.
3. It is not desirable that the lower paid employees should receive heavier reductions, proportionately, than the higher paid.
4. In determining wages for permanent employees, even though they be unskilled and easily replaceable, the possibility of maintaining a decent living upon the wages received is a pertinent consideration.

The dispute arose over a reduction of wages which the Canadian National Railways undertook to put into effect, closely following the award of the United States Railway Labor Board last summer. The management felt that as they had followed the lead of the United States when wages were rising, it was fair to do so when the time came for reductions. The Railway Labor Board had made a cut averaging 12½ per cent; the Canadian road did the same, but within this average was a wide range of reductions, varying at least from 8 to 20 per cent, according to the group affected. The workers objected, whereupon the road proposed that its scale should be accepted tentatively, pending a final settlement, and that the rates eventually decided upon should be made retroactive to the date of this agreement. Most of the workers assented to this, but the group concerned in this arbitration, who were all in the lower-paid classes, refused, and after an attempt at conciliation the matter went to arbitration.

In its report the arbitration board deals at some length with the first principle, concluding that "Railways and railway employees must in all fairness expect to take lower rates and lower wages." The board's attitude on the second principle differs somewhat from that of the United States Railroad Labor Board. The roads had stressed the necessity for the reductions, owing to their financial condition, on which argument the board comments:

> The board was not greatly impressed with the statement made as to the financial condition of the Canadian National Railways. It is not our task to deal with the causes of the deficits of these railways, and it is quite evident that the present em-

ployees of the railways can not be held responsible for these deficits. The financial condition of these railways can only enter into the question so far as it enters into railway conditions generally and financial conditions at large.

As to the third point, the board emphasizes its hearty agreement "with the contention that changed conditions imperatively demand a general decrease of wages from the highest peak of war and post-war conditions," but points out that the reductions have been so arranged as to be much harder on the lower-paid men than on the higher. In the case of engineers, for instance, the reductions were said to range from 6.5 per cent to 9.1 per cent of their previous salaries, while for the classes appearing before the board the reductions ran as high in some cases as 18 to 20 per cent of their former pay; that is, in these cases the reductions were much higher for the lower-paid men, in spite of the fact that "even a proportionate decrease is very much harder on the man with the smaller income than on the man with the larger." Again, a flat reduction of $12.24 a month was ordered for clerks, although "a reduction of $12.24 is not a serious matter for a man getting $200 a month, but it is a very serious matter for a man getting $100 a month."

As to the fourth point, the board admits that the railways could probably easily secure other workers to take the place of these at the reduced rates, but does not consider that this settles the matter. Under the "hard economic law of supply and demand," wages tend to fall to the lowest point at which the present employees could be replaced, but the working out of such a law implies struggles, with possible strikes and lockouts, and the very existence of machinery for arbitration is a recognition of the people's feeling that "some idea of fairness must be allowed to meliorate the operation of the economic law." The board is not prepared to indorse the general principle of a minimum wage, much less to recommend its adoption on one system of railways alone, but it does hold that in fixing wages the railways "must have some regard to the minimum cost of living under frugal but decent conditions."

Upon the basis of these four principles, the board recommends that for certain classes of those concerned in the arbitration the reductions set by the railways shall stand. In general all reductions made in the salaries of employees getting more than $125 a month are sustained. For employees getting $125 or less, except in the case of stenographers and sleeping, dining, and parlor car employees, a graduated scale of reductions is recommended, ranging from $5 per month for those receiving $80 or less to $10 for those getting $125. In regard to unskilled labor, a distinction is made between transient and permanent employees.

In so far as transient labor is before the board we think the rates fixed are keeping in with present wages in the open market.

In the case of all hourly paid men, other than transient laborers, such as loaders in stores, freight truckers or porters, locomotive cleaners, ash-pit men, fire builders and coal men, we recommend that the maximum decrease be not greater than 10 per cent of the wages paid before the reduction. Decreases less than 10 per cent, if any, should stand.

A dissenting report, signed by one member of the board, upheld the reductions called for by the railways.

EMPLOYMENT AND UNEMPLOYMENT.

Efforts to Regularize Employment in Seasonal Trades.[1]

By MARY T. WAGGAMAN.

THE present acuteness and extent of unemployment seem somewhat paradoxically to hold out the hope of a closer approach to a constructive solution of this "key problem" of industry. The enforced concentration of the great majority of governments on this world-wide industrial dislocation involving such incalculable waste of human energy must lead to a more scientific grappling with the whole question. An encouraging indication of the trend toward a deeper study of the subject is the growing realization of the potentialities of management in maintaining the equilibrium of the labor market in seasonal industries. One of the foremost engineering experts recently stated that seasonal unemployment, though less "spectacular" than "mass unemployment" possibly involves more waste—through higher losses in wages and decreased production. He also called special attention to the greater prevalence of labor unrest and revolt in intermittent industries, particularly in the building and clothing industries, in which, it is stated, over 30 per cent of all the strikes in New York City in 1919 occurred.[2] Certain progressive establishments have, however, met with considerable success in reducing unemployment fluctuations. The measures they have taken are briefly described in the following reports.

Policies of a Large Paper Manufacturing Company.[3]

THE methods of regularizing employment by a large paper manufacturing company have attracted the favorable attention of industrial experts and other students of labor problems and have been given considerable publicity in current industrial literature.

The principles by which this regularization was accomplished were tried out gradually and when found successful their application was extended. Any great reduction of seasonal employment must be brought about by degrees. The following is a summarization of these principles:

1. *Reducing seasonal orders by securing at least a minimum amount of orders considerably ahead of the season.* This has been done partially through simple requests for business, also by efficient salesmanship and promises of safer delivery. The production of paper boxes was originally extremely seasonal. It would be late in the

[1] Unless otherwise indicated, information for the most part is taken from special reports which were furnished the United States Bureau of Labor Statistics by the companies.

[2] Address before the Industrial Relations Conference at Harrisburg, Pa., Oct. 26, 1921, by Mr. L. W. Wallace, former executive secretary of the Federated American Engineering Societies.

[3] American Association for Labor Legislation Review, March, 1921. New York. pp. 53-58.

summer before any large numbers of orders were received and from that time until Christmas there would be a "painful rush of work." Through a system of modified sales many orders are received in January and a fair percentage of orders for Christmas delivery are even placed over a year ahead.

2. *Increasing nonseasonal orders which permit long-time delivery.* Some of these orders do not have to be delivered until a certain specified date. Others may be delivered when they are ready. The selling methods described above have also been effectual in increasing these orders.

3. *Planning a year in advance for all stock items.* More than a year ahead a detailed statement is made for all items needed, which is submitted to the warehousing department. That department prepares a minimum monthly schedule which is based on the sales distribution of the preceding year. The producing department is allowed to distribute work as seems advisable, provided this minimum is maintained.

4. *Making provision well in advance for various interdepartmental needs.* For example, the gummed label department's orders for boxes are placed at the opening of the year.

Through the application of the four principles above outlined, as many time-limited and seasonal orders as possible have been converted into articles allowing of long-time delivery and production in accordance with a schedule based on output rather than on delivery demands. It is conceded, however, that if the trade of this company were subject to sharp changes in style, the benefits resulting from the policy now in force would not be so great; yet even under these circumstances the personnel department is of the opinion that there would probably be some advantages in these policies.

5. *The increasing manufacture of out-of-season articles and the variation of the company's line so as to offset different demands.* For instance, the development of new kinds of paper boxes which are not for the holiday trade so that such boxes can be made and sold at periods when there is a slackness in holiday work. A further equalization of work is effected by the manufacture of staple articles for stock.

Through the application of these principles efforts are made to fill up business hollows rather than remove production peaks.

In addition to these measures, the company further regularizes employment by transferring employees not needed in one department to another department where their services can be utilized. It is a rule of the establishment to transfer the same seasonal employees to the same jobs each year so that they will become expert in another trade. The practice of deliberately saving up the work of the crêpe-paper department so that the paper-box makers may be transferred there during their dull season, December and January, is an illustration of how output may be planned to utilize operatives who might otherwise be unemployed. Among the incidental benefits resulting from this practice is the creation of a more versatile personnel, which facilitates the making of emergency transfers. Occasionally the company arranges transfers of its workers to outside establishments. The firm does not regard this course as desirable, however, as it tends to loosen the connection between the company

and the workers. At the same time such arrangement is looked upon as preferable to absolute discharge and to running the risk of losing able workers because of their securing permanent positions elsewhere at the time the company can not give them employment.

This firm maintains an unemployment insurance fund. A few other establishments have also been experimenting with such funds. The claim is made in various quarters that unemployment insurance as a charge on industry will inevitably result in reducing unemployment somewhat in the same way as workmen's compensation costs have effected a reduction in accident rates. But primarily the measure is not undertaken for the stabilization of employment and therefore does not fall within the limits of this article.

Methods of Certain Clothing Manufacturers.

A LARGE company of the Middle West engaged in the manufacture of clothing considers continuity of production a basic industrial problem and has succeeded in solving it to the extent of keeping up production practically all the time, even in the face of the industrial depression of the past year or so. This company has standardized its lines sufficiently to be able to forecast the market. Having specialized on certain materials and styles, it is not afraid to go ahead with production in advance of the receipt of orders. This firm reports that it was unfortunately short of materials upon some occasions and in consequence was not able to operate at full time, but even during the worst periods it kept up an 80 per cent production except during a two weeks' shutdown in February, 1921, in which there was also a shortage of materials. At this period, however, the plant was moved into enlarged quarters and since then has not only worked full time but steadily increased its production. In brief, this company's policy is built on the theory "that an industrial organization can only succeed and serve efficiently when planned on a continuous production basis." This policy is applied even when it involves a sacrifice of profits or temporary financial loss. The manager of manufacture of this company advocates the discouragement of unnecessary expenditures in periods of plenty and the accumulation of definite funds in such periods for use in times of depression when jobs should be created rather than eliminated. Wage-cutting propaganda, he thinks, only aggravates the unemployment situation. He declares that public emphasis should be put on the fact that "cutting down income cuts down buying power and cutting down buying power cuts down buying and therefore business." Wage reductions in a number of instances, he declares, lead to higher costs and when they do not they often have little practical effect on cost reduction. This manager's experience has also led him to conclude that the education of the buying public to cooperate with industry in the prevention of seasonal employment would accomplish much. While acknowledging that various industries and individual organizations have already made appreciable progress along these lines, he suggests the possibilities of much greater advancement through more scientific distribution and the anticipation of demands in the manufacture of stock.

Mr. N. I. Stone, himself the labor manager of a large clothing manufacturing establishment, stated, in an address at the annual meeting of the American Association for Labor Legislation in December, 1920 (see American Association for Labor Legislation Rev., March, 1921), that continuity of employment "has been achieved in at least three clothing plants in this country" with which he is personally familiar. The clothing establishment of the Middle West mentioned above is one of these to which Mr. Stone made reference. Another clothing manufacturing plant in the same locality, which he reports upon, has been successful in closely coordinating its sales and production policies. Though style is a strong factor in this plant's product, the company's rule is to sell what it makes instead of following the ordinary "opportunistic policy" of making what one sells. Months ahead of the season for selling the firm orders its materials and decides on the number and kinds of garments it desires to make the next season for the purpose of maintaining "capacity production." When the necessary models are designed and approved, manufacture is begun in quantity before orders have been received from customers. The company has won the confidence of its retailers, and its salesmen in the different districts usually dispose of the amounts of goods which they are expected to sell. Once in a while the establishment may lose on a particular model. In the long run the company has been notably successful in keeping up production for 51 weeks annually. One week a year is given over to plant repairing, during which time the workers have a vacation with pay.

Mr. Stone stated that the firm with which he is connected, although "catering to the most fastidious trade and strongly influenced by considerations of style and individual tastes among its customers," has brought about continuity of production in part by manufacturing conservative stock in dull intervals and in part by obtaining orders for midseason sales which allow no profit but which help to meet overhead expense, to keep the organization together, and to furnish remunerative work for the employees.

Some Constructive Provisions in the Agreements with the Amalgamated Clothing Workers of America.[4]

ALL agreements between the Amalgamated Clothing Workers of America and the manufacturers in the chief clothing markets of the United States and Canada provide for a division of work in slack seasons among the permanent labor force so as to afford every member some employment. This not only prevents the worker's being entirely without earnings in these dull periods but also enables him to keep his place in the industry. He is not obliged to seek a new job at the opening of every season.

This union's agreements also include a provision designed to prevent "overcrowding" of any shop, section, or department. This provision indirectly regularizes employment by discouraging too large additions to the force. It is obvious that if undue increases are made in the busy season, division of work in the slack season will result in

[4] Memorandum from the Research Department of the Amalgamated Clothing Workers of America transmitted Nov. 28, 1921.

each employee's receiving such a small amount of employment that it would be of little benefit to him. The provision on this subject from the preferential shop agreement in the Chicago market, with its approximately 40,000 workers, reads as follows:

> Overcrowding of sections is important in this agreement as the point at which provision for preference becomes operative. It is agreed that when there are too many workers in a section to permit of reasonably steady employment, a complaint may be lodged by the union, and if proved, the nonunion members of the section, or as many of them as may be required to give the needed relief, shall be dismissed. For the purpose of judging the application of preference the trade board shall take into consideration the actual employment condition in the section, as to whether there are more people employed at the time of complaint than are needed to do the work, and whether they, or any of them, can be spared without substantial injury to the company. If it is found that the section can be reduced without substantial injury, the trade board shall enforce the principle of preference as contemplated in the agreement.

Overrecruiting of permanent workers may be prevented during the busy season by the union's not filling requisitions when the full permanent working force of the market is employed. The employers' transient needs may then be met by hiring nonunion workers. Limiting the permanent force, therefore, serves to steady the employment of such force.

Wholesale clothing manufacture for the fall is at its peak in July and August, while the tailor-to-the-trade houses begin to run at full capacity in September, their busy season keeping up for a considerable period after work begins to slacken in the wholesale manufacturing establishments.

Last summer the union inaugurated a plan by which the cutters in the tailor-to-the-trade industry who were unemployed or on part time could be transferred to the wholesale manufacturing establishments and when needed returned to their original employers. This procedure had its difficulties. Some of the tailor-to-the-trade houses did not wish to release their workers for employment by other establishments in the market unless guaranteed that such workers would be returned to their original place of employment when their services were required. As all the workers in the market were under the union's jurisdiction, this assurance could be given.

The union is planning to extend the scheme now applied to the cutters to workers in other occupations.

In the summer of 1920 the board of arbitration in the clothing markets of Baltimore, Chicago, and Rochester decided to appoint an unemployment commission consisting of representatives of both employers and employees, with a chairman representing the impartial arbitration machinery, to investigate the matter of establishing an unemployment fund as a charge on the industry, the proposal for such a fund having been made by the union. This commission, however, has not yet been created, nor has the fund been established.

Measures of an Important New England Publishing House.

A LARGE proportion of the business of a certain New England publishing house consists in the printing and binding of school textbooks. The industry is seasonal because of the congestion of orders in the late spring to be filled for the opening of the school year. By offering special price inducements and credit extensions for other

publishing work during the winter months, the company has been enabled to get extra orders for this period. The effort is made to keep a steady force throughout the year. This personnel is augmented in the summer, when production is at a peak, by students from neighboring high schools and colleges. These students are employed by the company for successive summers and consequently become more and more valuable to the firm. The work in the publishing house begins to diminish by the time these extra workers have to return to school and their services can then be dispensed with. Through this convenient arrangement the company not only puts no seasonal unemployment burden upon the community but makes it possible for students to avail themselves of educational advantages which otherwise they might have to forego.

All new employees are taught several different operations. In this way the work can be carried on with a smaller regular force, as the different members can be transferred from one department to another as occasion requires. This publishing house reports that its efforts to cooperate with other establishments by the transfer of workers where the seasons of such establishments fit into its season have not resulted satisfactorily.

Equalizing Production in the Building Industry.

THOUGH the attempts making for the stabilization of employment in the building industry have been somewhat fitful, "recent developments and conferences have shown the possibilities of vast improvement." [5]

In the report of the Engineers' Committee on the Elimination of Waste in Industry, the following methods have been suggested (p. 67) to reduce seasonal employment:

1. Allowance of a small margin of profit for both labor and capital during winter months.
2. Development of methods of conducting work in cold weather.
3. Arrangement of work to provide indoor operations in cold and stormy weather.
4. Increasing the usefulness of employment bureaus.
5. Educating the public.

A plan embodying the above suggestions has been submitted to the Associated General Contractors of America.

In view of the fact that a certain construction company has been operating in two of the North Central States in both winter and summer for the last 15 years, the details of its methods of regularizing its building projects are well worth attention. This firm charges a fixed fee on a percentage-of-cost basis for construction which includes medium-sized public and commercial buildings. Through protective methods the period for construction has been extended so that men are employed from 8 to 12 months annually instead of from 6 to 8. The records of the firm show the employment of an average of 150 to 200 men for the past 10 or 15 years except for 1 to 3 months in some years. The wages of the company's workers have been based on the prevailing trade-union rates or scales in the locality in which the work was being done and ranged from 30 cents to 64 cents an hour for

[5] Waste in industry. Report by the committee on elimination of waste in industry of the Federated American Engineering Societies, New York, 1921, p. 67.

common labor and from 60 cents to $1.50 an hour for skilled mechanics "according to the economic conditions for the last 10 or 15 years."

By preparing plans and specifications and making contracts for materials during the fall and winter, work is provided during the winter for draftsmen and certain other skilled labor as well as for the employees in establishments manufacturing building materials. By spring the material ordered is ready for delivery. In the meantime the general contractor, having the plans and specifications in hand, can proceed to select the men required and make the estimates essential to letting the contract for materials. This systematic organization of the work results in economical and rapid construction. Before winter comes on steps are taken to protect outside work and plans made to transfer men to inside jobs. Large capacity steam boilers are used to protect concrete work. Stonework and brickwork, concrete footings, walls, floors, and columns are protected by straw, manure, tarpaulins, and salamanders. Salt and calcium chloride are put in the water to lower the freezing point until the concrete sets. Covering scaffolds, providing uncovered scaffolds with a salamander to each mortar board, mixing the mortar with warm water and warm sand, piling bricks in warm sheds, and using salt, sand, and cinders to prevent slipping on runways and scaffolds are some of the means that are used to enable bricklayers to keep on with their jobs in a temperature as low as 30 degrees below zero. Similar methods are applied in stonework. The protection of rough lumber and steel is not a difficult problem.

As a preliminary to the inside work to which skilled mechanics and common laborers are transferred when the building is roofed and the door and window openings are temporarily closed is the "roughing in of heating, plumbing, wiring, and mechanical equipment in general." This is very important as the temporary heat makes the use of salamanders unnecessary.

The company reports that when it has two or more jobs under way it can arrange to shift skilled or common labor to considerable advantage. For example, if the concrete work on one of the projects is nearly completed, the most efficient workers of the crew can be put on another job where the concrete work is about to be started. Similar transfers can be made through the different series of operations, the best men being put on the new job, with the result that less desirable employees are laid off when their help is no longer required. On the other hand, as the company's construction jobs increase, it has a corps of picked skilled and unskilled workers upon which to base an organization for another enterprise in a new locality. The additional cost of winter construction, because of smaller output per man, the necessary heating and covering, and the labor required for the protection of materials and men, is counterbalanced largely by the quicker completion and occupancy of the structures, by the fact of there being no injury to the building from standing still in severe weather, and by the elimination of the expense of preparing protection for the building during a shutdown and of the losses of interest on invested capital and of the expense due to stoppage of work and restarting operations or to rehiring and reorganizing crews. Other advantages of winter construction are the reduction of overhead expense for contractors and the improved business in the locality result-

ing from the increased purchasing power of the workers who are more regularly employed. The company states that its foremen, straw bosses, skilled mechanics, and common laborers have had for the last 10 or 15 years as continuous work "as varying fortunes of a medium-sized building organization subject to the uncertainties of the contracting business would permit."

Expedients of a Lock Company and a Woodworking Establishment.[6]

A LOCK company and a woodworking firm in a large eastern city have stabilized employment by the manufacture of new lines of goods. The lock company, notwithstanding the falling off of the foreign demand for locks, has increased its operating capacity from 40 per cent to 75 per cent in three months by taking up other metal-work specialties.

The woodworking company, with a regular line of wood furnishings for office buildings, churches, and other structures, has begun successfully to manufacture a wood disc automobile wheel. It was found that about 2,500,000 wheels could be produced annually. Only about 15 per cent addition to the existing machinery was required, and practically no new training of the employees and no extra plant buildings were necessary. In the report on the new activities of these companies special attention is called to the advantage of carrying lines closely allied from a production viewpoint. While the lock company's scheme was similar to that of the woodworking firm's, the former did not have to add to its equipment and moreover was able to eliminate waste by the utilization of scrap metal in the production of various simply designed specialties. The president of the company says, "What we are doing could very well have been done before this. * * * But we were never 'put to it' as we have been during the last year."

In the judgment of both these companies, supplementary lines should be undertaken with the intention of making them permanent.

An Experiment in Warehousing.[7]

A COMPANY of importers and packers of dates, through well-planned advertising combined with increased energy on the part of the sales department has extended the date season from September to June, whereas the demand for dates had been limited to the early fall and winter, especially in the holiday season. The height of the demand, however, still comes in the first part of the fall. A cold-storage warehouse was, therefore, built in which to place the daily output. The date packing goes on quite regularly month by month, but when the demand falls off in the summer the surplus is accumulated in cold storage for immediate release at the time of the peak season. This policy has brought about a striking regularization of employment and consequently a better factory morale.

[6] New products to keep the factory busy, by Wm. S. Dutton. In Factory, New York, October, 1921, pp. 834–837.

[7] Article by Ernest G. Draper, president of the American Creosoting Co. Quoted in Administration, New York, October, 1921, p. 372.

Procedure of Certain Other Companies.

A COMPANY manufacturing chain belts which had had for a number of years a basic 8-hour day, though actually operating 10 hours a day, abolished the overtime because of the industrial depression and went on a strictly 8-hour day, 44-hour week schedule.[8]

A motor-car company by reducing hours was able to keep its force intact. Maximum production was striven for within these hours, which tended to show up all the weak places in the output problem.[8]

Spreading out the work and rotating jobs in slack periods are, however, ameliorative rather than constructive measures, which fail to eliminate the great waste of man power resulting from underemployment.

A guaranty of a minimum wage for a certain number of hours a week, whether or not this full number of hours is worked, is given by some establishments in one important industry. This, however, can not be regarded as deseasonalizing employment.

Some shoe plants by the manufacture of both staples and novelties have been able to make stock shoes in the dull season, but this, of course, involves a tying up of capital. Experiments in equalizing production have also been made by securing advance information relative to the shoe market, by careful analysis of future sales, and by cooperating with other manufacturing and allied plants. The multiplication of shoe styles, however, and their rapid changes constitute serious impediments to the stabilization of employment in this industry. Some manufacturers have diminished this style hazard by owning their retail trade outlets.

A large organization of dyers and cleaners reports that it has been advertising extensively to induce the public, through arguments emphasizing economy and sanitation, to have cleaning done in dull seasons which usually occur in January and February and in July and August. This association has also inaugurated a campaign to impress upon the public the importance of having school children's garments cleaned in the winter months as a means of preventing children's epidemics which occur so frequently in the early spring. The interest of some of the school boards was secured in this connection.

Mr. Paul M. Atkins, instructor in industrial management in the University of Chicago, has recently made a somewhat extended investigation into the methods used by certain employers to offset seasonal depressions. He reports on the following measures:[9]

Selling books in the dull summer season by sending catalogues to guests at summer hotels; building up, through advertising and all-year-round orders, a steady demand for walnuts, cranberries, citrus fruits, light underwear, and mechanical toys, the orders for all of which products were originally congested in certain seasons; summer fur sales; special slack-period contests for salesmen; recourse to foreign markets, as in the case of farm machinery manufacturers and the California prune growers. Mr. Atkins also makes reference to the establishment of new lines of output, as the canning of baked beans, hominy, and soups in addition to seasonal vegetables; extension of the variety of articles in garment manufacture; and the

[8] Sharpening up dull periods. In Factory, New York, Mar. 15, 1921, pp. 718–723.
[9] Solving the problem of seasonal goods. In Administration, New York, October, 1921.

supplementing of the production of milk cans by the manufacture of coal scuttles. He calls special attention to the resourcefulness in salesmanship of some automobile dealers who clubbed together to purchase a snow plow to clear the road in a certain locality for the purpose of backing up their arguments for the buying of automobiles for winter weather.

Some Difficulties.

IT MUST be conceded that there are often overwhelming obstacles in the way of deseasonalizing employment. The character of ome of these difficulties is suggested in recent reports as to the experience of certain manufacturers. For example, the vice president of a company making goods for the automobile industry, motor manufacturers, and manufacturers in general states that despite the cutting of its prices to a little over the cost of direct labor and material, the firm has not succeeded in stimulating any real demand for its product. Its customers' business being only one-third of normal, this firm feels that it can not expect more than the same fraction of its normal business. This company in the first five months of the year expended more than $100,000 of its surplus in attempting to give employment to its force on a short-time basis, but by June a very great reduction was made in the personnel, a weeding out of the less efficient elements being effected. The bulk of the product of this establishment is made up from customers' specifications. Such specifications are often changed without any warning to the company and any attempt to manufacture such articles "in advance of the customer's expressed needs is suicidal." The sales manager of this establishment has been making efforts for the past year "towards taking a definite stand on seasonal business," but without results. While realizing fully the needlessness and expense of these fluctuations in demand the company is anything but optimistic as to the bringing about in the near future through its sales policy any modification of the striking variations in the production curve.

A firm running malleable iron foundries and chain factories also reports that a considerable portion of its product is "manufactured specifically to fit in certain locations and can not be made for stock."

This company is greatly opposed to taking on supplementary lines in times of depression, regarding this as a deplorable American tendency—"a poaching on the other fellow's preserve, with no ultimate benefit to anyone."

Other authorities suggest extreme caution in taking up supplementary lines of production, especially when these call for a different selling force.[10]

One of the chief officials in a large clothing manufacturing establishment emphasizes the disturbing fact that in nearly all industries "a contract for goods or services is a mere 'scrap of paper.'" This, he adds, is especially the case in industries where the factor of style is accentuated. Contracts are canceled in these industries on the slightest pretext. These cancellations are frequently made with the intention of throwing the stock back on the manufacturer and forcing him to sell the same goods later below production costs. For this reason the original prices asked are considerably higher than they

[10] Administration, New York, October, 1921, p. 479.

would otherwise be. This irresponsibility with regard to contracts makes the manufacturer exceedingly cautious in the matter of advance production.

Another serious impediment to manufacturing for stock is the amount of capital such practice ties up.

These few illustrations will suffice to indicate some of the complications involved in suggested remedies for intermittent employment. Industrial engineering difficulties, however, as difficulties in other lines of engineering, are spurs to achievement.

The Outlook.

WHILE the above-described constructive attempts to stabilize employment are more or less sporadic and in some cases crude, they are significant as pioneer efforts and suggest the lines of future industrial evolution.

Reiterated through recent industrial literature is the conviction of management's power to accomplish much toward the regularizing of employment. The citation of even a few of the many authoritative expressions of this conviction should serve to strengthen still further reliance on management's ability to struggle even more successfully with the deseasonalization of employment. For example, John R. Commons declares in his book, "Industrial Government" (p. 270), that "management can provide security of the job if security is deemed important enough." Again, in the same volume (p. 272), he says, "Capitalism can cure itself, for it is not the blind force that socialists supposed and not the helpless plaything of demand and supply, but it is management."

Prof. Edwin F. Gay, formerly dean of the Harvard Graduate School of Business Administration, is of the opinion "that by private enterprise better organization, better cooperative methods in industry as a whole, more intelligent planning to bring about regularization of industrial processes, much can be done to make employment steadier." [11]

Mr. Samuel A. Lewisohn, a member of the President's Unemployment Conference, in a paper presented at the Harrisburg Industrial Relations Conference, last October expressed himself as follows:

> Whether it be a problem of seasonal or cyclical unemployment, we employers must assume the onus of finding methods to mitigate these conditions. The task of stabilizing industry and employment is mainly ours.

Mr. Morris L. Cooke, engineer in management, thinks that "maximum relief from the evils attendant upon unemployment will come about through a localization of the problem within the individual manufacturing plants. Continuous employment is an absolute prerequisite for constantly lowering costs. In an economic sense all idleness during predetermined hours of work is waste." [12]

In the report of the executive council of the American Federation of Labor to the forty-first annual convention, held in Denver, June, 1921, it is acknowledged that "the progress that has been made in some cases in the development of the science of industrial management shows that it is possible to look forward along this line with

[11] American Association for Labor Legislation Review, New York, June, 1921, p. 29.
[12] Bulletin of the Taylor Society, New York, August, 1921.

some hope of results that will afford justice to the workers and to society at the same time." The report also declares that "industry requires bold and audacious reconstruction of method and process." The committee appointed to consider this report, in calling attention to the importance of this particular passage, refers to "the periods of spasmodic, hectic employment and of deadening, destructive idleness which now alternate in the great basic industries." [13] Organized labor's hope, however, for the establishment of continuity of production through management is coupled with the demand for a voice in such management.

The Secretary of Commerce in his opening address to the President's Unemployment Conference on September 26, 1921, cited as one of the chief means by which the administration hoped to meet successfully the unemployment crisis "the mobilization of the fine cooperative action of our manufacturers and employers * * *." [14]

In view of the weight of the burden of employment adjustment which is being placed on the shoulders of management, it is inspiriting to remember what valuable lessons management may draw from the War Industries Board's experience in national industrial planning and cooperation and from the very important recently published "assay" of the engineers' committee on the Elimination of Waste in Industry. The fact that the President's Unemployment Conference expects to make the most comprehensive report ever made on seasonal and cyclical unemployment, and that the Third International Labor Conference has just authorized an international inquiry and the calling of an international conference on unemployment [15] are guaranties that management will soon have at its command additional scientific data upon which to base constructive programs.

Employment in Selected Industries in November, 1921.

THE Bureau of Labor Statistics received and tabulated reports concerning the volume of employment in November, 1921, from representative establishments in 13 manufacturing industries and in bituminous coal mining.

Comparing the figures of November, 1921, with those of identical establishments for November, 1920, it appears that in 8 industries there were increases in the number of persons employed, while in 6 there were decreases. The largest increase, 74 per cent, is shown in the woolen industry. Men's ready-made clothing shows an increase of 54.1 per cent and hosiery and underwear an increase of 38.3 per cent. The most important decreases are 33.1 per cent in iron and steel and 25.2 per cent in car building and repairing.

Five of the 14 industries show increases in the total amount of the pay roll for November, 1921, as compared with November, 1920, and 9 show decreases. The most important percentage increase, 58.2, appears in the woolen industry. Iron and steel shows a decrease of 64.2 per cent and both car building and repairing and paper making a decrease of 38 per cent.

[13] Proceedings of the American Federation of Labor, 1921, p. 311.
[14] MONTHLY LABOR REVIEW, November, 1921, p. 127.
[15] Daily Intelligence, Geneva, Nov. 19, 1921, p. 17.

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS IN NOVEMBER, 1920 AND 1921.

Industry.	Establishments reporting for November, both years.	Period of pay roll.	Number on pay roll.			Amount of pay roll.		
			November, 1920.	November, 1921.	Per cent of increase (+) or decrease (−).	November, 1920.	November, 1921.	Per cent of increase (+) or decrease (−).
Iron and steel	118	½ month.	185,547	124,147	−33.1	$14,720,283	$5,274,084	−64.2
Automobile manufacturing	53	1 week	114,027	96,854	−15.1	3,295,077	2,702,489	−18.0
Car building and repairing	62	½ month.	71,960	53,816	−25.2	5,232,200	3,242,587	−38.0
Cotton manufacturing	60	1 week	56,819	62,761	+10.5	1,098,086	1,003,229	− 8.6
Cotton finishing	16	do	8,587	11,219	+30.7	177,948	228,821	+28.6
Hosiery and underwear	62	do	22,773	31,489	+38.3	389,320	516,940	+32.8
Woolen	52	do	29,164	50,731	+74.0	680,345	1,076,409	+58.2
Silk	47	2 weeks	17,021	17,957	+ 5.5	699,080	681,458	− 2.5
Men's ready-made clothing	48	1 week	21,379	32,936	+54.1	584,643	894,172	+52.9
Leather manufacturing	36	do	12,845	13,864	+ 7.9	332,218	282,860	−14.9
Boots and shoes	82	do	48,924	62,737	+28.2	1,072,864	1,324,016	+23.4
Paper making	57	do	32,295	25,157	−22.1	970,258	601,781	−38.0
Cigar manufacturing	54	do	16,899	16,738	− 1.0	357,656	286,295	−20.0
Coal mining (bituminous)	103	½ month.	29,688	26,543	−10.6	2,535,672	1,664,411	−34.4

Comparative data for November, 1921, and October, 1921, appear in the following table. The figures show that in 7 industries there were increases in the number of persons on the pay roll in November as compared with October and in 7 a decrease. The largest increases, 7.1 per cent and 5.9 per cent appear in paper making and car building and repairing, respectively. Decreases of 3.5 per cent and 3.2 per cent are shown for automobile manufacturing and silk.

In comparing November, 1921, with October, 1921, 5 industries show increases in the amount of money paid to employees and 9 show decreases. The largest increases are 7 per cent in paper making and 6.2 per cent in iron and steel. Silk shows a decrease of 13.5 per cent and automobiles a decrease of 8.5 per cent.

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS IN OCTOBER AND NOVEMBER, 1921.

Industry.	Establishments reporting for October and November.	Period of pay roll.	Number on pay roll.			Amount of pay roll.		
			October, 1921.	November, 1921.	Per cent of increase (+) or decrease (−).	October, 1921.	November, 1921.	Per cent of increase (+) or decrease (−).
Iron and steel	119	½ month.	118,768	123,920	+4.3	$4,974,236	$5,282,658	+ 6.2
Automobile manufacturing	52	1 week	100,384	96,838	−3.5	2,953,210	2,702,234	− 8.5
Car building and repairing	63	½ month.	50,943	53,964	+5.9	3,091,352	3,251,901	+ 5.2
Cotton manufacturing	59	1 week	62,153	61,981	− .3	968,338	995,048	+ 2.8
Cotton finishing	16	do	11,054	11,219	+1.5	238,740	228,821	− 4.2
Hosiery and underwear	62	do	30,903	32,009	+3.6	530,986	526,475	− .8
Woolen	52	do	51,496	50,731	−1.5	1,052,143	1,076,409	+ 2.3
Silk	48	2 weeks	19,064	18,462	−3.2	807,516	698,647	−13.5
Men's ready-made clothing	52	1 week	34,061	33,293	−2.3	919,680	902,208	− 1.9
Leather manufacturing	36	do	13,248	13,864	+4.6	286,806	282,860	− 1.4
Boots and shoes	83	do	63,463	63,096	− .6	1,376,903	1,335,407	− 3.0
Paper making	59	do	23,668	25,351	+7.1	565,788	605,396	+ 7.0
Cigar manufacturing	57	do	17,596	17,242	−2.0	317,188	293,302	− 7.5
Coal mining (bituminous)	101	½ month.	25,782	26,575	+3.1	1,777,015	1,667,286	− 6.2

In addition to the data presented in the above tables as to the number of employees on the pay roll, 89 establishments in the iron and steel industry reported 101,456 employees as actually working on the last full day of the pay-roll period for November, 1921, as against 148,292 employees for the reported pay-roll period for November, 1920, a decrease of 31.6 per cent. Figures given by 93 establishments in the iron and steel industry show that 98,881 employees were actually working on the last full day of the pay-roll period reported for November, 1921, as against 91,920 employees for the same period in October, 1921, an increase of 7.6 per cent.

Changes in Wage Rates and Per Capita Earnings.

DURING the period October 15 to November 15 there were wage changes reported by some of the establishments in 7 of the 14 industries.

Iron and steel.—One-half of the force of 1 establishment was reduced 20 per cent in wages. A wage reduction of approximately 16 per cent was made to 26 per cent of the men in 1 mill, while almost the entire force of another mill were reduced 15 per cent in wages. Decreases ranging from 10 to 15 per cent were made to all employees in 1 establishment. A 12 per cent decrease, affecting the entire force in 1 establishment and 85 per cent of the force in another establishment, was reported by 2 concerns. A decrease of about 9 per cent was made by 2 concerns, affecting all men in the first concern and 8 per cent of the men in the second concern. Four plants reported a reduction of 8 per cent in rates of wages which affected 60 per cent of the force in 2 plants, 40 per cent in the third plant, and 10 per cent in the fourth plant. In 3 establishments a decrease of 7 per cent was made to 35 per cent, 40 per cent, and 60 per cent of the employees, respectively. Fifty-five per cent of the force in 1 mill was reduced 6 per cent in wages. Improved business conditions were reported for this pay-roll period, and the per capita earnings show an increase of 1.8 per cent when October and November figures are compared.

Automobiles.—In one plant about 3 per cent of the force was granted wage rate increases ranging from 10 to 20 per cent, while 26 per cent of the force had wage reductions ranging from 8 to 12 per cent. A decrease of 10 per cent in rates of wages to 30 per cent of the employees was reported by 1 establishment. Less time was worked in this industry and the per capita earnings for November show a decrease of 5.2 per cent when compared with those for October.

Car building and repairing.—A decrease of 10 per cent in rates of wages to 15 per cent of the force was reported by 1 plant. The per capita earnings for November, when compared with those for October, show a decrease of 0.7 per cent.

Cotton manufacturing.—The per capita earnings for November increased 3 per cent over those for October.

Cotton finishing.—A decrease of 5.6 per cent in per capita earnings was noted when October and November pay rolls were compared.

Hosiery and underwear.—When comparing November per capita earnings with those of the previous month, a decrease of 4.2 per cent was reported.

Woolen.—Improved business conditions were reported for this industry. The per capita earnings were 3.9 per cent greater for November than for October.

Silk.—A wage decrease of 10 per cent was reported by 3 mills, affecting all employees in the first mill and 31 per cent of the employees in the second mill. The percentage of employees affected in the third mill was not stated. In 2 plants a decrease of 8 per cent was made to 90 per cent and 95 per cent of the forces, respectively. Reductions in forces and wages occurred throughout this industry, causing the per capita earnings for November to be lessened 10.7 per cent, when compared with October.

Men's ready-made clothing.—Per capita earnings for November increased 0.4 per cent when compared with October, as work was slack between seasons.

Leather.—A wage rate decrease of 12 per cent, affecting 88 per cent of the force, was reported by 1 tannery. A decrease of 5.8 per cent in per capita earnings was reported for November as compared with October.

Boots and shoes.—An increase of approximately 12 per cent was granted to 4 per cent of the employees in 1 plant. The entire force of another plant was reduced 12½ per cent in wages. One establishment reported a general wage decrease of 10 per cent, while 6 other establishments made reductions of 10 per cent, affecting 60 per cent of the force in 2 establishments, 51 per cent of the force in the third establishment, 26 per cent in the fourth establishment, 10 per cent in the fifth establishment, and about 3 per cent in the sixth establishment. Slight business depression was reported for some of the establishments, and the per capita earnings show a decrease of 2.5 per cent when October and November pay rolls were compared.

Paper.—All employees of 1 establishment were reduced 10 per cent in wages. In 1 mill a decrease of 9 per cent in wage rates was made to about 3 per cent of the men, while in another mill 21 per cent of the men were decreased 5 per cent. Although business conditions were improving generally, a very slight decrease of 0.1 per cent was reported for per capita earnings for November when compared with October.

Cigars.—Curtailed operations caused a decrease of 5.7 per cent in per capita earnings for November as compared with per capita earnings for October.

Bituminous coal.—Mines were working but a small part of their capacity and the per capita earnings for November when compared with those for October show a decline of 9 per cent.

Changes in Employment Reported by United States Employment Service.

THE report of the monthly industrial survey made by the United States Employment Service shows that 1,428 firms in 65 principal industrial centers, usually employing a total of 1,600,000 workers, had 7,219 more employees on November 30 than on October 31. This was an increase of less than one-half of 1 per cent. This

monthly survey is based on actual figures taken from the larger industrial pay rolls of the country.

In the 65 cities from which reports are taken 40 report increases in employment during November, ranging from 0.16 per cent in Newark, N. J., to 22.5 per cent in Peoria, Ill. Decreases in employment are reported in 24 cities, ranging from 0.14 per cent in Camden, N. J., to 10.5 per cent in Los Angeles, Calif.

Industrial classifications showing increases in employment are paper and printing; lumber and its manufacture; vehicles for land transportation; iron and steel and their products; tobacco manufactures; chemical and allied products; stone, clay, and glass products; textiles and their products; metals and metal products, other than iron and steel. The industries which show a decrease are liquor and beverages; railroad repair shops; food and kindred products; leather and its finished products; and miscellaneous industries.

Volume of Employment in the United Kingdom in October, 1921.

THE following statement as to the condition of employment in Great Britain and Ireland in October, 1921, as compared with September, 1921, and October, 1920, has been compiled from figures appearing in the British Labor Gazette for November, 1921. Similar information for July was published in the October MONTHLY LABOR REVIEW.

Employment in October continued bad generally, and there was much unemployment and short-time working in most of the principal industries. When the number of persons employed in September and October are compared, an increase of 49.9 per cent appears in iron mining. Employment in the linen trade was bad, but showed a further improvement as compared with the previous month, an increase of 13.4 per cent being reported. An increase of 8.4 per cent is shown for dock laborers. Returns from cement firms showed a decrease of 11.4 per cent, while for the brick trades a decrease of 5.6 per cent was shown.

Comparing September, 1921, with October, 1921, the earnings of employees show an increase of 37 per cent in the jute trade and 16.2 per cent in the linen trade. The greatest decrease reported—15.1 per cent—appears in the brick trades.

Decreases in the number of persons employed are reported for most of the trades, when comparing October, 1921, with October, 1920. Of the four increases reported, the greatest—10.7 per cent—is shown for seamen. Decreases of 28.6 per cent, 24.3 per cent, and 22.4 per cent are shown in the cement, tailoring, and glass trades, respectively.

The aggregate earnings of employees in October, 1921, as compared with October, 1920, showed but two increases—10.9 per cent in the pottery trades and 0.9 per cent in the boot and shoe trade. Cement trades showed a decrease of 37.7 per cent, while the woolen trade showed a decrease of 34.1 per cent.

VOLUME OF EMPLOYMENT IN THE UNITED KINGDOM (GREAT BRITAIN AND IRELAND) IN OCTOBER, 1921, AS COMPARED WITH SEPTEMBER, 1921, AND OCTOBER, 1920.

[Compiled from figures in the Labour Gazette, London, November, 1921.]

Industries and basis of comparison.	Per cent of increase (+) or decrease (−) in October, 1921, as compared with—	
	Sept., 1921.	October, 1920.
Coal mining:		
Average number of days worked	− 0.4	(1)
Number of employees	− 3.2	(1)
Iron mining:		
Average number of days worked	+ 6.7	(1)
Number of employees	+49.9	(1)
Quarrying:		
Average number of days worked	− 5.0	− 6.7
Number of employees	− 1.9	− 4.7
Pigiron: Number of furnaces in blast	+ 9.4	+16.7
Iron and steel works:		
Number of employees	− 1.7	−11.2
Number of shifts worked	− 4.5	−17.4
Tin-plate, steel, and galvanized sheet trades: Number of mills in operation	+ 8.3	− 5.1
Cotton trade:		
Number of employees	+ 3.5	− 2.2
Earnings of employees	+ 6.9	− 6.4
Woolen trade:		
Number of employees	+ 3.1	−19.3
Earnings of employees	+12.4	−34.1
Worsted trade:		
Number of employees	+ 2.4	− 9.6
Earnings of employees	+ 6.7	−17.3
Hosiery trade:		
Number of employees	+ 3.2	−14.3
Earnings of employees	+ 1.0	− 9.3
Jute trade:		
Number of employees	+ 6.1	−14.0
Earnings of employees	+37.0	−15.6
Linen trade:		
Number of employees	+13.4	−16.4
Earnings of employees	+16.2	−22.9
Silk trade:		
Number of employees	− 4.5	−19.7
Earnings of employees	+ 1.3	−28.8
Carpet trade:		
Number of employees	+ .6	− 6.6
Earnings of employees	+ 3.5	−19.3
Lace trade:		
Number of employees	+ 2.0	−18.4
Earnings of employees	+ 5.1	− 1.1
Bleaching, printing, dyeing, and finishing:		
Number of employees	+ 2.8	−10.8
Earnings of employees	+ 9.8	−19.6
Boot and shoe trade:		
Number of employees	+ .8	− 5.2
Earnings of employees	− 1.3	+ .9
Leather trades: Number of employees [2]	+ .4	− 3.2
Tailoring trade:		
Number of employees	− 3.6	−24.3
Earnings of employees	−13.7	−20.4
Shirt and collar trade:		
Number of employees	+ 2.6	−21.4
Earnings of employees	+ 4.6	−19.8
Other clothing trades:		
Dressmaking and millinery—Number of employees	+ 3.7	−12.8
Wholesale mantle, costume, blouses, etc.—Number of employees—		
London	− .6	+ .2
Manchester	+ 4.1	− 5.4
Glasgow	(1)	(1)
Corset trade—Number of employees	+ 3.5	−14.4
Woodworking and furnishing:		
Number of employees [2]	+ 1.0	− 6.4
Brick trade:		
Number of employees	− 5.6	+ 4.3
Earnings of employees	−15.1	− 8.3
Cement trade:		
Number of employees	−11.4	−28.6
Earnings of employees	−13.9	−37.7
Paper, printing, and bookbinding trades:		
Paper trades—		
Number of employees reported by trade-unions [2]	(1)	(1)
Number of employees reported by employers	+ 1.0	−16.2
Earnings of employees reported by employers	+ 3.0	−27.7
Printing trades—		
Number of employees reported by trade-unions [2]	− .4	− 5.6
Number of employees reported by employers	+ 2.3	−11.2
Earnings of employees reported by employers	+ 1.2	−13.6
Bookbinding trades—		
Number of employees reported by trade-unions [2]	+ .6	− 7.9
Number of employees reported by employers	− .8	−14.1
Earnings of employees reported by employers	− .9	−20.7
Pottery trades:		
Number of employees	− 1.2	+ 1.3
Earnings of employees	− 1.5	+10.9
Glass trades:		
Number of employees	− 1.7	−22.4
Earnings of employees	− 5.8	−33.6
Food-preparation trades:		
Number of employees	+ .1	− .6
Earnings of employees	− .5	− 5.5
Dock and riverside labor: Number of employees	+ 8.4	−14.9
Seamen: Number of employees	− 5.2	+10.7

[1] No figures.

[2] Based on unemployment.

Report of Employment Exchanges in the United Kingdom.

AS REPORTED by the British Labor Gazette for November, 1921, the operations of the employment exchanges for the five weeks ending October 7, 1921, are summarized as follows: The average daily number of applications from workpeople during the five weeks was 24,773; of vacancies notified, 3,010; and of vacancies filled, 2,410. This means 8 applications for every vacancy and 10 applications for every vacancy filled.

When comparing the daily average of applications from workpeople for September and October, an increase of 7.4 per cent is reported; while the daily average of vacancies notified and vacancies filled showed increases of 11.7 per cent and 9.8 per cent, respectively.

The average daily number of applications from adults was 22,364—16,917 men and 5,447 women. There were 2,571 average daily vacancies reported—1,531 men and 1,040 women. The average number of positions filled daily, when compared with the previous month, showed an increase of 24.9 per cent among men, while in the case of women there was a decrease of 4.8 per cent.

Increases occurred in the number of vacancies notified for men in the building, construction of works, commercial and clerical occupations, shipbuilding, and general laborer groups; there were decreases in engineering and iron founding, domestic service, the transport trades, and dress (including boots and shoes) groups.

With reference to juveniles, 37,249 applications were received from boys and 5,337 vacancies were notified for boys. Of the vacancies notified, 4,650, or 87.1 per cent, were filled.

The number of applications received from girls was 35,031. The number of vacancies notified was 7,827, of which number 6,450, or 82.4 per cent, were filled.

Of the total vacancies (11,100) filled by juveniles, 1,730, or 15.6 per cent, were filled by applicants who obtained their first situation since leaving school.

The following table shows for men and for women the number of applications from workpeople, vacancies notified, and vacancies filled during the five weeks ending October 7, 1921.

APPLICATIONS FROM WORKPEOPLE, VACANCIES NOTIFIED, AND VACANCIES FILLED DURING THE 5 WEEKS ENDING OCT. 7, 1921.

Group of trades.[a]	Applications from workpeople.		Vacancies notified.		Vacancies filled.	
	Men.	Women.	Men.	Women.	Men.	Women.
Building	62,352	.....	7,248	.....	6,194	.....
Construction of works	9,214	.....	12,669	.....	11,484	.....
Engineering and ironfounding	106,048	4,270	1,773	148	1,589	128
Shipbuilding	37,370	.....	2,012	.....	1,756	.....
Construction of vehicles	4,054	.....	112	.....	72	.....
Miscellaneous metal trades	38,637	5,066	214	238	181	166
Domestic service	6,154	39,197	636	21,599	468	12,995
Commercial and clerical	9,891	9,117	1,291	867	585	689
Conveyance of men, goods, and messages	51,572	3,988	1,904	447	1,707	406
Agriculture	2,920	369	958	531	855	538
Textiles	26,050	52,300	574	2,265	495	1,919
Dress (including boots and shoes)	7,096	17,295	412	2,756	329	1,739
Food, tobacco, drink, and lodgings	5,868	5,839	457	456	400	352
General laborers	42,273	3,243	10,685	223	10,294	206
All other trades	98,000	22,733	4,996	1,672	4,530	1,118
Total	507,499	163,417	45,941	31,202	40,939	20,256

[a] Casual occupations (dock laborers and coal laborers) are excluded from this table and from all other figures above. The number of casual jobs found for workpeople in these occupations during the period of 5 weeks ending Oct. 7, 1921, was 2,442.

Remedial Measures for Unemployment in Great Britain.[1]

BECAUSE of the increasing seriousness of the unemployment situation the British Parliament which reconvened on October 18, 1921, entered immediately upon a discussion of Government proposals for dealing with it. The Government's plans for relieving the distress due to the unemployment of a large number of workers were outlined in the House of Commons by the premier on October 19, 1921, and provided for direct assistance through special grants to the unemployed, and for indirect relief through the stimulation of trade.

The Government proposals in brief included: (1) A temporary fund for the dependents of the unemployed; (2) the allocation of £10,000,000 ($48,665,000, par) for relief works consisting of afforestation, land drainage schemes, and further road schemes; (3) an additional grant of £300,000 ($1,459,950, par) "to enable ex-service men and women to emigrate"; and (4) an extension, not to exceed £25,000,000 ($121,662,500, par) of the export credit scheme and the supply of loans to industry for employment at home. Following the announcement of the Government's relief plans remedial legislative measures were introduced and adopted. They include the trade facilities act; unemployed workers' dependents (temporary provision) act 1921; local authorities (financial provisions) act; and the poor law emergency provisions (Scotland) act.

The trade facilities act, which became a law on November 10, 1921, has two main objects: (1) To facilitate the granting of export credits; (2) to promote credit for home industries. As regards export trade the act extends and amplifies the provisions of the overseas trade (credits and insurance) act of 1920 and the amending act of July,

[1] Labour Gazette, London, Nov., 1921, p. 570.

1921, so that credits which previously could be granted only to certain European countries may now be extended to other foreign countries and the British dominions. For this purpose the Government agrees to set aside £25,000,000 ($121,662,500, par) and for 12 months after the act becomes operative the treasury is empowered to guarantee the payment of loans to be applied toward the "carrying out of any capital undertaking, or in the purchase of articles manufactured or produced in the United Kingdom for the purposes of the undertaking," provided the treasury is satisfied that such loans are "calculated to promote employment in the United Kingdom."

Moreover, under the provisions of the act an additional sum of £5,500,000 ($26,765,750, par) is allotted to general unemployment relief for the financial year ending March 31, 1922, with an estimated further sum of £630,000 ($3,065,895, par) for the next financial year. This money may be expended, with the approval of the treasury, in the development of schemes for the employment of labor upon land improvement and drainage, forestry, roads, and light railways, as well as in loans to boards of guardians and parish councils which are unable to meet the calls upon them for relief. The Government will also contribute a share of the interest and other charges on loans incurred in the carrying out of approved public works undertaken by local authorities to relieve the present emergency in unemployment, amounting to 65 per cent of the annual interest and loan repayment charges in case of nonrevenue producing works and 50 per cent in the case of revenue producing works.

The local authorities (financial provisions) act, applying only to England and Ireland, increases the charges which the boards of guardians may make against the metropolitan common poor fund in the London area for the maintenance of indoor paupers, throws the cost of all outdoor relief upon the poor fund instead of upon individual unions until December 31, 1922, and authorizes local authorities to borrow approved sums to meet temporary emergencies. The poor law emergency provision (Scotland) act provides that parish councils in Scotland may until May 15, 1922, and under certain circumstances until May 15, 1923, grant poor relief to destitute able-bodied persons who have no employment, a procedure followed only under exceptional circumstances.

The unemployed workers' dependents (temporary provisions) act, which became a law November 8, 1921, applies to Great Britain and Ireland, and establishes a new fund called the unemployed workers' dependents fund from which, for a period of six months beginning November 10, 1921, wives, dependent husbands, and dependent children of unemployed workers insured under the unemployment insurance act receive 5s. ($1.22, par) a week in case of the wives or invalid husbands and 1s. (24.3 cents, par) a week in case of each dependent child, the total weekly grant not to exceed 9s. ($2.19, par). This fund is to be maintained by a compulsory levy upon each insured contributor as follows: Men, 2d. (4.06 cents, par); employer, 2d. (4.06 cents, par); State, 3d. (6.08 cents, par). Women, boys and girls, 1d. (2.03 cents, par); employer, 1d. (2.03 cents, par); State, 2d. (4.06 cents, par). The estimated cost of the State's contribution to this fund for the current financial year is £2,192,000 ($10,667,368, par); for the next financial year, £670,000 ($3,260,555, par).

In addition to the passage of specific acts relating to the unemployment situation, the Government has set aside £330,000 ($1,605,945, par) toward providing passage for ex-service men and women and their dependents to the overseas dominions where they have been accepted as approved settlers. It is also estimated that £563,000 ($2,739,840, par) will be necessary for Government works and contracts, while a further sum of £2,000,000 ($9,733,000, par) will be available for the building and upkeep of roads. This amount the Ministry of Transport will endeavor to use to relieve unemployment in districts needing such assistance. To ease the position of workers who are insured under the national health insurance acts and whose insurance lapses on the completion of 12 months of unemployment the acts have been amended to provide for the continuance of insurance in the cases of those persons who can show that their lack of work has been due to inability to obtain employment and not to a change of normal employment. This act is retroactive to December 31, 1920, and will continue until December 31, 1922. The payment of the funds will fall on private societies, the national exchequer making only its normal statutory contribution.

Employment and Training of Ex-Service Men in Great Britain.[1]

THE employment of British ex-service men under the "Nationa scheme," an account of which appeared in the January, 1920, issue of the MONTHLY LABOR REVIEW (p. 205), still continues, and up to and including November 10, 1921, 28,926 employers had enrolled under the scheme, while 364,866 disabled ex-service men had been given positions. On the first of November there were 22,533 ex-service men receiving industrial training and 36,753 ready for training. Since August 1, 1919, 44,162 men have completed training courses.

[1] Labour Gazette, London, Nov., 1921, pp. 571, 572.

INDUSTRIAL HYGIENE AND DISEASES.

Cancer from Handling Anthracene Cake in the Dye Industry.

THE use of anthracene, which is the starting point of the alizarine dye industry, has been shown by W. J. O'Donovan,[1] writing in the British Journal of Dermatology and Syphilis, to be capable of producing cancer of the skin among workers handling the crude anthracene cake. Anthracene, a product of the distillation of coal tar, is delivered to the factory where the three patients reported in this article worked in the form of cake which is unloaded by hand and broken down, exposed to steam, and washed with solvent naphtha mixed with pyridene bases; the product is then distilled with potash and lime, washed with solvent naphtha, and finally sublimed.

The three cases reported were brought to the writer's attention within a period of about four months, and in a factory employing only about 25 men this was considered by him as "a heavy incidence of a grave industrial disease."

The first case was that of a man 62 years old who had been employed for five years in unloading boxes and sacks containing the raw cake. On the back of the right wrist was an ulcer with raised edges which proved to be a scaly and horny-celled carcinoma. The growth which was removed had started as a small wart six months previously. His forearms also showed much dilatation of the capillaries and small blood vessels and follicular keratoses, a form of acne. The second case occurred in a man aged 53 who had worked for 30 years in the same factory. A cancer of the same nature had appeared on his right cheek three months before and had grown very rapidly. Under treatment by radium it entirely disappeared. The third case was that of a man 59 years of age who had worked in the factory 32 years, and who had developed an ulcer on the right wrist 4 years previously. This ulcer had developed rapidly in the preceding six months and upon excision was found to be a cancer of the same nature as in the other two cases.

All the men working in this factory who in any way handled the crude anthracene showed a deep staining of the hands and faces. The hands were stained a deep brown, sometimes almost green, with very swarthy faces and necks and there were also acne papules on their necks and forearms.

The writer is quoted as summing up the disease and its causes as follows:

1. Elderly anthracene workers are liable to carcinomata of the skin similar to those found in chimney sweeps and in tar, creosote, and paraffin workers.

[1] Boston Medical and Surgical Journal, Dec. 1, 1921, pp. 662, 663. The Journal of Industrial Hygiene, Dec., 1921, pp. 187, 188.

2. These growths are squamous and horny-celled carcinomata; metastases have not been found.

3. Unlike tar cases, a multiplicity of growths in one patient was not met with. Four years was the longest and three months the shortest duration of the growths.

4. Minor lesions, acne, keratoses, telangiectases, and pigmentation are common features in workers on the plant.

5. A plant may run for 35 years before a carcinoma case develops.

6. The handling of purified anthracene does not appear to have the industrial hazard attributed to the handling of anthracene cake.

Skin Disease Among Zinc Oxide Workers.[1]

THE effects of zinc oxide dust in causing a troublesome dermatitis were observed recently in a zinc oxide manufacturing plant in the course of an investigation of the effects of inhaling zinc oxide dust. In the plant investigated the workers called the disease "oxide pox" presumably because of its similarity in appearance to the eruption of smallpox.

Zinc oxide, which is used medically in salves and pastes and industrially in the manufacture of paint, is made by roasting in a furnace zinc ore mixed with fine anthracite coal. The fumes from the furnace are conveyed to a bag room where two occupational groups, shakers and truckers, are employed. A considerable quantity of zinc oxide escapes through the meshes of the bags, and the men, who work in ordinary clothing, take no precautions whatever to protect themselves from the dust. In the packing department, also, where there are three occupational groups, packers, tailors, and repairmen, the workers are exposed to large quantities of the dust, which covers their clothes and their bodies.

Of the 17 men examined who are exposed to the oxide dust in the bag-room and packing departments all but 3 gave a history of having had attacks of "oxide pox" and 8 were suffering from the affection at the time of the investigation. The men had been employed for varying periods so that the length of employment did not seem to play any part in the occurrence of the disease. "Oxide pox," which is caused by a clogging of the sebaceous glands with zinc oxide and by subsequent bacterial infection, occurs in different parts of the body, chiefly where there is a rubbing together of two body surfaces and the action of the irritant is aided by free perspiration. The disease is most prevalent in summer, although six of the men claimed they were affected regardless of the season but that it was more troublesome in the summer months. The eruption, which is of a papular-pustular character, is accompanied by intense itching and usually persists for a week or 10 days, gradually subsiding and drying up, and is then followed by a slow but marked peeling of the skin. The cases studied showed no signs of systemic disturbances and no time was lost from work although the disease caused considerable discomfort.

[1] An occupational dermatoconiosis among zinc oxide workers, by Dr. John A. Turner. In Public Health Reports, November 4, 1921. Pp. 2727-2732.

A chemical analysis of zinc oxide shows that it is a nontoxic substance in which adulterating substance is so small as to be harmless, but it is capable of acting as a mechanical conveyor of bacteria. It was found to be the general opinion among the workmen that the occurrence of the disease depends entirely on personal cleanliness and if daily baths are taken no trouble is experienced. The precautions recommended by the author to be followed in eliminating the disease are as follows:

1. Special work clothes of a close weave of cloth, made to fit snugly at neckband, wristband, and ankles, should be worn in order to prevent the dust from coming in contact with the body.
2. The work clothes should be frequently cleaned.
3. Old muslin and collecting bags that are to be repaired should first be thoroughly cleaned.
4. Suitable washing, bathing, and change-room facilities should be provided so that the workers can bathe at the close of the work day.
5. Lack of attention to personal hygiene is a prime factor in the causes of this disease, and the workmen should be instructed in this respect.
6. The workmen should be advised to report immediately the presence of the disease as soon as it is detected.

Protection of Health of Adolescent Children in Industry.[1]

THE need for greater attention to the health of adolescent workers which has received only negative consideration in the child-hygiene activities of recent years is pointed out by Dr. Mitchell, who states that although some health work has been done in high schools, little or none has been done in continuation schools up to the present time. As three-fourths of the young people of 16 years of age, it is estimated, leave school for employment and from one-fifth to one-half of those 14 and 15 years of age, the need for constructive health service work for these young persons is evident. Such service would not only give these workers a better start in their careers, but it would also furnish the opportunity for studying the relation of specific forms of employment to the health of the worker, since there is now little definite knowledge as to the physical effects of industry upon adolescents.

In addition to the fact that adolescence presents a crisis in the lives of most young people during which many serious disorders may develop, there is also frequently a lack of proper medical attention and acquisition of habits of personal hygiene during childhood which results in a weakened and undernourished condition when the period of adolescence is reached. This condition of limited energy at a time of such extensive physical and mental changes with the added fatigue and perhaps overexertion connected with industrial work may lead to a collapse resulting in physical incompetence and economic dependence.

While the majority of children survive this crisis many come through it with definite handicaps. The great acceleration of growth in height and weight and of motor power and function during this period has been shown through experiments by various investigators,

[1] The need for special health protection of employed adolescents, by Harold H. Mitchell, M. D. The American Journal of Public Health, November, 1921, pp. 973-978.

and in general the conclusion is reached that the greatest development of physical power occurs between 15 and 19 years, the most rapid gain being fixed by most of the writers between the ages of 16 and 18. Altogether it seems safe to assume that the age period at which from 20 to 75 per cent of the children leave school to go to work is marked by such decided physical changes as to make very special demands on the vitality of the child. Lack of adequate protection from strain and hazards affecting the health and normal physical development of these young persons may be expected to show in morbidity statistics, and various investigations in Europe and the United States show a high rate of sickness between the ages of 15 and 20 and a high death rate was found to prevail in this country among young persons employed in cotton mills and in the printing industry.

Eighteen States have laws requiring a physical examination of each child entering employment between the ages of 14 and 16, while 10 other States recognize the need of health protection but do not specify that a physician must examine the child in all cases. The author suggests that the next step in the attempt to safeguard these workers should be a test of the efficiency of the single examination as a method of health protection. The need for periodic examinations could be tested by examinations of children in the continuation schools and valuable information could be gained of the relation of various kinds of employment to the health of the young worker by the proper recording and use of the data thus obtained.

Dust Reduction by Wet Stopers.[1]

IN A study of air conditions in mines under dry and wet drilling by D. Harrington, supervising engineer in the United States Bureau of Mines, it was found that the worst conditions of air dustiness obtain in the drilling of upper holes. The use of machines with water injection through the drill for crosscutting and driving controls the dust for practically horizontal holes or those inclining downward, while if the hammer type of dry drill is used for this work the dust is as great or even greater than in the dry drilling of upper holes with the stoper type of drill, a small air or electric drill usually mounted on an extensible column for working stopes (excavations which assume the shape of a flight of steps), raises, and narrow workings.

The study was carried out in two mining regions of the West, and samples of air taken under the different conditions of drilling in one of these sections showed that the hammer type of machine produced 345.1 milligrams of dust per cubic meter of air; dry drilling of upper holes by stopers produced an average dustiness of 208.3 milligrams per cubic meter, and wet drilling of approximately horizontal holes an average of 9.3 milligrams of dust. The average amount of dust when shoveling in these mines was found to be 17.7 milligrams per cubic meter of air as against the maximum allowable dustiness of South African mines of 5 milligrams. The use of external sprays

[1] Reports of investigations. Bureau of Mines, Nov., 1921. Serial No. 2291.

when properly used was found to result in considerable reduction in the amount of dust but not to a sufficient degree to make the dust content of the air safe for the workers, and when the sprays were used in a careless manner the dust breathed by the worker was actually greater with the spray than without it.

Opposition to the introduction of wet stoper drills is usually met with from the miners, who say they prefer to "swallow" the dust rather than to become crippled with rheumatism from the water, but with proper care this difficulty can be largely eliminated, and experience has shown that those who had been most opposed to their use became their strongest advocates, contract miners accustomed to the machines demanding them for use in raises and stopes. The writer concludes that the advantages gained from the use of wet stopers far outweigh the disadvantages, such as greater weight, higher first cost and upkeep, and probability of the drillers getting wet, and that the health feature alone should cause the elimination of dry drilling.

WORKMEN'S COMPENSATION AND ACCIDENT INSURANCE.

Annual Reports of the New York Workmen's Compensation Bureau and the State Insurance Fund, 1920.

THE annual report of the Industrial Commission of New York for the year ending June 30, 1920, presents as a part thereof the sixth annual report of the Bureau of Workmen's Compensation. It also presents a report of the State Insurance Fund for the calendar year 1920.

During the history of the compensation law, the bureau had adjudicated some 350,000 cases, bringing together "such a wealth of material that a complete study of it would undoubtedly reveal most of the laws which obtain in compensation matters." The bureau again pleads for an appropriation adequate to permit a statistical development of this material, which is felt to be of great importance and interest but unavailable for lack of funds to employ the necessary staff for its elaboration. During the fiscal year 345,672 accidents were reported of which 1,236 resulted fatally. The number of claims submitted was 53,512, besides which were 12,206 agreements. Heretofore, except for the first year, the number of claims has been less than the number of agreements, but the law now requires a consideration of all cases by the bureau, hence the change in ratio. "The very flower and essence of the New York plan outstanding among all plans of handling compensation cases is direct contact with the person injured."

Emphasis is laid upon the development of the important subject of rehabilitation, which has hitherto been referred to as desirable, but is now a reality. Cooperation with the Federal system has been arranged for, besides the State's own separate activity in this field. Approximately $400,000 per year is made available, which it was felt would adequately inaugurate the system and enable a determination of the best lines of activity.

The inclusion of occupational diseases is favorably noted, but disappointment is felt at the restricted coverage. It is recommended that instead of enumerating the diseases to be compensated all should be included without definition, unless certain diseases should be named as not to be so regarded.

Another legislative point noted is the exclusion of maritime and admirality cases resulting from the decision of the United States Supreme Court in the case of Knickerbocker Ice Co. *v.* Stewart, which declared unconstitutional the Federal amendment permitting the application of State laws to admiralty cases. There is felt to be an urgent necessity that Congress should "enact Federal legislation so that this numerous body of workmen engaged in these hazardous

occupations may be restored to the salutary rights and benefits of the law of workmen's compensation."

The success that has attended the efforts of the bureau to secure a general compliance with the law requiring employers to insure their liabilities under the act is indicated from the following: From March, 1918, to the end of October, 1919, there were 19,500 employers reported as not insured. Of these 3,000 were found to be erroneously reported and 14,300 secured insurance, leaving 2,200 not cleared up. For the eight months following 4,500 persons were reported without insurance of whom 4,274 secured insurance up to October 15, 1920, leaving 226 cases pending and under investigation. These figures relate to New York City alone; the up-State figures are less satisfactory owing to an inadequate force.

Among the amendments recommended are an increase of the compensation rate to 75 per cent of the wages, an increase of the wage basis from $125 to $150 per month; a reduction of the waiting period to 10 days, though 7 was said to be the better period; the classification of such injuries as heat prostration, sunstroke, frost bite, caisson diseases, anthrax, lead poisoning, etc., as accidents per se to be regarded as arising out of the employment if they arise in its course, provided that the nature of the employment was such that it was the source of such injuries. More drastic is the proposal to make accidents compensable if they arise "in the course of employment" instead of "out of and in the course of employment." The present limitation is said to be too narrow, since many accidents are attributable to the employment which do not flow from it as a natural or reasonable expected sequence. The present form is one which gives rise to a large amount of dispute and litigation, and its removal would greatly simplify the administration of the law and would be in line with a "sound social policy and a generous view of things as they should be."

The State insurance fund reports 9,305 members on December 31, 1920, increased from 8,402 at the beginning of the year (erroneously reported last year as being 9,949). There were 2,486 new policies issued and 1,583 cancelled, a net gain of 903. Earned premiums for the year amounted to $3,573,047, an increase of $146,743 over the previous year. The most notable competition during the year was in self-insurance, the chief losses in business, so far as premiums are concerned, being due to the withdrawal of a small number of large risks to become self-insurers. Premium rates in the fund are about 85 per cent of the rates of other carriers, with an expense ratio for administration for the year of 10.8 per cent.

The fund showed assets at the end of the year amounting to $7,955,639.53, of which $6,533,454 was reserve and $1,422,185.53 was surplus.

German Workmen's Accident Insurance Statistics, 1919.[1]

THE report of the German National Insurance Office (*Reichsversicherungsamt*) on workmen's accident insurance for the year 1919 is not comparable with reports for previous years owing to the loss of territories by Germany and also because a number of trade accident insurance associations (*Berufsgenossenschaften*) have not yet made complete returns.

The total number of trade accident insurance associations was 117 in 1919. Of these, 68, with 8,500,000 insured persons, were industrial associations, 48, with 16,000,000 insured persons, were agricultural associations, and 1 was a marine accident insurance association. In addition, 571 administrative authorities of the State, communes, and communal unions acted as carriers of workmen's accident insurance for 1,400,000 insured persons. The number of persons subject to industrial accident insurance was 9,700,000, composed of persons insured with the trade accident insurance associations and with the administrative authorities. The persons subject to agricultural accident insurance numbered 16,200,000 and those subject to marine accident insurance numbered 90,000. Compared with the preceding year the number of persons insured with industrial trade associations has increased by about 870,000, or 11 per cent, and that of persons insured with agricultural associations by about 40,000, or 0.25 per cent, while the number of persons insured with administrative authorities has decreased by 38,000, or 2.6 per cent. The administrative staff of the insurance carriers has remained practically the same in numbers with one significant exception: The number of technical supervisory officials (insurance inspectors), who are of such importance with respect to accident prevention, has decreased from 441 to 282.

Owing to large salary increases granted to the administrative staff of the insurance carriers the costs of administration have, of course, greatly increased, while the amount of accident compensations paid out has not undergone any considerable change. In 1918 the disbursements for accident compensation of the 117 trade accident insurance associations formed three-fifths of the total disbursements and in 1919 only two-fifths. The disbursements for accident compensation have only increased from 173,000,000 marks to 187,000,000 marks ($41,174,000 to $44,506,000, par) and the costs of care of injured persons within the legal waiting time from 1,000,000 marks to 1,400,000 marks ($238,000 to $333,200, par). The costs of administration, on the other hand, have increased from 35,000,000 to 58,000,000 marks ($8,330,000 to $13,804,000, par), those of accident prevention from 2,250,000 to 4,333,333 marks ($535,500 to $1,031,333, par), the costs of adjustment of claims amounted to 500,000 marks ($119,000, par), and the costs of accident investigations, supervision of pensioners, etc., have increased from 4,666,666 to nearly 6,000,000 marks ($1,110,666, to $1,428,000, par).

The total amount disbursed in compensation by all insurance carriers was 209,000,000 marks ($49,742,000, par) in 1919 as against 192,000,000 marks ($45,696,000, par) in the preceding year. With

[1] Soziale Praxis und Archiv für Volkswohlfahrt. Vol. 30, No. 44. Berlin, Nov. 2, 1921.

the exception of the year 1915, the total amount of disbursements for compensation has continuously increased from year to year.

The number of accidents decreased in 1919. A total of 575,000 accidents was reported, as against 657,000 in 1918. The number of accidents compensated for the first time was 104,000 in 1919 as compared with 107,000 in the preceding year. Among the compensated accidents were 10,000 (11,000 in 1918) fatal accidents and 609 (626 in 1918) involving permanent total disability.

The number of survivors of fatally injured persons, who in 1919 were for the first time in receipt of pensions, decreased from 18,200 to 17,700. Among them were 6,400 widows or widowers, 10,700 children and grandchildren, and 550 ascendants. The number of injured persons has steadily decreased since 1912. There were 6.79 persons per 1,000 insured against industrial accidents who received accident compensation for the first time in 1919, as against 7.85 in 1918, 7.50 in 1917, and 7.14 in 1916.

Very instructive are the data compiled by the National Insurance Office as to the relative costs of the administration of the insurance. In some trade accident insurance associations the relative costs have changed very little, while in others they have undergone extraordinary changes. In the association covering the manufacture of fine machinery, instruments of precision, etc., for instance, the costs of administration in 1919 per 1,000 marks ($238, par) wages amounted to 0.72 mark (17.1 cents) as against 0.48 mark (11.4 cents, par) in 1918, and in the association covering the musical instruments industry to 1.43 marks (34 cents, par) as against 1.70 marks (40.5 cents, par) in 1918. Computed per insured person the costs of administration in the same two associations amounted in 1919 to 2.68 marks (63.8 cents, par) as against 1.36 marks (32.4 cents, par) in 1918, and 3.22 marks (76.6 cents, par) as against 1.73 marks (41.2 cents, par) in 1918, respectively. In trade accident insurance associations in which the costs of administration per insured person underwent little change, as, for instance, in the association covering the paper industry, in which they amounted to 2.40 marks (57.1 cents, par) as against 2.28 marks (54.2 cents, par) in 1918, they have decreased considerably if computed per 1,000 marks ($238, par) wages, in this instance from 1.51 to 0.96 marks (35.9 to 22.8 cents, par).

It is a striking phenomenon that in a few trade associations the costs of administration have considerably decreased not only if computed per 1,000 marks of wages but also if computed per insured person. In the association covering the Saxon woodworking industry they have fallen from 7.08 to 2.74 marks ($1.69 to 65.2 cents, par) per insured person, in the association covering the building trades of the Magdeburg district from 2.81 to 2.66 marks (66.9 cents to 63.4 cents, par), and in the association covering the building trades in Thuringia from 5.34 to 3.63 marks ($1.27 to 86.3 cents, par). If computed per 1,000 marks wages this means a decrease of the costs of administration from 4.60 marks to 1 mark ($1.09 to 23.8 cents, par), 2.82 to 1.88 marks (67.1 cents to 44.7 cents, par), and 4.33 to 1.74 marks ($1.03 to 39.1 cents, par), respectively.

Unemployment and wage fluctuations in the individual industries exert their influence upon these figures, and decreases in the costs of administration are above all explained by the fact that in 1918 the

number of insured persons was relatively very small. Decreases in the costs of administration, however, point out another fact, namely, that great savings can be achieved by combination of administrations.

Annual Report of Ontario Workmen's Compensation Board, 1920.

THE sixth annual report of the Workmen's Compensation Board of Ontario covers the year 1920. During the year benefits were awarded amounting to $7,780,145.25, a gain of approximately $3,600,000 over the preceding year. This increase is largely due to increased benefits provided for by amendments to the act, and particularly by reason of increases in death benefits payable for accidents happening in previous years, this alone accounting for $2,289,249.55.

The number of accidents reported during the year amounted to 54,851 as against 44,260 for the previous year. Of these 452 were fatal, as against 429 in 1919 and 440 in 1918.

Though the rates were materially increased, bringing the Ontario law well to the front as regards liberality (disabilities are compensated on a 66⅔ per cent basis), the burden has not proved excessive. "The absence under our State-administered collective liability system of the large overhead charges and profits necessarily incidental to insurance systems of other places, and the reduction of expenses to a minimum, explain the difference" between the conditions in Ontario and those existing elsewhere. Only 1.55 per cent of the assessments collected during 1920 went for expenses; the average premium rate for all industries was $1.25 per hundred dollars' pay roll.

Two systems of compensation are provided by the Ontario law, schedule 1 establishing what is called the collective liability system, which is in brief a State insurance fund. Employers under schedule 2 are self-insurers, who contribute, however, to certain administrative expenses. The report strongly recommends the abolition of schedule 2, and the placing of all industries upon the same footing. Its establishment was originally for purposes of comparison, and "experience leaves no doubt of the many advantages and general desirability of the schedule 1 system." If this step is not taken, at least the full capitalized value of all pensions awarded should be paid into a fund that would act as a safeguard against future insolvency or other loss of paying capacity of the employer whose liability may extend far into the future.

Of the compensation awarded during the year all but $1,963,389.82 was under schedule 1. There was also paid under schedule 1 the sum of $703,705.66 as medical aid, being about 13.8 per cent of the compensation awarded. The amount of medical aid under schedule 2 is not known, being furnished directly by the employer.

The average cost of all compensated accidents aggregated $163.99 per case, of which $144.14 was for compensation and $19.85 for medical aid.

Accident data and financial statements are reported according to industry classes, 34 in number. Details are worked out for the year 1919, the cases for 1920 not being sufficiently completed for final

presentation. Of the 32,629 accidents in schedule 1 in 1919, 11,769 called for medical aid only, while 18,476 received compensation for temporary disability, and 2,157 suffered permanent disability in some degree, while there were 227 deaths. The total loss of time, inclusive of cases of death and permanent disability, is given at 511,674 days, the average for temporary disability cases being 19.66 days. Other tables show the month of occurrence of accidents, geographical location, time loss, average age, and wage of injured workers, total and average compensation, medical aid costs, allegiance, sex, and marital condition of injured workers, duration and nature of injuries, causes of accidents, etc.

Of 18,476 cases of compensated temporary disability in schedule 1, 8,629 terminated in 1 to 2 weeks after the accident, 3,762 in 2 to 3 weeks, 2,093 in 3 to 4 weeks, and 1,255 in 4 to 5 weeks, thus accounting for 15,739 cases, or more than 85 per cent of the total. But 8 cases extended beyond the year, and but 50 beyond six months.

The wage expenditure on which premiums were based in 1919 was $325,225,970.37, with net receipts of $3,959,930.32. The funds are classified by industry groups, many of them showing a deficit for the year 1919, the net deficit being $650,203.70. This is due to the fact that retroactive increases of benefits affecting prior accidents were charged to that year. Deducting this deficit from the balance brought forward from the preceding year left, however, a balance to be carried forward of $441,311.78. The present status of the fund is that all retroactive increases in benefits have been provided for, the year 1921 starting without any burden for prior accidents. A provisional statement of income and expenditures for schedule 1 by classes for the year 1920 indicates a favorable provisional balance in all but 4 classes, the net provisional balance being $818,818.36.

An interesting section of the report is devoted to the condition of permanent disability pensioners under the act. From January 1, 1915, to December 31, 1920, 1,974 awards have been made for such disability, of which 1,644 were in schedule 1, 297 in schedule 2, while 33 were Crown cases. Of these 64 have expired, 21 by lapse of term and 43 by death of the pensioner; 73 have been commuted on return to Europe, and 19 for other reasons. In 7 cases pensions have been rescinded and in 30 suspended, while 1,781 continue. Of this latter number 134 did not furnish complete information, so that the present study, deals with 1,647 cases. The investigation covered the time between December 10, 1920, and May 10, 1921, disclosing 79 pensioners unable to work, 18 going to school or employed at home, and 95 in business for themselves. There were 980 employed and 475 unemployed. Of the number employed 463 were working for the same employer as when injured, 517 being employed elsewhere.

Of the 475 unemployed, 113 have done no work since injured, and 362 have had employment part of the time. Of the 79 pensioners reported as unable to work 59 were rated at 100 per cent disability, 7 between 70 and 100 per cent, and the remaining 13 unable to work for other causes, such as old age, illness, etc. Of 95 pensioners self-employed, 41 were farming, bee keeping, poultry raising, or truck gardening, the others being distributed among a variety of occupations in small groups. Only 51 could give their earnings with accuracy, reporting

an average rate of $14.92 per week as against $19.81 when injured. The average age at time of injury was 36.39 years.

Of the 475 unemployed pensioners, 267 were married, 197 single, and 11 widowed. The average wage when injured was $19.90 and the average age 36.22 years. Of the 113 who had done no work, 20 were rated from 10 to 20 per cent disabled, 28 from 20 to 30 per cent, and 34 from 30 to 40 per cent; only 22 exceeded 70 per cent disability. Of the 362 who have worked, 183 were rated between 10 and 20 per cent disabled, 88 between 20 and 30 per cent, and 35 between 30 and 40 per cent; 14 had more than 70 per cent disability. The average period of unemployment for those who have worked at all was 2.29 months, while for those who had been without work the average period of unemployment was 27.69 months.

Of the 980 employed, the average age at the time of injury was 37.41 years and the average wage was $20.95. The average wage earned at time of reporting was $25.02, an increase of $4.07 per week. The average impairment was given as 24.60 per cent, pensions being awarded accordingly. The actual increment of income, therefore, was the weekly increase of wages and the benefit awarded, amounting to $9.22 weekly. The wage increase was greater among employees working for the same employers, advancing from $21.91 to $26.69; while where employers had changed the increase had been from $20.09 to $23.52. The occupation had changed in 636 cases out of the 980, of which 432 were out of the 517 cases of employment by different employers, while 204 were out of 463 cases of employment by the same employer.

LABOR LAWS AND COURT DECISIONS.

Picketing and the Clayton Act.

ON DECEMBER 5 Chief Justice Taft delivered an important opinion on the subject of picketing, giving the most complete existing expression of the law on this point enounced by the Supreme Court of the United States (American Steel Foundries *v.* Tri-City Central Trades Council, 42 Sup. Ct. Rep., p. 72). The American Steel Foundries is a New Jersey corporation engaged in the manufacture of steel products at Granite City, Ill. In November, 1913, it shut down its plant which, when in full operation, employed 1,600 men, and in April following it resumed operations with about 350 regular men, about one-half of the skilled workmen being employed at rates from 2 to 10 cents per hour below those paid before the plant shut down. In view of this fact the Trades Council appointed a committee to secure reinstatement of the previous wages; this committee was informed that the plant was run as an open shop, not recognizing organized labor, and would not deal with the committee but would entertain any complaint by an employee. Thereupon on April 22 a strike was declared and a notice posted announcing the strike and calling on union men and all labor to remain away from the plant.

Only two of the then employees of the company struck at this time, one being a member of the machinists' union and one a member of no union. A picket was established about the plant which was carried on for three or four weeks without intermission by groups of pickets, some of whom indulged in acts of violence. It was claimed that no assaults had been authorized, and some of the pickets denied any knowledge of them. Others admitted a knowledge of assaults and even participation. In view of all the facts, an injunction was issued by the District Court for the Southern District of Illinois in May, 1914. In brief, this restrained the Trades Council and certain individual defendants from "the use of persuasion, threats, or personal injury, intimidation, suggestion of danger, or threats of violence of any kind" so as to interfere with, hinder, or obstruct employees of the Steel Foundries in connection with its business. Picketing at or near the premises of the complaining company was also forbidden, and no one might order, direct, or aid any person in committing the acts enjoined. The Trades Council and those associated with it appealed to the Circuit Court of Appeals, securing a modification of the injunction by striking out the words "persuasion" and inserting after the clause restraining picketing, the words "in a threatening or intimidating manner."

This case is reported in 238 Fed. Rep. 728, and noted in Bulletin No. 246 of the Bureau of Labor Statistics at page 158.

Chief Justice Taft prefaced the opinion of the court by the statement of facts summarized above, concluding that "it is clear from

the evidence that from the outset, violent methods were pursued from time to time in such a way as to characterize the attitude of the picketers as continuously threatening,'' with the result that employees and would-be employees were put in fear and the operation of the plant interfered with until the issue of the rescinding order.

The first question taken up for discussion is the effect of section 20 of the Clayton Act of October 15, 1914 (38 Stat. 738). This act was passed while the present case was pending in the court of appeals. Justice Taft pointed out that since relief by injunction operates in the future, and the right to it must be determined as of the time of hearing, existing legislation, though enacted subsequent to the commission of the acts on which the suit was based, must control the issue of the injunction. (Duplex Printing Press Company *v.* Deering, 254 U. S. 443, 464, 41 Sup. Ct. 172.)

The section consists of two paragraphs, which are quoted in full. The court then said:

> It has been determined by this court that the irreparable injury to property or to a property right, in the first paragraph of section 20, includes injury to the business of an employer, and that the second paragraph applies only in cases growing out of a dispute concerning terms or conditions of employment, between an employer and employee, between employers and employees, or between employees, or between persons employed and persons seeking employment, and not to such dispute between an employer and persons who are neither ex-employees nor seeking employment.

As there were but two actual ex-employees among the defendants affected by the decree, the first question was as to their status under the law, and specifically under the second paragraph of section 20.

> The prohibition of section 20, material here, are those which forbid an injunction against, first, recommending, advising or persuading others by peaceful means to cease employment and labor; second, attending at any place where such person or persons may lawfully be for the purpose of peacefully obtaining or communicating information, or peacefully persuading any person to work or abstain from working; third, peaceably assembling in a lawful manner and for lawful purposes. This court has already called attention in the Duplex case to the emphasis upon the words "peaceable" and "lawful" in this section (245 U. S. 443, 473). It is clear that Congress wished to forbid the use by the Federal courts of their equity arm to prevent peaceable persuasion by employees, discharged or expectant, in promotion of their side of the dispute, and to secure them against judicial restraint in obtaining or communicating information in any place where they might lawfully be. This introduces no new principle into the equity jurisprudence of those courts. It is merely declaratory of what was the best practice always. Congress thought it wise to stabilize this rule of action and render it uniform.
>
> The object and problem of Congress in section 20, and indeed of courts of equity before its enactment, was to reconcile the rights of the employer in his business and in the access of his employees to his place of business and egress therefrom without intimidation or obstruction, on the one hand, and the right of the employees, recent or expectant, to use peaceable and lawful means to induce present employees and would-be employees to join their ranks, on the other. If in their attempts at persuasion or communication with those whom they would enlist with them, those of the labor side adopt methods which however lawful in their announced purpose inevitably lead to intimidation and obstruction, then it is the court's duty which the terms of section 20 do not modify, so to limit what the propagandists do as to time, manner, and place as shall prevent infractions of the law and violations of the right of the employees, and of the employer for whom they wish to work.
>
> How far may men go in persuasion and communication and still not violate the right of those whom they would influence? In going to and from work, men have a right to as free a passage without obstruction as the streets afford, consistent with the right of others to enjoy the same privilege. We are a social people and the accosting by one of another in an inoffensive way and an offer by one to communicate and discuss information with a view to influencing the other's action are not regarded as

aggression or a violation of that other's rights. If, however, the offer is declined, as it may rightfully be, then persistence, importunity, following and dogging become unjustifiable annoyance and obstruction which is likely soon to savor of intimidation.

The nearer this importunate intercepting of employees or would-be employees is to the place of business, the greater the obstruction and interference with the business and especially with the property right of access of the employer. Attempted discussion and argument of this kind in such proximity is certain to attract attention and congregation of the curious, or, it may be, interested bystanders, and thus to increase the obstruction as well as the aspect of intimidation which the situation quickly assumes.

There were in the present case three or four groups of picketers, with from 4 to 12 persons in a group. Assaults and violence occurred early in the picketing and continued from time to time.

All information tendered, all arguments advanced and all persuasion used under such circumstances were intimidation. They could not be otherwise. It is idle to talk of peaceful communication in such a place and under such conditions. The numbers of the pickets in the groups constituted intimidation. The name "picket" indicated a militant purpose, inconsistent with peaceable persuasion. * * * When one or more assaults or disturbances ensued, they characterized the whole campaign, which became effective because of its intimidating character, in spite of the admonitions given by the leaders to their followers as to lawful methods to be pursued, however sincere. Our conclusion is that picketing thus instituted is unlawful, and can not be peaceable and may be properly enjoined by the specific term because its meaning is clearly understood in the sphere of the controversy by those who are parties to it.

The question remained as to the preservation of the right, evidently intended by Congress to be preserved, of ex-employees and others properly acting with them to communicate with others and persuade those still working for the employer to leave their employment. Protection from annoying importunity or intimidation of numbers is said to be the primary right of the employees in their choice to work for whom they will; while the employer is also entitled to the free access of his employees as an incident to his property and business. The number of persons permitted to be stationed at each point of ingress and egress was limited to one, with "the right of observation, communication, and persuasion but with special admonition that their communication, arguments, and appeals shall not be abusive, libelous, or threatening, and that they shall not approach individuals together, but singly, and shall not in their single efforts at communication or persuasion obstruct an unwilling listener by importunate following or dogging his steps."

The Chief Justice pointed out that this was not laid down as a rigid rule, but one applicable to this case under the circumstances disclosed by the evidence. Other cases might call for variations according to the judgment of the chancellor who has heard the witnesses and knows the facts.

Each case must turn on its own circumstances. It is a case for the flexible, remedial power of a court of equity which may try one mode of restraint, and if it fails or proves to be too drastic, may change it. * * * The purpose should be to prevent the inevitable intimidation of the presence of groups of pickets, but to allow missionaries.

The opinion then referred to the fact that the original injunction by the district court had forbidden picketing, this being modified by the court of appeals by adding the words, "in a threatening or intimidating manner." This qualification was said to be inadequate. "In actual result, it leaves compliance largely to the discretion of the

pickets. It does not secure practically that which the court must secure and to which the complainant and his workmen are entitled. The phrase really recognizes as legal that which bears the sinister name of 'picketing' which it is to be observed Congress carefully refrained from using in section 20." However, persuasion can not be forbidden as regards the two ex-employees; nor, since the members of the local unions were reasonably expecting to seek employment when full operation should be resumed, could they be said to be entirely outside the purview of the Clayton Act. The legality and even the necessity of labor organizations is said to be recognized, in order to "give laborers opportunity to deal on equality with their employer." The right to combine for the purpose of securing better terms of employment "has in many years not been denied by any court." The strike is a lawful instrument in a lawful economic struggle and in order that it may be effective employees must make their combination extend beyond one shop. "It is helpful to have as many as may be in the same trade in the same community united, because in the competition between employers they are bound to be affected by the standard of wages of their trade in the neighborhood."

The case in hand was distinguished from Hitchman Coal & Coke Company *v.* Mitchell (245 U. S. 229, 38 Sup. Ct. 65, Bul. No. 246, page 145), where an organization entirely outside the territory sought to unionize the employer's workmen secretly and in violation of their contract of employment by unlawful and deceitful means. The case of the Duplex Printing Co. was also distinguished, where a secondary boycott was undertaken as an interference with interstate commerce to procure the unionization of a factory. In the present case there was said to be no evidence of malice, while a lawful excuse existed in the direct interest of the workers, even though not ex-employees, and in view of such a situation the members of these local unions might lawfully join in persuasion and the use of "all lawful propaganda to enlarge their membership and especially among those whose labor at lower wages would injure their whole guild."

The final conclusion, therefore, was to reverse in part the decree of the circuit court and to affirm in part its modifications of the injunctive order of the district court, remanding the case to the district court for modification of its decree in conformity with this opinion.

Mr. Justice Clarke dissented from the foregoing, but without opinion; Mr. Justice Brandeis concurred in substance in the opinion and the judgment of the court. The other justices concurred with the opinion as delivered by the Chief Justice.

Maternity and Child Welfare.

ONE of the last acts of the recent session of Congress was to complete legislation "for the promotion of the welfare and hygiene of maternity and infancy." This was a Senate measure, and passed the Senate July 22, 1921, by a majority of 63 to 7. It was delayed for a considerable time in the House, though when it came to a vote on November 19, there was a majority in its favor of 279 to 39. The result of the more than three years' of effort to secure such legis-

lation is the establishment of a Board of Maternity and Infant Hygiene, consisting of the Chief of the Children's Bureau, the Surgeon General of the United States Public Health Service, and the United States Commissioner of Education, which is charged with a general supervision of administration of the act, though on the Children's Bureau of the Department of Labor devolves the principal responsibility. The chief of this bureau is the executive officer, and the bureau is to make, or cause to be made, the studies, investigations, and reports necessary to promote the efficient administration of the act.

Cooperation with State agencies is contemplated, the State being required to legislate and arrange for the acceptance of the provisions of the act as in the case of vocational education and rehabilitation of injured persons. In the absence of legislation, the governor may, if authorized by State law so to act, accept the provisions of the law, designating or creating a State agency which may serve until six months after the adjournment of the first regular session of the legislature of the State following the passage of the Federal act. This is to prevent undue delay in the case of legislatures having biennial sessions. However, six States at their sessions in 1921 anticipated the probable passage by Congress of the act and have authorized cooperation by a State agency.

The act appropriates $10,000 for each of the States for the current fiscal year, and for each subsequent year for the next five years the amount of $5,000. These amounts are absolute, regardless of population, while an additional sum of $1,000,000 annually is to be available for distribution in proportion to the population of the various States. This latter amount is to be granted only when an equal sum is appropriated by the State. All plans by the State for the use of Federal funds must be submitted to the Federal Children's Bureau, and be subject to the approval of the board mentioned above. The use of existing State agencies of health, and specifically of existing child-welfare or child-hygiene divisions in such agencies is contemplated, and no person carrying out the provisions of this act may proceed in opposition to the parents' choice with regard to any child.

Regulation of Wage Scale by Court of Industrial Relations of Kansas.

THE law of Kansas (ch. 29, Acts of 1920) which establishes a court of industrial relations has been construed in a number of cases involving its application to employees. In a recent case, decided October 8, 1921 (Court of Industrial Relations *v.* Chas. Wolff Packing Co., 201 Pac. 418) the supreme court of the State had before it the contention of an employer that the court of industrial relations had not the authority to direct the payment of a scale of wages fixed by it. (See MONTHLY LABOR REVIEW for July, 1921, pp. 206–208.) The action was for a writ of mandamus to compel the company to recognize and put into effect a scale of wages so established.

The first contention related to procedure, the point being that the court could not sue in its own name or prosecute actions in the supreme court. The law creating the court was quoted, and various

comparable statutes cited, the conclusion being reached that while the court was not itself directly interested in the result of the action, the State, the actual party in interest, had authorized the court to bring the action. The proceeding was therefore declared to be proper.

The next contention was that as the court was to compel the payment of wages to certain employees, the proper procedure would be for those employees to sue on their respective accounts. The court rejected this, saying that the action was brought to compel the company to obey an order of the court of industrial relations fixing a scale of wages and establishing hours of labor to be observed by the employer in its business. An action in mandamus to compel such observance was therefore the proper one, and properly brought by the court of industrial relations.

A third point was to the effect that the proceedings of the court were of a legislative, not a judicial, nature. This was based on a provision permitting an interested person to commence proceedings in the courts of the State to compel the court of industrial relations to make just, reasonable, and lawful orders, which, it was claimed, would, in effect, be legislation. It was pointed out that the company was not seeking the establishment of an order, which this provision of the law bears upon, but was resisting an established order, so that this contention could avail it nothing. A further insistence that the orders of the industrial court are not effective until approved by the supreme court was rejected.

The next point urged was that the fixing of wages is an extraordinary power, not be exercised except in cases of emergency. The law provides for a recognition of controversies such as might endanger the continuity or efficiency of service of an industry declared by the law to be affected by a public interest. Such a state of affairs was held to have been properly alleged in the case in hand, so that an emergency was regarded as having arisen justifying the action taken.

The final contention was that the act interferes with the freedom of contract, depriving the defendant of its liberty and property in violation of the fourteenth amendment of the Constitution of the United States. It was variously urged that the employees can not be governed by the orders of the industrial court, that their wages are not affected by a public interest so as to be subject to State regulation, that the right to contract is violated, and that the classification of the businesses covered is arbitrary and unjust.

Each of these propositions was considered in order and all were disposed of in favor of the validity of the law. The statute does in fact measurably restrict the course of action of both employers and employees, but neither party is compelled to surrender its rights to an extent injurious to its own financial success; while the interest of the public is so clearly demonstrated that the right of the State to intervene must be sustained. "The State is not powerless to regulate the wages to be paid for labor in those enterprises without the continuance of which the people must suffer." The discretion of the legislature in classification was also regarded as properly exercised in this case, the classification being reasonable and not arbitrary nor hostile. All justices, therefore, concurred in upholding the law and approving it as applicable to the case in hand.

Coverage of Maryland Compensation Law.

THE attorney general of Maryland is the legal adviser of the State industrial accident commission, and under this provision of the law is called upon from time to time for opinions to guide in the application of the compensation act.

Officers of Corporations.

ON JANUARY 31, 1921, an opinion was submitted in response to an inquiry as to the inclusion or noninclusion of officers of a corporation within the terms of the compensation act. After citing the apt provisions of the law, the attorney general reached the conclusion that the act clearly provides compensation according to the character of the work done by the employee, and if an employee is engaged in extrahazardous employment, and is also an officer of the corporation employer, the latter fact would not defeat his right to compensation.

State Employees.

A SECOND inquiry related to the status of employees of the State, the commission feeling that it did not have the legal power to enforce an award against a coordinate department of the State government. An opinion was therefore desired as to the status of workmen employed by the State, and how their compensation, if payable, should be provided for. The attorney general replied on November 12, 1921, citing first the provision of the act that brings employees of the State and its subdivisions under the act if engaged in any extrahazardous work within the meaning of the act. However, another provision of the law defines employment as a business or occupation "carried on by the employer for pecuniary gain."

The illustrative employments now carrying compensation were three, i. e., the State roads commission, the commissioner of motor vehicles, and the University of Maryland. The attorney general found none of these agencies engaged in any activity for pecuniary gain and, construing the limitation as to employment as applying to the State the same as to any other employer, the conclusion was reached that in the absence of a purpose of pecuniary gain the law had no application.

Extraterritoriality.

THE third opinion to be here noted was rendered December 1, 1921, and relates to the application of the law to Maryland employees rendering service outside the State, citing the instance of a builder of machines in Maryland who sent an employee to another State to erect a machine sold to a customer in that State. The attorney general was of the opinion that the law of the locality applies, and not the law of the place of contract. Attention was called to the fact that the title of the act relates to compensation for injuries received during work in extra-hazardous employments "in this State;" also to a special provision relating to miners entering a shaft in the State where workings might extend underground beyond the State boundary. The provision in this latter case that such a worker should be cared for by the Maryland statute was said to indicate that

this was in the nature of an exception, so that the legislature was not assuming to provide generally for injuries received outside the State. Another point in the statute provides for a separate computation of earnings where the employee renders service partly within and partly without the State, insurance premiums not being payable on that portion of the earnings accruing for services rendered beyond the State boundaries; this serves to distinguish the Maryland statute from that of New York, where the law is said to follow the employee even though the injury may occur outside the State boundaries. Just as nonresident employees have been awarded benefits under the Maryland statute when injured in the State of Maryland, so it may be presumed that reciprocal benefits will be apportioned to Maryland employees injured outside the State; the Maryland statute was therefore held to apply only within the territorial boundaries of the State.

Enforcement of Minimum Wage Law of Minnesota.

THE Supreme Court of Minnesota recently had before it an appeal by an employer convicted of the violation of the minimum wage law of the State (State *v.* Allyn, 184 N. W. 787.) It was found by the court below that Allyn had employed a minor "of ordinary ability" as a clerk in a store at a rate less than the $10.25 weekly wage fixed by the minimum wage commission for such workers in a village of less than 5,000 population.

The act directs that a copy of the orders of the commission "shall be mailed so far as practicable to each employer affected." Allyn offered to prove that no copy had reached him, nor had he any knowledge of the order either by mail or otherwise, but the trial court refused to accept evidence on this point. The supreme court held that "without notice of such orders an employer could hardly know of the wages thus established, much less post copies thereof in his place of business." It was said that the presumption that public officials will properly perform their duties is open to rebuttal, and that the proof offered should have been received. Orders were said not to be effective until mailed, so far as practicable, to the employers; nor were they admissible in evidence in the court unless compliance with the provisions of the act was affirmatively shown. "Courts will not take judicial notice of such orders."

Another point involved was as to the determination of who is a worker "of ordinary ability." This was said to be not within the power of the commission, but left to the courts, so that it was an error to exclude testimony bearing upon that phase of the case.

For the reasons given, the judgment of conviction was reversed and a new trial granted.

The court points out that the only mode of publication provided for by the statute is the mailing of copies "so far as practicable" to employers, who are also to post copies in the work places about their establishments. "The order, when considered in connection with the statute, amounts in effect to a penal law." It is obvious, under the ruling of the court, that one quality of a law does not exist in the situation described, since ignorance of it is apparently allowable as a defense.

Injunctions as Affected by the Clayton Act, Missouri.

IN THE MONTHLY LABOR REVIEW for October, 1920, an account was given (pp. 205–207) of a decision rendered in the United States Court for the Eastern District of Missouri in which an injunction was sought but denied. (Kinloch Telephone Co. *v.* Local Union No. 2, 265 Fed. 312.) In the attempt to establish a closed shop, the union was seeking to entice away employees under contract, working under open-shop conditions. The court admitted that irreparable injury had been done and was continuing, and that but for the Clayton Act (38 Stat. 730, Oct. 15, 1914) an injunction would issue; but it took the view that this law forbade the issue of an injunction under the circumstances.

The company appealed from the ruling of this court, securing a reversal and instructions to issue a temporary injunction (275 Fed. 241). A number of the findings of the court below as to the facts were approved, involving the maintenance of a strike "upon wholly feigned and insufficient grievances," the object being to secure a closed shop. The strikers and picketers were not employees of the company, but were members and officers of the union, undertaking to breach existing contracts and substitute their own methods of conducting the business.

The court of appeals differed from the court below in holding that the Supreme Court of the United States had reckoned with the Clayton Act in its judgment in the Hitchman case (245 U. S. 229, 38 Sup. Ct. 65), in which an injunction was issued against attempts by persons not in the relation of employees to unionize open-shop mines. Even more directly in point was the case, Duplex Printing Press Co. *v.* Deering (254 U. S. 443, 41 Sup. Ct. 172), noted in the MONTHLY LABOR REVIEW for February, 1921 (pp. 165–168). Following these decisions, the court felt that it was fully warranted in the issuance of a temporary injunction, which was accordingly ordered.

Danish Invalidity Insurance Law.[1]

DENMARK'S new invalidity insurance law was passed May 6, 1921, and went into effect October 1, 1921. The law is compulsory as to all employers who are subject to the workmen's compensation law but voluntary as to employees to the extent that members of a recognized sick fund, membership in which is voluntary, may insure thereunder, but on the other hand all members of a recognized sick fund must carry invalidity insurance.

Invalidity insurance funds are obtained from premiums paid by insured employees, payments by employers subject to the act, and contributions from the State and communes.

All employers subject to the act pay annually 5.40 kroner ($1.45, par) per full-time worker employed by them, while all members of sick funds between 18 and 62 years of age pay annual premiums as follows: Persons taking out insurance at the time the law becomes effective pay 5.40 kroner ($1.45, par). Persons becoming members

[1] Social Forsorg, No. 5, May, 1921.

after the law goes into effect, and who are under 25 years of age, pay 5.40 kroner ($1.45, par), those from 25 to 33 years, 7.80 kroner ($2.10, par), and those from 33 to 40 years, 10.20 kroner ($2.73, par), while those over 40 years pay premiums on a basis approved by the minister of the interior. If an insured person drops his insurance and later reinsures, the premium is to be based on the age at the time of reinsurance. No invalidity premium is paid while the insured person is receiving an invalidity pension or while on military duty.

The State and commune each contribute an amount equal to half the difference between the expenditures and sum needed for reserve and the income from contributions of insured employees and of employers, except that the expenses of the central administration are paid by the State alone.

According to the law, by invalidity is meant a reduction of earning capacity to one-third or less, which exists when the insured employee is unable to earn one-third of the sum usually earned by a physically and mentally sound person of the same training in the same locality. Invalidity which the insured person has willfully brought upon himself is not included. The pension granted under this law amounts to 800 kroner ($214.40, par) annually, with medical attendance under certain conditions. In the case of a married person, where both husband and wife are entitled to pensions, the pension is reduced by one-fourth. Provision is also made for reduction of the pension in the case of insured persons receiving pensions or aid from other sources.

In case there is a probability that a case of threatened invalidity may be warded off, or a case of existing invalidity terminated or decreased below the limit established by proper medical or surgical care, the insured person must submit to such care, but he is not compelled to undergo any operation which may endanger life or health

Invalidity insurance funds are administered by a committee of three persons, one appointed by the minister of the interior, one by the minister of finance, and the third, the sick-fund inspector, who is also the fund's manager. Premiums paid by insured employees are collected by the sick funds when collecting sick-fund contributions, and employer's contributions are collected at the same time contributions under the workmen's compensation law are collected.

A tribunal is provided to determine whether or not invalidity exists. This tribunal is to consist of a president (a jurist), appointed by the king, and five other members, of which two must be physicians, two members of recognized sick funds, and one an employer of at least six workers, to be appointed by the minister of the interior for a term of six years.

Labor Legislation in the Yukon Territory.

THE Territory of Yukon, while unorganized as a Province, has a council which enacts legislation for its population. The Labor Gazette of Canada reports recent ordinances establishing an 8-hour working day for persons employed in quartz and lode mining, subject to extension in cases of emergency. The value of this statute

is rendered problematical by permitting the owner, agent, manager, or their representative to be "the sole judge of what constitutes an emergency within the meaning of this section."

A monthly pay day is directed by another ordinance, applicable to designated classes of workmen, the requirement being that wages earned during any month shall be paid not later than the 15th day of the following month. Persons who leave service or are discharged must be paid in full up to the time of such termination of the contract.

A third ordinance is only indirectly a labor law. A tax of $5 is imposed on all unmarried persons of both sexes between the ages of 21 and 55 years residing in the Territory for a period of three months during the year 1921, Indians and members of the mounted police excepted. Employers of labor are required to furnish to the tax collector a list of their employees, and must pay the tax, deducting the amount from the wages. This applies whether the employment is direct or through a contractor.

LABOR ORGANIZATIONS.

International Survey of the Growth of Trade-Unionism since 1913.

IN THE following article an attempt is made to set out in a summary manner the chief facts and statistics as to the growth of trade-unionism in the different countries of the world since 1913. The two principal sources used in the compilation of the present article are: "The growth of trade-unionism since 1913," in the July-August, 1921, issue of the International Labor Review (Geneva), and "Die Gewerkschaftsbewegung," in the October 5, 1921, issue of Weltwirtschaftliche Nachrichten (Kiel).

Introduction.

AFTER the conclusion of the armistice in 1918, the various direct and indirect hindrances to the development of the economic organizations of workers due to the war were removed, and in the two years subsequent to the war trade-unionism experienced a phenomenal growth throughout the whole world. Trade-union membership reached its highest level at the end of the first half of 1920, but during the second half of that year the upward movement came to a standstill and in some countries there set in a retrograde movement which in 1921 seems to have become still more marked. Statistical data for this latest phenomenon are of course not yet available; data collected by the International Labor Office at Geneva make it, however, possible to follow the trade-union movement up to the end of 1920.

The total membership of the trade-unions of 30 countries for which returns are available has trebled since 1913, having increased from 15,446,000 to 48,037,000 members. This very great increase in trade-union membership may be partly attributed to the fact that trade-union statistics are becoming more complete each year and thus reflect the real position more and more clearly. Allowance must also be made for a general increase in population, which plays a part in the increase of trade-union membership (probably about 6 per cent during the period). It should, moreover, be taken into consideration that Russia and Japan, in which countries in 1913 the trade-unions were not yet legally recognized, are not included in the total for 1913, neither are Argentina, Greece, India, Poland, Portugal, and Spain, for which countries figures for that year were not available. Nevertheless, the above total membership figures indicate a very great increase in trade-union membership in the various countries of the world, more particularly in those which, since the armistice, have undergone great political changes. The future will show how far the trade-unions will be able to adjust their

organizations to the new conditions and to assimilate the hordes of new members. At present there seems to be a tendency among large parts of the trade-union membership to secede into new separate organizations.

Total Trade-Union Membership of 30 Countries.

IT IS not possible to make anything more than a rough comparison between the totals of trade-union membership in various countries, as the degree of completeness and accuracy of the figures varies greatly. In most cases the statistics given here are based on returns voluntarily made by the trade-unions to their Governments, or published in trade-union or other periodicals. In some countries the trade-unions are centralized in great national federations, and in these cases the figures may be regarded as nearly complete, as the unions which are not affiliated to these central organizations are generally small ones. In the case of other countries, where there are a number of isolated local organizations, the available information is far less reliable.

The definition of the term "trade-union" is somewhat difficult and varies from one country to another; an association which in one country would be called a trade-union bears a different name in another. Account has here been taken rather of the idea than of the name.

For some years there are no available figures. In these cases approximate estimates have been made either from the figures of the preceding and following years, or from the calculations of the competent authorities of the country. All estimates contained in the following tables are, however, designated as such.

Generally speaking, but especially as regards belligerent countries, the figures referring to the years 1914 to 1918 are not of great value. Trade-union statistics were almost everywhere disarranged by mobilization. In some countries mobilized members of the trade-unions are omitted from the statistics, which thus show a great decrease in the membership; in other countries an attempt has been made to include them, but it has not been possible to arrive at such accurate results as formerly. Finally, some countries ceased entirely to publish statistics of this kind during the war.

The following table gives the total trade-union membership, so far as figures are available, in 30 countries for the years 1913, 1919, and 1920. Figures for the years 1914 to 1918 have been omitted for the reasons stated above.

TOTAL TRADE-UNION MEMBERSHIP IN 30 COUNTRIES, 1913, 1919, AND 1920.

Country.	1913	1919	1920
Argentine	(1)	40,000	68,000
Australia	498,000	628,000	684,000
Austria	260,000	803,000	901,000
Belgium	200,000	[2] 715,000	920,000
Bulgaria	[2] 30,000	36,000	[3] 36,000
Canada	176,000	378,000	374,000
Czechoslovakia	(1)	1,301,000	[2] 2,000,000
Denmark	152,000	360,000	[2] 400,000
Finland	28,000	41,000	59,000
France	1,027,000	[2] 2,500,000	[3] 2,500,000
Germany	4,513,000	11,900,000	[2] 13,000,000
Great Britain	4,173,000	8,024,000	[3] 8,024,000
Greece	(1)	170,000	[3] 170,000
Hungary	[2] 115,000	212,000	[2] 343,000
India	(1)	[2] 500,000	500,000
Italy	972,000	1,800,000	3,627,000
Japan	(1)	247,000	[3] 247,000
Netherlands	189,000	457,000	[2] 683,000
New Zealand	72,000	83,000	[3] 83,000
Norway	64,000	144,000	142,000
Poland	(1)	[2] 350,000	[2] 1,037,000
Portugal	(1)	100,000	[3] 100,000
Rumania (old)	10,000	[2] 75,000	90,000
Russia	(1)	3,639,000	5,220,000
Serbia (old)	9,000	20,000	[2] 20,000
South Africa	5,000	60,000	60,000
Spain	(1)	876,000	[3] 876,000
Sweden	136,000	339,000	[2] 400,000
Switzerland	[2] 95,000	[2] 200,000	292,000
United States	2,722,000	5,607,000	5,179,000
Total	[4] 15,446,000	41,605,000	48,037,000

[1] Figures not available.
[2] Estimates based on partial information.
[3] Figures for 1919.
[4] Not including figures for 9 countries, not available.

The total membership figures given in the preceding table are not absolutely comparable. Only the total for 1919 is based on nearly complete information. For 1913 statistics are only available for 21 countries.

The third column of the table shows the total membership in 1920. For those countries (nine in number) for which no statistics are available the figures for 1919 were inserted in the column, as there has probably been no considerable decrease in membership in any of them. This gives us, according to most recent information, a total of 48,037,000 members in 1920 for all countries, a total which is probably not an overestimate. When compared with 1919, the figure for the total shows an increase of over 6,000,000 members in the course of a single year. It is estimated that in 1913 there were approximately 15,500,000 members, so that by 1920 prewar membership had trebled.

Among the countries in which the increase has been greatest from 1913 to 1919, there must be mentioned Austria and Belgium, in which membership has more than trebled. Japan, Russia, and Poland are in a somewhat peculiar position, for trade-unions were not recognized by law in these countries in 1913 and therefore hardly existed at that time. In 1919, however, they had a large membership.

The countries in which the trade-union movement was most hampered by the war, namely, Germany, Austria, France, Hungary, Italy, and Czechoslovakia, have rapidly made up the deficiency since the armistice. Their 1919 membership was at least double

that of 1913, and their 1920 membership shows a further very considerable increase.

It is interesting to note further that of the total of 41,605,000 members in 1919, 34,061,000, or 82 per cent, belong to European countries. Of the remaining 7,544,000 non-European members, 5,985,000 belong to the North American Continent. A closer examination shows that the concentration of trade-union membership in certain countries is still more marked. Six countries, namely, Germany, Great Britain, the United States, Russia, France, and Italy, account in 1919 for 33,471,000 trade-union members, while the other 24 countries account for only 8,134,000. If, moreover, Russia, where the trade-union movement is of a peculiar nature, and Italy, where 60 per cent of the members are agricultural workers, métayers, and small farmers, are excluded, it is found that the four great industrial countries, Germany, Great Britain, the United States, and France, include more than 28,000,000 members, or 67 per cent of the recorded total of world trade-union membership in 1919.

The International Movement.

The International Federation of Trade-Unions.

ABOUT one-half of the membership of the trade-unions of the world is, through their national central organizations, affiliated with one great international federation. Before the war this affiliation was effected in closest connection with the international organization of the Social-Democratic Party. After the international conference at Copenhagen in 1901 international conferences of the secretaries of the central trade-union organizations of the various countries took place at first every year, and later on every two years, and an international secretariat presided over by Legien, the president of the German General Federation of Labor, kept the various federations in contact with each other. The International Secretariat, which in 1913 assumed the name International Federation of Trade-Unions, is an association of the national central organizations of the trade-unions and recognizes only one trade-union federation in each country as the representative of organized labor in that country. It is due to this rule that the I. W. W. of America and the Federation of German Trade-Unions of Czechoslovakia were not allowed to affiliate with the International Federation. In 1912 the number of national central organizations affiliated to the International Federation was 19. Their total membership was 7,400,000. In 1913 the central trade-union organizations of New Zealand and South Africa affiliated with the International Federation. The World War brought about the entire disruption of the International Federation, and in July, 1919, it was reorganized with a secretariat at Amsterdam. Not all of the countries formerly affiliated with it could, however, be induced to rejoin the reorganized International Federation. The American Federation of Labor reserved for some time its decision as to whether it would affiliate, and in the fall of 1920 it broke off definitely its relations with the International Federation, as it considered the political aims of the latter too radical. At the same time Russia issued a call for the foundation of a new "red" International in opposition to the "yellow" Amsterdam International. In spite

of these secessions the International Federation had a membership of 23,662,000 at the end of 1920. In the following table are listed the central organizations affiliated with the International Federation of Trades-Unions and their membership in 1912 and at the end of 1920, as given in the official compilations by the International Federation of its membership for those years:

MEMBERSHIP OF NATIONAL LABOR ORGANIZATIONS AFFILIATED WITH THE INTERNATIONAL FEDERATION OF TRADE-UNIONS, 1912 AND DECEMBER, 1920.

Country, and national labor organization.	Membership.	
	1912	December, 1920.
Europe.		
Austria: Austrian Trade-Union Commission (*Gewerkschaftskommission Oesterreichs*), Vienna	[1] 426,000	800,000
Belgium: Trade-Union Commission of Labor Party and Independent Trade-Unions (*Commission Syndicale du Parti Ouvrier et des Syndicats Indépendants*), Brussels	116,000	700,000
Czechoslovakia: General Federation of Social-Democratic Trade-Unions (*Odborové sdruzeni ceskoslovenské*), Prague	.....	750,000
Denmark: Central Federation of Danish Trade-Unions (*De Samvirkende Fagforbund i Danmark*), Copenhagen	107,000	300,000
Finland: General Confederation of Trade-Unions (*Suomen Ammattijärjestö*)	21,000	.....
France: General Confederation of Labor (*Confédération Générale du Travail*), Paris	387,000	1,500,00
Germany: German General Federation of Trade-Unions (*Allgemeiner Deutscher Gewerkschaftsbund*), Berlin	2,553,000	8,500,000
Great Britain: General Federation of Trade-Unions, London, and The Trades-Union Congress, London	874,000	6,500,000
Greece: General Federation of Labor (*Confédération Générale du Travail*), Piræus	.....	170,000
Hungary: Central Federation of Hungarian Trade-Unions, Budapest	112,000	215,000
Italy: General Federation of Labor (*Confederazione Generale del Lavoro*), Milan	321,000	2,300,000
Jugoslavia: Central Federation of Labor of Croatia and Slovenia, Zágráb	[2] 5,500	25,000
Luxemburg: Commission of Trade-Unions of Luxemburg, Luxemburg	.....	27,000
Netherlands: Dutch Federation of Trade-Unions (*Nederlandsch Verbond van Vakvereenigingen*), Amsterdam	62,000	240,000
Norway: General Federation of Norwegian Trade-Unions (*Faglige Landsorganization i Norge*), Christiania	61,000	150,000
Poland: Central Commission of Polish Trade-Unions (*Komisja Centralna Zwiazkow Zawodowych*), Warsaw	.....	334,000
Rumania	9,700	.....
Spain: General Union of Workers (*Union General de Trabajadores*), Madrid	100,000	250,000
Sweden: National Trade-Union Secretariat (*Landssekretariatet*), Stockholm	86,000	281,000
Switzerland: Federation of Swiss Trade-Unions (*Schweizerischer Gewerkschaftsbund*), Bern	86,000	225,000
North America.		
Canada: The Trades and Labor Congress of Canada, Ottawa	2,055,000	260,000
United States: American Federation of Labor, Washington, D. C.		[3]
South America.		
Argentine: General Federation of Labor (*Federación Obrera Regional Argentina*), Buenos Aires	.....	70,000
Peru: International Central Labor Organization of Latin America (*Centro International Obrero de Solidaridad Latino-Americano*), Lima	.....	25,000
Africa.		
South Africa: South African Industrial Federation, Johannesburg	.....	40,000
Total	7,382,200	23,662,000

[1] Figure for prewar Austria.
[2] Bosnia and Herzegovina with 5,500 and old Serbia with 5,000 members were also affiliated before the war; after the war they joined the "red" International of Moscow.
[3] Not affiliated in December, 1920.

From the preceding tabulation it will be seen that in prewar times as well as at the end of 1920 Germany led all other countries with respect to membership affiliated with the International Federation

of Trade-Unions. In 1912 Germany led the list, with 2,553,000 members, the United States and Canada with 2,055,000 holding second place, and Great Britain, with 874,000 members, being third. At the end of 1920 Germany was again in the lead with 8,500,000 affiliated members, with Great Britain and Italy, having 6,500,000 and 2,300,000 affiliated members, respectively, in second and third places.

The Third International.

Compared with the powerful organization of the International Federation of Trade-Unions the "red" trade-union international, officially called the "International Council of Trade and Industrial Federations," but generally known under the name "Third International," lags far behind as to affiliated membership. Its membership is chiefly recruited from eastern Europe. The declaration of principles of the Third International of July 15, 1920, is signed by trade-union federations of Russia, Italy, Spain, Bulgaria, and Jugoslavia, and by revolutionary minorities of the French and Georgian trade-unions. The membership figures quoted by the Third International at the time of its foundation are without doubt very unreliable. The figure given for Bulgaria, for instance, is much too high, and the data as to the revolutionary minorities of federations not affiliated with the Third International are very arbitrary. It is, moreover, altogether impossible to give correct data as to the affiliated membership of the Third International because according to the resolutions adopted at its first congress of August, 1921, it is not the object of this organization to found new separate trade-unions but to have its adherents "bore within" the old established trade-unions until these declare themselves solidly for affiliation with the Third International. The statement made at the first congress of the Third International giving the number of affiliated members and adherents as between 17,000,000 and 18,000,000 must be considered as pure propaganda.

The refusal of the Third International to sanction the formation of independent trade-unions has aroused strong opposition on the part of the syndicalistic and unionistic trade-unions which exist as independent organizations. This opposition is especially strong in Germany and America. The attempt of the Third International to combine within its organization all the revolutionary elements among trade-unions has therefore failed. Efforts of the unionists and syndicalists to form an international organization among themselves have likewise so far not led to any tangible results.

The International Federation of Christian Trade-Unions.

Before the war the Christian Trade-Unions had made attempts at international organization. The first international conference of Christian trade-unions at Zürich (August, 1908) resolved to found an international secretariat with headquarters in Germany and an international commission which was to collaborate with the secretariat. After the war, the congress at The Hague (July, 1920) created a new central organization, the International Federation of Christian Trade-Unions, to which the Christian trade-unions of Germany, Austria, Switzerland, Czechoslovakia, the Netherlands,

Italy, France, and Spain, and later on Luxemburg affiliated. Accurate data as to the membership of the new organization are not available.

International Trade-Union Secretariats.

In addition to the International Federation of Trade-Unions there exist a considerable number of international combinations of trade-unions in an individual trade or industry. In the following table are shown the occupations or trades for which international secretariats exist, the year of their organization, and their membership and headquarters in 1913 and 1920.

MEMBERSHIP OF INTERNATIONAL TRADE-UNION SECRETARIATS, 1913 AND 1920.[1]

Occupation or trade.	Year of organization.[2]	Membership.		Headquarters.	
		1913	1920	1913	1920
Agricultural workers [3]	1920	.....	2,133,835	.....	Netherlands.
Bakers	1907	68,681	.....	Germany	Switzerland.
Bookbinders	1907	49,905	249,667	do	Do.
Shoemakers and leather workers	1907	105,600	.....	do	Germany.
Building trades	1903	418,590	800,000	do	Do.
Carpenters	1903	83,363	.....	do	Do.
Mercantile and office employees	1904	55,139	1,000,000	Netherlands	Netherlands.
Diamond workers	1905	15,212	27,000	Belgium	Belgium.
Factory workers	1907	298,001	2,417,300	Germany	Netherlands.
Food and beverage industries [3]	1920	.....	331,374	.....	Switzerland.
Furriers	1894	6,169	.....	Germany	Germany.
Glass workers	1908	29,230	.....	do	Do.
Barbers and hairdressers	1907	4,850	.....	do	Do.
Hatters	1893	32,913	.....	do	Do.
Hotel and restaurant employees	1911	20,519	200,000	Netherlands	Netherlands.
Lithographers	1896	35,923	.....	Germany	Belgium.
Metal workers	1893	1,106,003	3,200,000	do	Switzerland.[4]
Miners	1890	1,374,000	2,606,215	Great Britain	Great Britain.
Painters	1911	72,074	74,470	Germany	Germany.
Pavers	.....	.....	.....	do	Do.
Postal employees [3]	1920	.....	520,000	.....	Austria.
Potters	1894	16,114	.....	Germany	Germany.
Printers	1893	137,451	.....	do	Switzerland.
Saddlers	1906	20,119	.....	do	Germany.
Seamen [3]	1920	.....	.....	.....	Belgium.
State and municipal workers	1907	72,025	.....	Germany	Netherlands.
Stone workers	1903	75,000	155,350	Switzerland	Switzerland.
Tailors	1896	101,500	.....	Germany	Netherlands.
Textile workers	1893	.....	.....	Great Britain	Great Britain.
Tobacco workers	1890	50,125	.....	Germany	Netherlands.
Transport workers	1898	881,950	2,560,000	do	Do.
Woodworkers	1904	393,355	800,000	do	Do.

[1] Post-war statistics of the international trade-union secretariats are very incomplete. Many of the secretariats were entirely disorganized during the war and are now in process of reorganization.

[2] The year given in this column is the year of original organization. Many of the secretariats disorganized during the war were reorganized after its termination.

[3] Organized after the war.

[4] Temporary headquarters.

The membership data of international trade-union secretariats for the year 1920 given in the preceding table are very incomplete, owing to the following facts: Before the war 22 of the 28 then existing secretariats had their headquarters in Germany. During the war most of the affiliated unions in foreign countries, with the exception of those in a few neutral countries, discontinued all their relations with the secretariats and stopped sending contributions. This brought about disorganization of most of the secretariats. After the termination of the war the secretariats made strenuous efforts to reorganize the international trade federations, and in order to induce the trade-unions in

Entente countries to affiliate with them the headquarters of a number of secretariats were transferred from Germany to neutral countries, such as Belgium, the Netherlands, and Switzerland. As many of the secretariats are still busily engaged in a reorganization of their federations they have not yet published any membership statistics for the year 1920. From the available membership data it can, however, be seen that the movement of international combination of trade-unions in an individual trade or industry is growing greatly in extent. The Metal Workers' International Federation, with a membership of 3,200,000 (1,106,003 in 1913), is the largest of these international organizations. Those of the miners with 2,606,215 affiliated members, the transport workers with 2,560,000 members, the factory workers with 2,417,300 members, and the agricultural workers with 2,133,835 members, come next in importance in the order named. Four new international secretariats, those of the agricultural workers, workers in the food and beverage industries, postal employees, and seamen were organized in 1920.

Statistics of the Trade-Union Movement in Individual Countries.

THE MONTHLY LABOR REVIEW keeps its readers currently informed on the trade-union movement in the various countries. Beginning with its February, 1921, issue it has also published a series of articles on labor unrest in the more important countries. Each of these articles contains a chapter devoted to labor organizations, their history, aims, membership, etc. It seems, therefore, superfluous to cover once more all these subjects in the present article. For reference purposes there is, however, given below a table showing for 30 countries the membership of their individual trade-union organizations during the past decade.

MEMBERSHIP OF TRADE-UNION FEDERATIONS IN 30 COUNTRIES, 1910 TO 1921.

Country, and trade-union federation.	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921
Argentine: General Federation of Labor				2,666	3,427	13,233	35,726	39,683	68,138	
Australia: Trade-unions			523,271	528,031	546,556	564,187	581,187	627,685	684,450	
			[1](712)	[1](713)	[1](705)	[1](747)	[1](767)	[1](771)	[1](795)	
Austria:										
Austrian Trade-Union Commission		253,127	146,542	111,712	108,739	213,321	295,127	772,146	900,828	
Christian Trade-Unions							25,933	30,725		
Belgium:										
Trade-Union Commission of Labor Party and Independent Trade-Unions		128,759						613,500	720,000	
General Federation of Christian and Free Trade-Unions		70,000							200,000	
Bulgaria:										
General Confederation of Labor	8,502	5,350	7,584	([2])				12,000		
Federation of Free Trade-Unions	4,845	([2])	4,000	4,900				4,500		
Union of State Employees	([2])	([2])	([2])	([2])				14,072		
Independent Unions	([2])	([2])	([2])	([2])				([2])		
Total trade-union membership	[3]31,500	([2])	[3]30,000	[3]31,000				[3]35,500		
Canada:										
International Unions									267,247	
Noninternational Unions									25,406	
Independent Unions									31,189	
National Catholic Unions									45,000	
One Big Union									5,000	
Total number of organized workers		175,799	166,163	143,343	160,407	204,630	248,887	378,047	373,842	
Czechoslovakia:										
Czecho-Slovak Social-Democratic Trade-Unions								727,055	742,000	
German trade-unions in Czechoslovakia								285,000	400,000	
Czecho-Slovak Socialist Trade-Unions								211,932	352,267	
Czecho-Slovak Christian Unions								77,000	([2])	
Total								1,300,987		
Denmark:										
Central Federation of Trade-Unions	106,767	114,289	121,529	133,776	150,552	179,284	255,150	277,392	[3]300,000	
Independent unions	[3]32,000	38,000	34,634	40,469	38,477	39,342	60,447	[3]92,624	100,000	
Total trade-union membership	138,767	152,289	156,163	174,245	138,999	218,626	315,597	[3]360,016	[3]400,000	
Finland: General Confederation of Trade-Unions		28,021	30,870	30,150	41,804	160,695	20,780	40,677	59,470	

[1] Number of trade-unions reporting. [2] Data not available. [3] Estimated.

MEMBERSHIP OF TRADE-UNION FEDERATIONS IN 30 COUNTRIES, 1910 TO 1921—Concluded.

Country, and trade-union federation.	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921
France:										
General Confederation of Labor	575,276	592,447	861,162	83,292	167,582	493,104	997,548	2,048,221	.....	.....
Confederation of Christian Workers	.....	.....	.....	.....	.....	.....	.....	.....	[3] 140,000	.....
Germany:										
German General Federation of Trade-Unions	2,583,492	2,525,042	1,502,811	994,853	944,575	1,277,709	2,888,846	7,338,000	8,025,682	.....
Christian Trade-Unions	350,930	341,735	218,107	162,425	178,970	298,187	538,559	1,000,770	1,105,894	.....
Hirsh-Duncker Trade Societies	109,225	106,618	77,749	61,086	57,666	79,113	113,792	189,831	225,998	.....
Independent organizations	303,450	318,508	205,360	172,391	178,501	144,658	214,360	([2])	([2])	.....
Nonmilitant organizations	231,048	280,002	167,074	133,353	145,403	141,862	45,705	([2])	([2])	.....
Salaried employees' organizations	887,990	941,343	.....	531,609	444,384	425,298	871,791	([2])	([2])	.....
Total trade-union membership	4,454,121	4,513,249	[3]2,870,000	2,055,717	1,940,342	2,361,827	4,673,053	[3]11,900,000	[3] 13,000,000	.....
Great Britain: [4]										
Membership affiliated with the Trades-Union Congress	1,987,354	2,217,836	2,866,077	2,677,357	2,850,547	3,082,252	4,532,085	5,283,676	6,494,707	.....
General Federation of Trade-Unions	.....	.....	.....	.....	.....	.....	.....	.....	1,480,000	.....
Total trade-union membership	.....	.....	4,176,000	4,388,000	4,669,000	5,540,000	6,645,000	8,024,000	.....	.....
Greece: [5] General Federation of Trade-Unions	.....	.....	.....	.....	.....	.....	.....	170,000	.....	.....
Hungary:										
Central Federation of Hungarian Trade-Unions	111,966	107,488	51,510	43,381	55,338	215,222	721,437	212,405	[6] 152,441	.....
Federation of Christian Social Trade-Unions	.....	.....	.....	.....	.....	.....	[3] 13,000	.....	.....	190,000
India: Indian Trades-Union Congress	.....	.....	.....	.....	.....	.....	.....	.....	500,000	.....
Italy:										
General Confederation of Labor	.....	327,302	330,858	233,963	201,291	237,560	249,039	1,159,062	[7] 2,320,163	.....
Italian Confederation of Workers	.....	.....	.....	.....	.....	.....	.....	.....	[8] 1,182,291	.....
Syndicalist Union	.....	.....	.....	.....	.....	.....	137,000	.....	.....	.....
Italian Labor Union	.....	.....	.....	.....	.....	.....	.....	.....	125,000	.....
Japan: Trade-union membership	.....	.....	.....	.....	.....	.....	.....	.....	246,658	.....
Netherlands:										
National Secretariat of Labor	6,200	8,100	9,700	9,200	10,500	14,300	23,100	33,600	48,800	36,000
Dutch Federation of Trade-Unions	52,200	61,400	84,300	87,600	99,500	128,900	159,400	190,900	259,700	225,400
Bureau of Roman Catholic Trade-Unions	16,400	21,100	29,100	35,300	40,300	54,900	69,100	91,800	150,000	158,000
Federation of Christian Trade-Unions	7,800	7,900	11,000	12,300	15,000	20,500	28,000	46,300	70,300	76,500
General Federation of Trade-Unions	.....	2,800	3,900	4,700	5,000	5,600	7,800	10,500	46,600	52,000
Total trade-union membership	169,100	189,000	220,300	227,400	251,700	303,800	369,200	456,500	617,700	([2])
New Zealand: Trade-unions	60,602	71,544	73,991	67,661	71,388	72,873	71,447	82,553	.....	.....
	[1] (322)	[1] (372)	[1] (403)	[1] (389)	[1] (378)	[1] (382)	[1] (370)	[1] (380)	.....	.....
Norway: General Federation of Norwegian Trade-Unions	.....	63,812	67,604	77,968	80,628	93,912	107,542	143,956	141,543	.....
Poland:										
Federation of Free Trade-Unions	.....	.....	.....	.....	.....	.....	.....	.....	560,000	.....
Central Commission of Polish Trade-Unions	.....	.....	.....	.....	.....	.....	.....	.....	428,700	.....
Christian trade-unions	.....	.....	.....	.....	.....	.....	.....	.....	50,000	.....
Union of Ukranian Trade-Union Organization	.....	.....	.....	.....	.....	.....	.....	.....	([2])	.....

Portugal: General Confederation of Labor								100,000		
Rumania (old):										
Trade-union membership	9,708			16,700			16,000	75,000	90,000	
Transylvania									80,000	
Russia: Trade-union membership						[9] 1,475,429	[10] 2,539,000	[10] 3,638,812	[10] 4,320,000 [11] 5,222,000	[12] 6,800,000
Serbia:										
Central Federation of Trade-Unions	5,000	9,000	14,000			11,700		20,000		
Jugoslavia Central Federation of Trade-Unions									200,000	
South Africa: South African Industrial Federation										60,000
Spain:										
General Union of Workers		128,000	121,000	76,000	99,000	90,000	150,000	211,000	220,000	
National Confederation of Labor								665,000		
Sweden:										
Central Federation of Swedish Trade-Unions		97,252	101,207	110,708	140,802	186,151	222,185	258,996	280,029	
Independent unions		38,725	39,296	40,097	47,767	57,626	80,000	79,994	[3] 120,000	
Total		135,977	140,503	150,805	188,569	243,777	302,185	338,990	[3] 400,000	
Switzerland:										
Federation of Swiss Trade-Unions	78,119	86,313	89,398	74,675	65,177	88,648	148,697	177,143	223,588	
Christian Trade-Unions									17,000	
Salaried Employees' Federation									51,000	
United States: [13]										
American Federation of Labor				[14] 1,946,347	[14] 2,720,702	[14] 2,371,434	[14] 2,726,478	[14] 3,260,068	[14] 4,078,740	3,906,528
Order of Railway Conductors of America										54,653
Brotherhood of Locomotive Engineers										84,000
Brotherhood of Locomotive Firemen and Engineers										125,642
Brotherhood of Railroad Trainmen										188,000
Total railroad workers										452,295

[1] Number of trade-unions reporting.
[2] Data not available.
[3] Estimated.
[4] Many British unions are affiliated both to the Trades-Union Congress and to the General Federation of Trade-Unions.
[5] There also exist a certain number of "yellow" trade-unions and a "Socialist group" to which 49 unions are affiliated.
[6] Provisional figures; probably too low.
[7] 46 per cent agricultural workers.
[8] 80 per cent agricultural workers
[9] June.
[10] January.
[11] December.
[12] Summer.
[13] There exist a considerable number of large independent unions in the United States, such as the Amalgamated Clothing Workers, Amalgamated Textile Workers, etc., for which reliable membership data are not available.
[14] Fiscal year.

STRIKES AND LOCKOUTS.

Strikes and Lockouts in the United States, July to September, 1921.

ACCORDING to information received by the United States Bureau of Labor Statistics, 463 strikes and lockouts occurred in this country during the third quarter of 1921. Inasmuch as many reports do not reach the bureau until some time after the strikes occur, the number of strikes occurring during the quarter was probably somewhat larger than the above figures would indicate. Complete data relative to these strikes have not been received by the bureau, and it has not been possible to verify all that have been received. The figures in the following tables should therefore be regarded as only an advance statement and not accepted as final.

NUMBER OF STRIKES AND LOCKOUTS BEGINNING IN EACH MONTH, JANUARY TO SEPTEMBER, INCLUSIVE, 1920 AND 1921.

Kind of dispute.	January.	February.	March.	April.	May.	June.	July.	August.	September.	Month not stated.	Total.
Strikes:											
1920....	222	185	270	398	398	301	286	245	218	190	2,713
1921....	221	167	213	276	600	185	163	141	117	117	2,200
Lockouts:											
1920....	2	6	8	4	5	2	2	5	6	4	44
1921....	3	6	1	6	18	9	3	4	4	2	56
Total:											
1920....	224	191	278	402	403	303	288	250	224	194	2,757
1921....	224	173	214	282	618	194	166	145	121	119	2,256

The strikes involving the largest number of employees were those of 8,000 coal miners in Pennsylvania in August, and 6,500 oil workers in California in September. Others that may be mentioned were 2,000 waist and dress makers in Philadelphia and strikes of several thousand musicians, mattress workers, and chauffeurs and teamsters in New York City.

The data in the following tables relate to the 452 strikes and 11 lockouts reported to have occurred in the three months under consideration. A few strikes that occurred during the quarter, but in which the exact month was not stated, appear in a group by themselves.

STATES IN WHICH FIVE OR MORE STRIKES AND LOCKOUTS WERE REPORTED AS OCCURRING DURING THE THIRD QUARTER OF 1921.

State.	July.		August.		September.		Month not stated.		Total.		Grand total.
	Strikes.	Lock-outs.	Strikes.	Lock-outs.	Strikes.	Lock-outs.	Strikes.	Lock-outs.	Strikes.	Lock-outs.	
New York	34	.....	38	1	17	.....	2	.....	91	1	92
Illinois	25	.....	10	1	12	.....	1	1	48	2	50
Pennsylvania	12	.....	18	.....	16	.....	3	.....	49	.....	49
Massachusetts	7	.....	18	1	4	.....	3	.....	32	1	33
New Jersey	12	1	8	.....	8	.....	2	.....	30	1	31
Ohio	10	.....	5	.....	8	1	6	.....	29	1	30
California	9	.....	5	.....	4	.....	2	.....	20	.....	20
Michigan	3	.....	4	.....	4	.....	1	.....	12	.....	12
Missouri	6	.....	2	.....	4	.....	.....	.....	12	.....	12
Oklahoma	2	.....	5	.....	3	.....	2	.....	12	.....	12
Texas	2	.....	5	.....	2	.....	1	.....	10	.....	10
Indiana	4	1	2	.....	1	.....	1	.....	8	1	9
Connecticut	3	.....	1	.....	4	.....	.....	.....	8	.....	8
Louisiana	3	.....	1	.....	3	.....	.....	.....	7	.....	7
Maine	3	.....	2	.....	1	.....	.....	.....	6	.....	6
Oregon	1	.....	1	.....	3	.....	1	.....	6	.....	6
West Virginia	4	.....	.....	.....	2	.....	.....	.....	6	.....	6
Georgia	2	.....	3	.....	.....	.....	.....	.....	5	.....	5
Rhode Island	1	.....	1	.....	2	1	.....	.....	4	1	5
Washington	1	.....	2	.....	2	.....	.....	.....	5	.....	5
Wisconsin	3	.....	1	.....	1	.....	.....	.....	5	.....	5
21 other States and Territories	17	.....	9	1	16	2	5	.....	47	3	50
Total	164	2	141	4	117	4	30	1	452	11	463

Of these disputes, 328 strikes and 9 lockouts occurred east of the Mississippi River and north of the Ohio and Potomac Rivers; 95 strikes and 1 lockout occurred west of the Mississippi River; and 29 strikes and 1 lockout south of the Ohio and Potomac Rivers and east of the Mississippi River. In 16 strikes union officials repudiated the action of the men in striking.

As to cities, New York City had the largest number of disturbances, 57, followed by Chicago, with 36, Detroit, 10, Philadelphia, 9, Boston and St. Louis with 8 each, and Buffalo with 7.

As to sex, the distribution was as follows: Males, 335 strikes and 4 lockouts; females, 6 strikes; both sexes, 58 strikes; sex not reported, 53 strikes and 7 lockouts.

The industries in which five or more strikes and lockouts were reported are shown in the table which follows:

NUMBER OF STRIKES AND LOCKOUTS IN SPECIFIED INDUSTRIES OR OCCUPATIONS REPORTED AS OCCURRING DURING THE THIRD QUARTER OF 1921.

Industry or occupation.	July.		August.		September.		Month not reported.		Total.		Grand total.
	Strikes.	Lockouts.	Strikes.	Lockouts.	Strikes.	Lockouts.	Strikes.	Lockouts.	Strikes.	Lockouts.	
Building trades	26	.....	22	.....	18	2	10	1	76	3	79
Clothing	12	.....	22	.....	16	1	1	.....	51	1	52
Metal trades	17	1	11	.....	13	.....	2	.....	43	1	44
Miners	7	.....	10	.....	16	.....	3	.....	36	.....	36
Printing and publishing	19	.....	6	.....	4	1	2	.....	31	1	32
Textiles	12	.....	4	.....	12	.....	2	.....	30	.....	30
Bakers	10	.....	6	.....	.....	.....	.....	.....	16	.....	16
Musicians and theatrical employees	3	.....	8	2	3	.....	.....	.....	14	2	16
Iron and steel	7	.....	3	.....	4	.....	.....	.....	14	.....	14
Chauffeurs and teamsters	4	1	4	.....	2	.....	1	.....	11	1	12
Hotel and restaurant	4	.....	6	.....	.....	.....	1	.....	11	.....	11
Leather	3	.....	4	.....	2	.....	.....	.....	9	.....	9
Shipbuilders	5	.....	2	.....	2	.....	.....	.....	9	.....	9
Paper and paper goods	.....	.....	6	.....	2	.....	.....	.....	8	.....	8
Railroads	3	.....	3	.....	2	.....	.....	.....	8	.....	8
Light, heat, and power	4	.....	2	.....	1	.....	.....	.....	7	.....	7
Longshoremen and freight handlers	5	.....	.....	.....	2	.....	.....	.....	7	.....	7
Stone	3	.....	2	.....	2	.....	.....	.....	7	.....	7
Coopers	2	.....	1	1	1	.....	.....	.....	4	1	5
Farm labor	.....	.....	2	.....	3	.....	.....	.....	5	.....	5
Lumber and timber	1	.....	1	.....	1	.....	2	.....	5	.....	5
Miscellaneous	17	.....	16	1	11	.....	6	.....	50	1	51
Total	164	2	141	4	117	4	30	1	452	11	463

Included in the above table are 32 strikes of coal miners, 14 strikes of compositors, 12 strikes of bindery workers, 12 strikes of fur workers and hat and cap makers, 11 strikes of plumbers and steamfitters, and 10 strikes each of machinists and molders.

In 334 strikes and 7 lockouts the employees were reported as connected with unions; in 10 strikes they were not so connected; in 1 strike they became connected after the strike began, and in 107 strikes and 4 lockouts the question of union affiliation was not reported.

In 238 strikes and 3 lockouts only 1 employer was concerned in each disturbance; in 16 strikes and 2 lockouts, 2 employers; in 9 strikes and 1 lockout, 3 employers; in 1 strike, 4 employers; in 4 strikes, 5 employers; in 59 strikes and 2 lockouts, more than 5 employers; and in 125 strikes and 3 lockouts the number of employers was not reported.

In the 239 strikes for which the number of persons on strike was reported there were 105,623 strikers, an average of 442 per strike. In 34 strikes in which the number involved was 1,000 or more, the strikers numbered 72,200 an average of 2,124. In the 205 strikes involving less than 1,000 persons each, there were 33,423 strikers, an average of 163. By months the figures are as follows: July, 25,374 strikers in 77 strikes, average 330, of whom 9,774 were in 66 strikes of less than 1,000 persons each, average, 148; August, 35,549 strikers in 88 strikes, average 404, of whom 9,149 were in 78 strikes

of less than 1,000 persons each, average 117; September, 31,498 strikers in 61 strikes, average 516, of whom 12,698 were in 52 strikes of less than 1,000 persons each, average 244.

The following table shows the causes of the strikes and lockouts in so far as reported. In over half of the disturbances wages was the prominent question. Hours, general conditions, agreements, and the open or closed shop were about equal in importance, being about one-twentieth each.

PRINCIPAL CAUSES OF STRIKES AND LOCKOUTS REPORTED AS OCCURRING DURING THE THIRD QUARTER OF 1921.

Cause.	July.		August.		September.		Month not stated.		Total.		Grand total.
	Strikes.	Lock-outs.	Strikes.	Lock-outs.	Strikes.	Lock-outs.	Strikes.	Lock-outs.	Strikes.	Lock-outs.	
For increase in wages	7	.....	7	.....	2	.....	.....	.....	16	.....	16
Because of decrease in wages	52	.....	46	.....	62	2	14	.....	174	2	176
Because of increase of hours	3	.....	2	.....	1	.....	1	.....	7	.....	7
For decrease of hours	12	.....	4	.....	1	.....	1	.....	18	.....	18
Recognition	4	.....	1	.....	2	1	.....	.....	7	1	8
Recognition and wages	2	1	5	.....	5	.....	.....	.....	12	1	13
General conditions	10	1	6	.....	8	.....	.....	.....	24	1	25
Conditions and wages	2	.....	1	.....	1	.....	.....	.....	4	.....	4
Employees discharged	3	.....	8	.....	1	.....	.....	.....	12	.....	12
For discharge of objectionable persons	2	.....	3	.....	.....	.....	.....	.....	5	.....	5
Nonunion men	3	.....	1	.....	1	.....	.....	.....	5	.....	5
Relative to agreement	4	.....	9	.....	5	.....	.....	.....	18	.....	18
For a new agreement	1	.....	2	.....	3	.....	.....	.....	6	.....	6
Sympathy	3	.....	2	.....	1	.....	.....	.....	6	.....	6
Jurisdiction	1	.....	2	.....	1	.....	.....	.....	4	.....	4
Because of increase of hours and decrease of wages	4	.....	7	.....	2	.....	.....	.....	13	.....	13
Open or closed shop	8	.....	9	.....	5	1	.....	.....	22	1	23
Closed shop and other causes	1	.....	2	.....	.....	.....	.....	.....	3	.....	3
Against wage reduction and open shop	6	.....	4	1	4	.....	2	.....	16	1	17
Miscellaneous	4	.....	9	1	4	.....	1	.....	18	1	19
Not reported	32	.....	11	2	8	.....	11	1	62	3	65
Total	164	2	141	4	117	4	30	1	452	11	463

It is frequently difficult to state exactly when a strike terminates, since many strikes end without any formal vote on the part of the strikers. The bureau has information of the actual ending of 272 strikes and 4 lockouts during the quarter, besides 8 strikes in which the positions of the employees were filled with practically no interruption in the work.

The following table relates to such strikes and lockouts as the bureau has been advised actually terminated during the first nine months of 1920 and 1921.

NUMBER OF STRIKES AND LOCKOUTS ENDING DURING THE FIRST NINE MONTHS OF 1920 AND 1921.

Kind of dispute.	January.	February.	March.	April.	May.	June.	July.	August.	September.	Month not stated.	Total.
Strikes:											
1920	75	81	126	193	195	180	180	144	147	101	1,422
1921	55	43	71	80	154	136	117	92	58	17	823
Lockouts:											
1920	2	4	3	1	2	3	4	2	1	.....	22
1921	.....	.....	.....	3	7	5	1	2	1	1	20
Total:											
1920	77	85	129	194	197	183	184	146	148	101	1,444
1921	55	43	71	83	161	141	118	94	59	18	843

The following tables relate to such strikes and lockouts as the bureau has been advised actually terminated during the third quarter of 1921:

RESULTS OF STRIKES AND LOCKOUTS ENDING DURING THE THIRD QUARTER OF 1921.

Result.	July.		August.		September.		Month not stated.		Total.		Grand total.
	Strikes.	Lockouts.	Strikes.	Lockouts.	Strikes.	Lockouts.	Strikes.	Lockouts.	Strikes.	Lockouts.	
In favor of employers	59	.....	40	1	26	1	2	.....	127	2	129
In favor of employees	16	.....	16	.....	7	.....	1	.....	40	.....	40
Compromised	23	.....	24	.....	15	.....	.....	.....	62	.....	62
Return pending arbitration	9	.....	3	.....	2	.....	.....	.....	14	.....	14
Not reported	10	1	9	1	8	.....	1	.....	28	2	30
Total	117	1	92	2	58	1	4	.....	271	4	275

The foregoing table does not include one strike in which the plant went out of business.

DURATION OF STRIKES AND LOCKOUTS ENDING DURING THE THIRD QUARTER OF 1921, OF NUMBER REPORTING.

Period.	July.		August.		September.		Month not reported.		Total.		Grand total.
	Strikes.	Lockouts.	Strikes.	Lockouts.	Strikes.	Lockouts.	Strikes.	Lockouts.	Strikes.	Lockouts.	
1 day or less	3	.....	3	.....	1	.....	.....	.....	7	.....	7
2 days	3	.....	3	.....	2	.....	.....	.....	8	.....	8
3 days	3	.....	5	.....	2	.....	.....	.....	10	.....	10
4 days	4	.....	3	.....	1	.....	.....	.....	8	.....	8
5 to 7 days	7	.....	7	1	1	.....	.....	.....	15	1	16
8 to 14 days	8	.....	4	.....	5	.....	.....	.....	17	.....	17
15 to 21 days	1	.....	6	.....	7	.....	.....	.....	14	.....	14
22 to 29 days	2	.....	7	1	3	.....	.....	.....	12	1	13
30 to 90 days	41	.....	13	.....	14	.....	.....	.....	68	.....	68
Over 90 days	26	.....	28	.....	12	.....	.....	.....	66	.....	66
Not reported	19	1	13	.....	10	1	5	.....	47	2	49
Total	117	1	92	2	58	1	5	.....	272	4	276

The total days lost in strikes and lockouts ending during the quarter for the 227 reporting was 13,752. The average duration of these was

about 61 days. The average duration of strikes and lockouts lasting less than 90 days was 30 days. By months the record is as follows: July, days lost, 6,130, average 63 days; August, days lost, 4,844, average 60 days; September, days lost, 2,778, average 58 days.

Injunction Against Employers by Striking Cloakmakers of New York City.

THE strike of the members of the International Ladies' Garment Makers' Union of New York, which began November 14, 1921, has several features of interest, the most notable being the resort of the strikers to the courts for an injunction against the employers' association, and their institution of suits for damages due to loss of wages during the strike.

The strike itself arose out of the relations between associations of employers and employees. On the workers' side the industry in New York is well organized, practically all the employees belonging to the International Ladies' Garment Makers' Union, a national organization affiliated with the American Federation of Labor. The New York locals, for the purpose of dealing with employers, are banded together into what is known as the Joint Board of Cloak Makers' Union of New York City. On the employers' side the organization is not so complete. The association most actively concerned in this strike is the Cloak, Suit and Skirt Manufacturers' Protective Association, which has been in existence about 12 years, and comprises about 320 members, operating a large number of inside shops. A second organization is the American Cloak and Suit Manufacturers' Association, with about 900 members, who operate mainly as subcontractors. Outside of both organizations are the independent operators, who are estimated to number something over 1,000.

In the spring of 1919 the cloakmakers' union entered into agreements with the two manufacturers' associations and with the independent operators, the agreements covering working conditions pretty completely, and being designed to promote industrial harmony and do away with the frequent strikes by which the industry has been harassed. The agreement with the Protective Association, signed May 29, 1919, provided among other things for the use of the week work system in place of piecework with minimum weekly rates of wages, established the preferential union shop and the 44-hour week with limitation of the amount of overtime allowed, and called for investigation and review of all grievances, including complaints growing out of discharges. Some of its important provisions are thus summarized:

> The agreement with the Cloak, Suit and Skirt Manufacturers' Protective Association states the following to be legitimate causes for discharge: Incompetency, misconduct, insubordination in performance of work, breach of reasonable rules (jointly established), "soldiering on the job." Strikes and lockouts are prohibited. Provision is made for the peaceful joint adjustment of grievances and, in instances of disagreement, for adjustment by a trial board consisting of one representative from each side and an impartial person mutually satisfactory.[1]

[1] "New trade agreements in the cloak, suit and skirt industry of New York City"; MONTHLY LABOR REVIEW, December, 1919, pp. 42-60. The full text of the agreement and a discussion of the situation as to production at that time will be found in this article.

The employers soon began to complain that under this plan output suffered, and that in the interests of production the piecework system should be reintroduced. The employees strongly dissented from this view. The disagreement became so pronounced that on June 3, 1921, the cloakmakers' union and the Protective Association decided that a joint commission, composed of three representatives from each side, should be established to consider the whole situation and find some method for increasing output. The commission should meet at least once a month, and on November 1 should make a report of its activities and findings to a joint conference of representatives of the Protective Association and the union, accompanying the report "with complete and appropriate recommendations." Apparently the manufacturers felt that this commission was not progressing satisfactorily, for on October 25, less than a week before the date set for the joint conference, the Protective Association adopted the following resolutions:

Whereas it is the opinion of the executive committee that in order to stabilize and bring into the industry a condition under which garments may be manufactured efficiently and at prices consistent with the times, that there must be a radical readjustment of industrial standards, therefore it is

Resolved, That it has become necessary to substitute in the industry the piecework system for the week work system, to establish an increase of the number of working hours in the week and to fix a reduction of the wages of the workers in those branches of the industry where, by the nature of the services rendered, it is required that they be retained on the week work system; and further be it

Resolved, That the extent of the reduction of the wages of the week workers and the number of hours to be added to the working week be determined by the executive committee; and be it further

Resolved, That in order to bring into full force and effect the above changes in the industrial standards of the industry, there be promulgated an order, binding upon every member of this association, that, beginning Monday, November 14, 1921, each and every member will operate his factory on the piecework system and at the scale of wages and for the working week established by the executive committee.

Addendum: It is expected that when the readjustment of working conditions is established as outlined in this resolution, that the effect will be not only a reduction of the prices of garments to the consumer, but also through the stimulation of business that the workers will be enabled to earn an average wage in excess of their earnings under the present week work conditions. (N. Y. Daily News Record, Oct. 27, 1921, p. 9.)

The union officials at once began conferences on the best way of meeting this situation and shortly announced that a strike would follow any attempt to carry out this program. Moreover, since the Protective Association might use the shops of other employers to get work done for its members, the strike would be made general, though new agreements, embodying safeguards against this, would be made at once with employers who wished to settle with the union on the old terms. Both sides sought publicity for their views. The union maintained that the action of the Protective Association was a direct violation both of the agreement of May, 1919, and of the supplementary agreement of June, 1921, and declared that the fundamental principle of collective bargaining was destroyed if a contract could thus be abrogated by one party at its pleasure. The Protective Association at first dwelt mainly on the loss of efficiency under the week work system and the impossibility of carrying on the industry under the amount of workers' control involved in the union's claims. The reestablishment of the piecework system, the lengthening of the

week to 49 hours, the reduction of time wages and the vesting in the employer of entire control over employing and discharging were absolutely essential, it declared, to the rehabilitation of the industry and the lowering of prices to the final purchaser. In response to the union's claim of a broken contract, it maintained that the union had itself violated the contract in the matter of some shop strikes in 1920, and that since that time no contract had been in force between them and their workers.

Efforts were made by both State and Federal authorities to avert the strike, but neither side would recede from its position. At the beginning of November the members of the Protective Association posted notices in their shops that the changes announced would become effective November 14, and on that date the workers walked out. There was some difference of opinion as to how general the strike was, the union claiming that it was practically unanimous, while the Protective Association announced that 40 per cent of its workers had remained at their posts. A number of employers outside the Protective Association, who had made no attempt to introduce the changes, at once applied for a settlement on the old terms, and within the first four days of the strike, according to the New York Times, more than 100 employers, with shops employing over 4,000 workers, had signed up again with the union. The American Association, which had not posted notices of the changes, made efforts to bring the two sides together, and so did both State and Federal authorities, but to no purpose. The union insisted that the Protective Association had broken its contract and the Protective Association insisted that for over a year there had been no contract to break, and neither side would yield a point.

In these circumstances the union took the unusual step of applying for an injunction against the Protective Association, this being the first time, it is said, that such relief has ever been sought by a union against an association of employers. A preliminary injunction was granted on November 29. On December 1 counsel for the Protective Association made application to have the injunction vacated, but the application was denied. A hearing on the question of whether or not the injunction should be made permanent was set for December 5, but on application of counsel for the Protective Association it was postponed till December 12. On that day arguments were presented by both sides, but the judge reserved decision, allowing both sides until December 21 to present all papers.

The injunction, which is very sweeping in its terms, among other provisions enjoined the defendants from:

> Combining and conspiring in any way to order, direct, instigate, counsel, advise, or encourage the members of the Cloak, Suit, and Skirt Manufacturers' Protective Association, or any of them, to cease performing or to violate the agreements of May 29, 1919, and June 3, 1921, made between the said The Cloak, Suit, and Skirt Manufacturers' Protective Association and the International Ladies' Garment Workers' Union and the Joint Board of Cloakmakers' Union of the City of New York, and from doing or sanctioning any act in furtherance or support of such conspiracy, from ordering, directing, instigating, counseling, assisting, advising, or encouraging such members of the said the Cloak, Suit, and Skirt Manufacturers' Protective Association, or any of them, to abrogate, repudiate, violate, or discontinue the provisions of said agreements setting forth and providing for the system of week work in their establishments prior to June 1, 1921, or to increase the hours of labor in their establishments above 44 hours per week until the said first day of June, 1922; from supporting,

aiding, or assisting members of the Cloak, Suit, and Skirt Manufacturers' Protective Association, or any of them, in any effort to abrogate the week work system or increase the hours of labor in their establishments prior to June 1, 1922, by money contributions or in any other manner whatsoever.

The fear was at first expressed that this injunction interfered with the right of the individual employer to run his shop according to his own ideas, and an interpretation, sanctioned by the presiding judge, was agreed upon by counsel for both sides. According to this the individual employer is absolutely at liberty to do what he pleases, subject to the claim of the workers for damages should their contention be upheld that he breaks a contract by introducing changes otherwise than by the methods set forth in the agreement of May, 1919. The injunction lies only against the Protective Association, as such. From the workers' standpoint, the importance of this is that the association may not discipline members who break away from their program, nor support those who adhere to it; hence the individual employers are less likely to hold firmly together.

Meanwhile, the union has enlarged its legal program to include suit for damages for all loss of wages during the strike, however long its duration may be. They claim that the strike is due directly to a breach of contract on the part of the Protective Association; that owing to the strike the workers are losing heavily in wages; and that, on the analogy of the Danbury Hatters case, the workers are entitled to damages for this loss. It had been expected, before the strike took place, that the unions might be sued for breaking their contracts with the independent employers and with the members of the American Association. Their action in themselves initiating suits for breach of contract came as a complete surprise and is said to involve several new and important questions. Meanwhile the strike continues, and the union announces its determination and ability to hold out indefinitely. The Protective Association declares itself equally determined and the deadlock persists. Presumably, the situation will be strongly affected by the decision of Justice Wagner upon the question of making the injunction permanent, but until that decision is handed down no change is anticipated.

COOPERATION.

Cooperative Building Guilds in the United States.

EVIDENCES of the beginnings of a movement somewhat corresponding to the housing guild movement in Great Britain [1] are shown in the establishment of union-supported building companies at various points in the United States. In April, 1921, a construction company was formed in St. Paul, Minn. According to information furnished to this bureau by the company the organization is capitalized at $100,000, of which half is in common and half in preferred stock. Control is vested in the common stock, which can be owned and voted only by labor organizations. The board of directors consists of one representative each from each of the unions engaged in the building trades. Each representative is an expert in his particular craft.

The company has confined itself largely to house construction, and since its establishment in April has done a business amounting to $200,000 and shown a dividend of 7 per cent. Its operation is on a "strictly business basis." Union standards of wages and working conditions are maintained.

At the time the company was organized, another association—a building and loan association—was formed to handle the mortgage financing on the construction work undertaken. The construction company reports that this building and loan association has also shown a satisfactory growth.

The All-American Cooperative Commission reports that similar building guilds have been formed in Jackson, Mich., and Reading, Pa.

Cooperation in Foreign Countries.

Cooperative Fishing in Belgium.

LA COOPÉRATION Belge for October 15, 1921, states that a cooperative dream of 35 years' standing has just been realized. In 1886 Edouard Anseele, the father of the Belgian consumers' cooperative movement, testifying before a commission of inquiry, pointed out the misery and poverty of the salt-water fishermen. He urged the purchase of two trawlers to be turned over to a cooperative society formed among the fishermen, with the stipulation that all profits should be applied toward the purchase of more boats for the use of their fellow fishermen.

The suggestion was not followed, but the idea has now taken shape through the efforts of the workers. The capital has been furnished through the cooperative society, "Vooruit," the socialist fishermen of

[1] A description of the work of these guilds was contained in the December, 1921, issue of the MONTHLY LABOR REVIEW, pp. 147–153.

Ostend, the syndicalist trade-unions of Anvers, the chief cooperative societies, and the Belgian Labor Bank. Two steam trawlers have been purchased from the English Admiralty for £7,000 ($34,066, par) each. They will operate on the North Sea and the crews will consist of men belonging to the socialist union of fishermen at Ostend.

The fish which are caught will be sold largely through the cooperative retail stores of the "Vooruit," of which there are several in Ghent.

Establishment of a Government Office on Cooperation in Belgium.

THE November 15, 1921, issue of La Coopération Belge notes the issuance, at the instance of the minister of labor, of a royal decree establishing a section on cooperation in the office of trades and commerce. This is a partial fulfillment of one of the ends for which the movement has been working—that there should be some branch of the Government concerning itself with the cooperative movement and in particular with the organization of consumers. The office will henceforth be called the office of commerce and cooperation.

Report of Danish Cooperative Wholesale Society.

THE October, 1921, number of the International Cooperative Bulletin gives the following figures for the 1920 operations of the Danish Cooperative Wholesale Society:

	1919.	1920.
Number of member societies	1,729	1,792
Number of individual members	323,000	335,104
Amount of business ..... kroner[1] ..	131,000,000	203,000,000

Those productive departments of the wholesale for which figures are given produced goods valued as follows:

	Kroner.[1]		Kroner.[1]
Paper goods	1,000,000	Tobacco and cigars	1,500,000
Lumber	627,000	Rope and cord	500,000
Coffee (roasting)	6,000,000	Soap	1,000,000
Chocolate	2,500,000	Margarine	17,600,000
Sweets	1,500,000	Clothing	4,300,000

Workers' Productive Associations in France.

THE journal of the French Workers' Productive Associations, L'Association Ouvrière, for November 5, 1921, contains an article designed to refute the statement so often heard, that it is almost impossible for workers' cooperative productive associations to attain long life and that their mortality rate is enormous. This article points out, first of all, that the societies that die are replaced in equal or greater numbers by new societies. According to the writer, at the beginning of 1908, there were 215 workers' societies in the federation. In 1921, 106 of these, in spite of the hard times caused by the war, were still on the federation's rolls. Not all of the other 109, it is pointed out, had died; some had simply dropped out of membership in the federation. Among the printing associations, in spite of the war and dearth of paper, only four of those which had appeared on the membership list of the federation in 1908 failed to appear in 1921.

[1] Krone at par=26.8 cents.

Establishment of a Cooperative Surgical Instrument Factory in Hungary.

MENTION is made in the October, 1921, issue of the International Cooperative Bulletin of the establishment, by the National Union of Hungarian Physicians, of a cooperative factory for the manufacture of surgical instruments. At first organization proceeded slowly, for the medical faculty had little knowledge of the cooperative idea. As a result, however, of powerful moral support by the "Hangya" (consumers' cooperative wholesale), workshops for the manufacture of surgical instruments and orthopedic appliances were opened in 1920. Shortly afterwards a shop was opened for the sale of instruments, followed a few weeks later by a smithy and locksmiths' workshop where hospital furniture, laboratory requisites, operating tables, etc., are manufactured. In the workshops for the manufacture of surgical instruments there are from 30 to 40 expert workmen.

In connection with the workshops, about 15 persons are employed making orthopedic appliances.

Report of Italian National Credit Institute.

THE National Credit Institute of Italy has, according to the October, 1921, issue of the International Cooperative Bulletin, become in the past few years the chief "financial establishment of Italian cooperation in all its forms." At the end of 1919 it had relations with 5,370 societies, as follows:

	Number.
Consumers' societies	3,621
Workers' productive societies	1,227
Agricultural societies	349
Agrarian universities	22
Miscellaneous societies	151
Total	5,370

The institute grants loans on special guaranties to productive and labor [workers' productive] societies for the undertaking of public works, while in the case of distributive [consumers'] societies the institute has a claim on the goods. In the case of the agricultural societies it has a claim on the harvest yield and on mortgages.

During 1920 loans to the amount of 142,000,000 lire ($27,406,000, par) were granted to 380 workers' productive societies in order to enable them to execute works to the value of 218,000,000 lire ($42,074,000, par).

The agricultural societies also received considerable support from the institute, and consequently were able to extend their work of cultivation. The area cultivated by the societies in relation with the institute at Rome increased from 30,000 hectares (74,130 acres) in 1919 to 100,000 hectares (247,100 acres) in 1920.

Report of Norwegian National Cooperative Union.

THE September, 1921, issue of Kooperatören,[1] gives statistics for 1920 for the Norwegian National Cooperative Union, as follows:

Number of member societies		401
Number of individual members		88,346
Sales:		
Groceries	kroner [2]	16,314,380
Hardware	do.[2]	1,005,148
Shoes	do.[2]	636,146
Manufactured articles	do.[2]	84,657
Office and printing materials	do.[2]	36,254
Total	do.	18,076,585
Net surplus	do.[2]	147,622

During the year the creamery operated by the union had sales amounting to 3,500,000 kroner ($938,000, par). The establishment of a margarine factory at Christiania is being considered.

At the annual meeting the organization of an insurance office to write all kinds of insurance, except life insurance, was decided upon, members to be cooperative societies and trade-unions. It began operations on August 1.

Report of Union of Polish Consumers' Society.

AN ACCOUNT of the tenth congress of the Union of Polish Consumers' Societies, held at Warsaw, in June, 1921, is contained in the October, 1921, issue of the International Cooperative Bulletin. The report there given of the activities of the Union and its members for 1920 contains the following figures:

Union of Polish Consumers' Societies:		
Number of affiliated societies		1,058
Amount of business	marks.[3]	756,853,765
Net surplus	do.[3]	28,723,222
Reserve fund	do.[3]	37,547,390
Members of union:		
Number of individual members		347,459
Amount of business	marks[3]	1,443,554,113

Spanish Agricultural Cooperative Movement.

THE agricultural cooperative movement in Spain dates from 1911 when a few farmers living on an estate formed the Catholic Workman's Production Association. This association, according to Commerce Reports for October 31, 1921, is now a federation of 5,000 societies having 600,000 members. Through the local societies such cooperative activities as buying and selling, lease holding, writing of insurance of various sorts, banking, etc., are carried on. Clubhouses with reading rooms and libraries are also maintained.

The central bank of the confederation, organized in April, 1918, had on September 30, 1919, assets exceeding 5,500,000 pesetas ($1,061,500, par). The aggregate deposits of the central and

[1] Kooperatören. Organ for den Kooperativa Rorelsen i sverge. Stockholm, September, 1921.
[2] Krone at par =26.8 cents.
[3] Mark at par=23.8 cents.

local banks at the end of 1920 amounted to 250,000,000 pesetas ($48,250,000, par).

The capital of the rural banks, derived from special subsidies and donations from federation and syndicate banks and from margin of profit on loans and deposits, is loaned to members at a rate never to exceed 6 per cent, payable in advance. Surety is taken in the form of insurance taken out in the confederation on farm produce, crops, implements, life or accident insurance policies, etc. This makes it possible for a member to borrow money for the purchase of land or other agricultural purposes even though he can give no other security than an insurance policy of various types. More than 50,000 individuals have thus been enabled to buy farms of their own.

No dividends are paid. The ultimate profits are applied to defray administration expenses, the creation of a surplus reserve, and the advancement of works of mutual benefit and interest. The books are open to the inspection of members.

Through the "Banco Rural," established by the central body, cooperative buying and selling is carried on.

It is estimated that this cooperative wholesale buying of fertilizers, agricultural machinery, live stock, feed stuffs, etc., and the sale of produce realized in 1920 for the members of the confederation between 80,000,000 and 100,000,000 pesetas [$15,440,000, and $19,300,000, par]. The confederation's turnover in 1917 represented 57,000,000 pesetas [$11,001,000, par], 200,000,000 [$38,600,000, par] in 1918, and 600,000,000 [$115,800,000, par] in 1920. The confederation now controls 15 flour mills, 50 cooperative warehouses, 100 olive-oil presses, and numerous bakeries, granaries, and general stores. It is soon to establish an industrial bank for the purpose of bringing related and dependent industries under its control and a territorial bank to handle the purchase and allotment of landed estates.

WHAT STATE LABOR BUREAUS ARE DOING.

Iowa.

Factory Inspection.

ACCORDING to a report made by the Iowa Bureau of Labor Statistics on statistics of manufactures for the year ending December 31, 1919, in which is included a report on factory inspection for the biennium ending June 30, 1920, there were 3,206 establishments with an average yearly number of 75,056 wage earners. The capital invested amounted to $409,282,755; the yearly wages totaled $84,980,847; and the average yearly wages of factory employees, both sexes included, were $1,129.30 as compared with $651.37 in 1915 and $785.22 in 1917. Out of the 3,206 factories only 2,841 reported hours worked per day, the 8, 9, and 10 hour groups being quite evenly divided. The inspection department consists of three inspectors—two men and one woman, and the deputy commissioner, who, because of a limited force, also does a great deal of inspection work. Following is a comparative table of the inspection work of the bureau for the past four biennial periods:

Period.	Number of inspections.	Number of recommendations.
Jan. 1, 1912, to Dec. 31, 1913 (2 years)	3,361	5,540
Jan. 1, 1914, to Dec. 31, 1915 (2 years)	4,434	5,814
Jan. 1, 1916, to June 30, 1918 (2½ years)	5,175	3,193
July 1, 1918, to June 30, 1920 (2 years)	4,206	2,536

In the total 1,898 establishments inspected during the fiscal year July 1, 1919, to June 30, 1920, there were 72,964 employees, of whom 53,936 were males and 19,048, females. Of this number 388 males and 200 females were under 16 years of age.

Conciliation and Arbitration.

The biennial report of the Iowa Bureau of Labor Statistics on the subject of conciliation and arbitration gives an account of the five cases which have come up for arbitration under the arbitration law of July 4, 1915, in the two-year period ending July 1, 1920. Under the Iowa arbitration and conciliation act disputes which do not involve directly or indirectly interstate trade relations and which involve 10 or more wage earners may be brought up for arbitration, when the parties are unable to adjust their differences, upon petition of 25 adult citizens or upon application by various public officers or of the employees or of a majority of the employees, which majority

shall in no case exceed 20 employees. The board consists of three members with a representative each of the employer and the employees involved in the dispute, chosen by the governor from a list of five persons submitted by each side to the controversy, and the third member chosen by these two members and appointed by the governor. The board has full power to summon witnesses, administer oaths, and may demand any evidence it sees fit, whether strictly legal evidence or not, but the award is not compulsory and either party to the dispute may reject the decision of the board and may even refuse to take any part in the proceedings. In case both parties agree to accept the decision it is binding for one year.

Two of the five cases under consideration, those of the Clinton Street Railway of Clinton, and the Iowa Biscuit Co. of Burlington, resulted in definite awards, both of which were accepted, and in the latter case a working agreement was drawn up and signed by the company and its employees. The three other companies refused to arbitrate, and the governor in each case appointed the State industrial commissioner to represent the employers upon the board. Testimony was taken in these three cases as in the two cases which were adjusted, but because of the impossibility of enforcing the award it could result in nothing further than recommendations to the employers and employees for peaceable settlement of their disputes.

Free Employment Service.

A report by the state bureau of labor statistics of the operation of the State-Federal Free Employment Service for the two-year period ending June 30, 1920, shows that in that time there were 217,990 registrations of applicants for work, 187,179 persons were wanted by employers, 157,109 applicants were referred to jobs, and 120,405, or 55.2 per cent of the applicants for work, were reported placed. A comparison between the two years shows that there was a much higher percentage of placement in the first year than in the second, in 1918–19 61.9 per cent of the applicants being placed, and in 1919–20 43.9 per cent, a reduction of 18 per cent. In 1919–20 there was an increase in the percentage of women referred to jobs and a large decrease in the percentage of men so referred. Placement of men in the latter year shows a 23.1 per cent reduction and of women a decrease of only 7.1 per cent. The registrations of women are largely in excess of the help wanted in both years, but this excess is due in great measure to the inclusion of the total registration of teacher applicants.

Child Labor.

An analysis of work permits for the two-year period July 1, 1918, to June 30, 1920, published as Bulletin No. 4 by the Iowa Bureau of Labor Statistics, reveals the fact that during the first year of the operation of the law, July 4, 1915, to June 30, 1916, 1,522 work permits were issued to young persons of that State. From July 1, 1916, to June 30, 1918, 4,913 work permits were issued, while in the biennial period July 1, 1918, to June 30, 1920, 7,469 permits were issued. Of these, 4,832 were issued to boys; 2,637 to girls. The report warns against a misinterpretation of this great increase in the employment of child labor. It does not indicate laxity in law

enforcement or a more serious situation as regards child labor. The steady growth of Iowa's industries has necessitated an increase in the number of employees and the number of children employed has increased with that of adult employees. High prices for the necessities of life have led a larger number of boys and girls between the ages of 14 and 16 to enter industry, either to support themselves or to assist their families, while employers through motives of economy in a time of high wages have employed minors where it was possible to do so without reducing efficiency.

No person under 14 years of age can be employed with or without compensation in any "mine, manufacturing establishment, factory, mill, shop, laundry, slaughter house or packing house, or in any store or mercantile establishment where more than 8 persons are employed, or in the operation of any freight or passenger elevator, or livery stable or garage, place of amusement, or in the distribution or transmission of merchandise or messages." Minors between 14 and 16 years of age may be employed in the occupations named for 8 hours a day between 7 a. m. and 6 p. m. and not exceeding 48 hours in any week and not exceeding 40 hours per week during part-time school term, provided a work permit is issued for every position obtained by each child between 14 and 16 years of age. Furthermore, the officer who issues the permit must determine whether the occupation is one in which a child may work, whether the child has received the prescribed education, has reached the legal age, and is physically able to engage in the occupation it seeks.

The law also contains prohibitions upon employment in certain occupations dangerous to health or morals. No girl under 21 years of age may be employed in an occupation requiring constant standing, and neither boys nor girls under 18 years of age can deliver goods or messages between 10 p. m. and 5 a. m.

The statistics shown in the following table were secured from the 7,469 permits issued during the last two-year period. These have been tabulated and classified so as to show the number by age, school grade, height and weight, for 29 cities of the State besides a few towns combined into a miscellaneous group. The number of boys and girls divided into half-yearly and yearly groups, is as follows:

Age.	Boys.	Girls.	Age.	Boys.	Girls.
Half-yearly group.			*Yearly group.*		
14 to 14½ years	1,223	574	14 to 15 years	2,515	1,305
14½ to 15 years	1,292	731	15 to 16 years	2,317	1,332
15 to 15½ years	1,322	679			
15½ to 16 years	995	653	Total, 14 to 16 years	4,832	2,637

Labor Organizations.

Bulletin No. 5 of the Iowa Bureau of Labor Statistics deals with labor organization in the State for the two years ending December 31, 1919. The growth of trade unionism in this period is stated to have been very rapid. The number of craft unions increased from 67 in 1917 to 72 in 1919, the number of locals from 792 to 975, and membership from 53,944 to 81,404, or 50.9 per cent. Membership

among women grew from 664 in 1917 to 1,815 in 1919, an increase of 173.3 per cent in the two years under consideration.

The section on unemployment shows that 5,435 union members were out of work at the end of 1919, of whom 856 were unemployed because of lack of work or material; 1,260 because of weather conditions; 1,433, of whom 1,085 were miners, on account of strike or lockout; 1,210 because of sickness or old age; 403 because of seasonal occupation, and the remainder, 273, for other reasons.

Rates of wages varied so greatly in different localities that no uniform percentage of increase can be shown, but in general the report states the occupations normally receiving the lowest pay have shown greater increases than the skilled occupations which receive the higher rates.

The strike data is admittedly incomplete, but the bureau's records show 103 strikes involving 11,440 union members, excluding the general strike of the coal miners. The latter strike involved 15,000 members and was included in the injunction proceedings of the Department of Justice before Federal Judge Anderson at Indianapolis, Ind. Seven lockouts were reported for the two-year period which lasted from two days to one year, the combined duration being 522 days. All these lockouts resulted favorably for the employees.

Massachusetts.[1]

AS THE result of an investigation of accidents sustained by employees on power punch presses, a committee has been formed to recommend to the Department of Labor and Industries of Massachusetts rules and regulations for the proper safeguarding of such machines.

To assist in meeting the problems of unemployment, Gov. Cox has appointed a committee to promote work. This committee is organized with the following subcommittees: Executive committee, national committee, State committee, cities and towns, committee for relief work, committee on merchants and manufacturers, publicity committee, committe on reconditioning the Leviathan, committee on unemployment among women.

The department of labor and industries in cooperation with the United States Employment Service secures monthly from 192 manufacturing establishments in eight principal industrial centers in the State, each normally employing 500 or more, information with reference to the number of persons employed as shown by the last pay roll of the month. The canvass made at the close of November shows a very slight gain in the aggregate number employed in these representative establishments, as compared with a corresponding aggregate at the close of October. The November aggregate, 198,768, when compared with the corresponding aggregate, 191,759, for the close of April shows an increase of 3.6 per cent, representing the improvement from the lowest point of the year.

Of the eight cities, Fall River, Lawrence, New Bedford, and Worcester showed fairly encouraging increases in the number employed,

[1] Typewritten notes from the Department of Labor and Industries of Massachusetts. Boston, Nov., 1921.

while Boston, Brockton, and Lowell showed comparatively small decreases.

To the extent that these establishments may be considered as representative, they indicate a continued, although slow improvement in the manufacturing industries of the State.

An advisory council on women and children in industry has been formed to assist the department of labor and industries in this branch of its work. The council consists of individual representatives of organizations that are sympathetically interested in the welfare of working women and children.

In the annual report of the department of labor and industries for the year ending November 30, 1921, recommendations for legislative action are made providing for the enforcement of minimum wage decrees, for expert assistance in certain lines of the department's work, such as industrial health and safety codes, and for increasing the penalty for the illegal employment of minors.

Publications recently issued by the department of labor and industries include two labor law bulletins, one giving the text of the law relating to the employment of women and children, the other the law relating to the certification of working children. A new edition of the manual of Labor Laws enforced by the department is now in press and will be ready for distribution shortly.

Ohio.

Union Scale of Wages.

THE annual report of the division of labor statistics of the Department of Industrial Relations of Ohio relates to union scales of wages and hours of labor and covers the organized trades in sixteen cities. The report includes agreements in force on May 15, 1921, in the following industries and occupations: Bakeries; building; metal; printing, book and job, and newspapers; transportation, street railways; teamsters and chauffeurs for various industries, and a miscellaneous group. The approximate total of the membership of all local unions covered under this report was 90,000.

In the bakery trade the lowest hourly rate paid in any occupation was 50.92 cents and the highest $1.33\frac{1}{3}$. The 48-hour week was in force in all cities except Newark, where 54 hours were worked per week, and among Hebrew workers in Cleveland, where the hours of labor were 45. In the building trades the lowest rate, $47\frac{1}{2}$ cents, was paid to glaziers in Cincinnati, and the highest, $1.50, to bricklayers engaged in sewer and tunnel work in Cleveland. The 8-hour day and 44-hour week prevailed, though there were a few instances where the 54-hour week was in force, and other scales of hours varied between these limits. In the metal trades the lowest rate, 50 cents, was paid to horseshoers in Hamilton and to machinists' helpers in Toledo, and the highest, $1.50, to boilermakers in Cleveland. The hours varied between the 8-hour day and the 44-hour week, and the 9-hour day and the 50-hour week, although there were several instances where longer hours were worked, in Steubenville a 59-hour week being in force for machinists in manufacturing shops and in Portsmouth, a

60-hour week for molders. Table and machine hands (bookbinders) in Cincinnati received 40.91 cents, the lowest wages paid in the different cities, and lithographers on offset presses, $1.25, the highest rate in the book and job trade, while the rates for newspaper workers ranged from 31¼ cents per hour for machine tenders' assistants in Columbus to $1.21 per hour for pressmen in charge in Cleveland. The 44 and 48 hour week prevailed in the printing trades except in a few instances where 40 and 42 hours were worked. Street car employees worked from 63 to 70 hours, and hourly rates varied from 41 cents to 60 cents. Teamsters and chauffeurs worked on an average 56 and 60 hours a week with a maximum of 73½ and a minimum of 48. Hourly rates varied from 26⅔ cents to 83⅓ cents. Many exceptions to these rates and hours are noted, overtime, night work, and seasonal conditions operating to modify the agreements.

Porto Rico.

THE Eighth Annual Report of the Bureau of Labor of Porto Rico (March, 1921) calls attention to the working conditions in the Island, especially to those prevailing in the rural districts. According to a recent investigation only 25 per cent of the workingmen visited in the urban zone were able to meet their subsistence expenses on their wages alone. The situation of agricultural laborers is described as "distressing."

The increase of the population, especially among rural workers, is is said to be "startling" and measures are needed to prevent employers from carrying on their enterprises in total disregard of the most rudimentary hygienic requirements.

The lack of sufficient appropriations for the bureau of labor is repeatedly referred to in the report, and recommendation is submitted for a reorganization of that office.

Minimum Wage for Women.

Early in the last quarter of 1920 the industries employing the greatest number of women benefiting under the minimum wage law, began gradually to reduce their forces. By the end of the year 75 per cent of the shops were closed and from an approximate total of 30,000 women who had been receiving a salary of $1 per day only 20 per cent were permanently employed.

In December, 1920, the Supreme Court of the island handed down a decision settling all cases regarding piecework in workshops and factories. Various employers affected by this decision have determined to close their shops, refusing to pay the stipulated wage. Home work is on the increase.

The apprenticeship term, which is fixed at three weeks in all trades, involves particular difficulties in this island where the lack of skilled labor constitutes a serious problem. An amendment to this provision is advocated. It is suggested as a possible satisfactory arrangement that the bureau of labor might be given the discretionary power of fixing the apprenticeship term in accordance with the trade or that a commission be created to regulate wages.

Woman and Child Labor.

In matters relative to the working conditions of women and children employers are deaf to the repeated verbal and written advices of the bureau of labor and in case of prosecution secure a favorable decision by submitting evidence in their behalf from unscrupulous workers.

During the year, up to December, 1920, visits were made to 558 workshops and factories in which there were 16,416 women and 2,663 men assistants; to 86 mercantile establishments in which women were employed as cashiers; and to 33 agencies and 347 subagencies for blouses, with 13,462 needleworkers.

The chief of the bureau of labor declares that "it was not possible to find a single establishment where the law governing sanitary conditions of the shops was strictly complied with."

Regarding notices in re hours of labor, there are some employers who not only do not apply for blank forms in this connection but who have destroyed such forms when furnished with them.

Wage Claims for Farm Labor.

The defects of the law with reference to the settlement of the wage claims of agricultural workers are pointed out, among such defects being the failure of the act to provide adequate means for carrying out its provisions. It is suggested in the bureau's report that the representative of the department of agriculture and labor who handles the workers' claims should be a lawyer or that a judicial officer of the department of justice or a local attorney be assigned to handle the case. The law should also be extended to include the urban zones. The bureau of labor has been able to adjust satisfactorily 20 per cent of the 194 wage claims of workers residing in the urban zone during 1920.

Inspection of Scaffolds.

Workmen cooperate with employers in the constant violation of the law relating to the inspection of scaffolds, which is the only Porto Rican law for the prevention of accidents. Most of the building construction, painting, and repairing is done on defective scaffolds until they are inspected.

Need of Inspectors.

In discussing some of the details of the frequent and flagrant violations of the insufficient labor legislation of the island, the chief of the bureau of labor states that employers are convinced that his office lacks "the personal authority and restraining power" strictly to enforce existing labor legislation, and they will continue in this attitude so long as the bureau has no adequate body of inspectors and until the employers realize that it is a benefit to themselves to safeguard the health and lives of their workers.

Emigrant Contracts.

Various groups of Porto Rican emigrants have contracted to work in other countries without applying in the matter to the department of agriculture and labor, and when employers have violated

these contracts the department, having no part in them, can do nothing in behalf of the complainants. As a means of preventing similar occurrences in the future the bureau has recently utilized all the island newspapers to set forth the workmen's rights in such cases, to suggest the possible dangers of contracts in which the department has no part, and to make known the difficulties of employment abroad unless emigrants are provided with sufficient guaranties against the fear of employers not living up to their contracts. Copies of these publications were furnished to workmen's organizations and also sent to the homes of hundreds of rural workers, among which the recruiting propaganda was more active. "It has not been possible to prosecute those employers who have made a mockery of the good faith of the contracted workmen and of the best purpose of the legislature." If the law were amended to include possible evasions and severe punishments for violations, it might prevent "the increase in the number of native exiles who succumb to misery in far-away countries, victims of their involuntary ignorance."

Homestead Commission.

The work of the homestead commission for the establishment of laborers' quarters is commended. The report states that 360 houses are being built in a healthful and picturesque locality near San Juan. It is expected that the legislature will authorize somewhat similar projects in other localities.

CURRENT NOTES OF INTEREST TO LABOR.

Formation of Cooperative Colony in California.

EIGHTY-seven acres, according to the San Francisco Organized Labor, have recently been acquired by the Santa Barbara Fellowship. This land, which is situated 2 miles from Santa Barbara, on El Camino Real, is to be the site for a model cooperative colony of 300 homes. A cooperative cafeteria, kitchen, playground, Greek theater, athletic stadium, auditorium, garage, store, and laundry are to be erected by this home-buying cooperative association.

Death Benefits for Woman Employees in Hongkong and Canton, China.

A CONSULAR report recently received by this bureau contains an excerpt from the Report on Commerce and Industries of Hongkong, China, for September,1921. According to the report thus quoted a system of death benefits has been inaugurated by a large cigarette manufacturing company of Hongkong and Canton, China, for its female employees. Such a scheme has been in operation by the company for some time but heretofore has covered only supervisory employees. It is now extended to cover all women employees of the company. The plan provides that the following benefits shall be payable to the relatives on the death of an employee who has been in the service of the company a specified length of time:

Period of service:	Death benefit.	Period of service—Concluded.	Death benefit.
1 and under 3 years.....	[1] HK $50	10 and under15 years.....	$150
3 and under 5 years.....	80	15 years and over.....	200
5 and under 10 years.....	100		

Recent Developments of the Guild Principle in Great Britain.

AN EXTENSION of the guild principle to industries other than the building trades is indicated in recent labor reports from Great Britain. The October number of the Monthly Circular, published by the Labor Research Department (p. 51), gives an account of a furnishing and furniture guild just organized in Manchester. The new guild was formed on lines similar to those of the building guild and expects to cooperate closely with it. The claim is made that since the guild will operate upon a "no profit" basis prices to the consumer will be cut approximately 50 per cent. The United Clothing Workers' Trade-Union of London is also experimenting along guild lines. According to the November issue of the Monthly Circular (p. 67), this union has inaugurated a clothiers' guild for London, which has already begun to operate. The clothiers' guild is employing persons from the unemployed list at full trade-union

[1] Hongkong dollar at par is equal to about 48 cents.

rates for a 48-hour week. The trade-union appointed the board of directors which in turn appointed the general manager. The foreman was elected by the workers in the shops. The manager believes that the clothiers' guild will be able to sell goods at 25 to 35 per cent below prevailing prices.

The Glasgow Garment Workers' Union has formed a tailors' guild and the guild principle is being applied to agriculture by the New Town Trust, an organization engaged in developing a garden city. The agricultural guild plans to start with 500 acres of land, upon which it hopes to produce the food for the garden city settlement. The management of this enterprise will be vested in a committee of nine persons, five of whom will be workers elected by the workers, one by the community, two by the New Town Trust, and one by the trade-union. The capital of the guild is made up of 1s. (24.3 cents, par) shares, with a limitation of one share to each shareholder. All surplus earnings are to be applied to the reserve and development funds.

Apprentice Training in an Iron and Steel Works in India.[1]

THE Tata Iron and Steel Co. of Jamshedpur (India) has recently abandoned its plan for training artisans and apprentices only, which has been in fairly successful operation for several years, and has substituted a higher grade of apprenticeship which is designed to furnish skilled men for the technical departments. As a result of the plant training already established there is comparatively little difficulty in getting foremen of the ordinary type and skilled mechanics for positions in various departments, but the more technical positions are still filled by Europeans or Americans or Indian university men with English and American experience.

Most of the men entering industry have previously been engaged in agricultural or clerical pursuits and therefore lack the industrial background for work of a technical character. For this reason the company has decided to admit to these apprenticeship courses only men 20 years of age and over who have had training equivalent to that leading to a degree of B. S. in the Indian universities. They must also be physically able to endure the intensive work both of the course and in the steel mills. With these two limitations candidates will be chosen strictly upon their merits. The course covers two years, the time being equally divided between technical education having to do with the metallurgy of iron and steel, and supervised experience in the steel works. For the present at least, only 50 men will be admitted to training. It is purposed to graduate 20 men each year. Students will be paid 60 rupees ($19.44, par) monthly during the period of instruction and scholarships will be granted to the men each year for study in England and the United States, but the successful men will be chosen from those who after finishing their courses have a year's experience in the mills rather than from the graduating classes. The teaching staff will consist of three European professors and two Indian assistants in the library and laboratories.

[1] Modern Review, Sept., 1921, pp. 358-361.

OFFICIAL PUBLICATIONS RELATING TO LABOR.

United States.

ILLINOIS.—*Department of Labor. The Employment Bulletin. Vol. I, No. 1. Chicago, September, 1921. 4 pp.*

The initial number of a monthly bulletin issued by the Illinois Department of Labor, under the direction of the general advisory board of the free employment service.

IOWA.—*Bureau of Labor Statistics. Arbitration and conciliation. Report for biennium ending June 30, 1920. Des Moines [1921]. 53 pp. Bulletin No. 3.*

A digest of this report appears on pages 226 and 227 of this number of the MONTHLY LABOR REVIEW.

—— —— *Child labor. Analysis of work permits issued during biennium ending June 30, 1920. Des Moines [1921]. 37 pp. Bulletin No. 4.*

A summary of this report appears on pages 227 and 228 of this issue of the MONTHLY LABOR REVIEW.

—— —— *Labor organizations. Trade-union statistics for biennium ending December 31, 1919. Des Moines [1921]. 71 pp. Bulletin No. 5.*

A summary of this report is given on pages 228 and 229 of this issue of the MONTHLY LABOR REVIEW.

—— —— *The State Free Employment Bureau. Including farm wage data for biennium ending June 30, 1920. Des Moines [1921]. 29 pp. Bulletin No. 6.*

For a summary of this report see page 227 of this issue of the MONTHLY LABOR REVIEW.

—— —— *Statistics of manufactures for year ending December 31, 1919. Including report on factory inspection for biennium ending June 30, 1920. Des Moines [1921]. 108 pp. Bulletin No. 2.*

This report is reviewed on page 226 of this issue of the MONTHLY LABOR REVIEW.

MASSACHUSETTS.—*Department of Banking and Insurance. Commissioner of Insurance. Annual report, 1920. Part II. Life, miscellaneous, assessment, and fraternal insurance. Boston [1921]. xci, 303, 398a pp.*

Includes data on companies transacting workmen's compensation insurance.

MISSOURI.—*Negro Industrial Commission. Semi-annual report, January 1–July 1, 1921. Jefferson City, Mo., 1921. 56 pp.*

Gives details concerning housing conditions of Negroes in St. Louis and Kansas City, with some data as to discrimination against the colored in various parts of Missouri, and statistics of the colored schools under the supervision of county superintendents.

NORTH DAKOTA.—*Industrial Commission. The North Dakota industrial program. Bismarck, 1921. 109 pp.*

This pamphlet was issued by the Industrial Commission of North Dakota, as constituted prior to the recent election, as "a report on the organization and progress of the North Dakota State industries, and the administration of the related laws, protecting and promoting agriculture and other industries in the State, enacted and established by the Sixteenth Session of the North Dakota Legislative Assembly."

OHIO.—*Department of Industrial Relations. Division of Labor Statistics. Union scale of wages and hours of labor in Ohio on May 15, 1921. Columbus, August, 1921. 36 pp. Report No. 1.*

A summary of this report is given on pages 230 and 231 of this issue of the MONTHLY LABOR REVIEW.

PORTO RICO.—*Bureau of Labor. Eighth annual report. San Juan, 1921. 36 pp.*

A summary of this report appears on pages 231 to 233 of this issue of the MONTHLY LABOR REVIEW.

TEXAS.—*Industrial Welfare Commission. Report for the years June, 1919, to August 31, 1920. Austin, 1921. 44 p.*

A digest of this report appears on pages 107 and 108 of the MONTHLY LABOR REVIEW for December, 1921.

WISCONSIN.—*Industrial Commission. Building code, revised 1921. Madison, 1921. 129 pp.*

—— —— *Ninth annual report of the Citizens' Committee on Unemployment and the Public Employment Bureau of Milwaukee, July 1, 1920, to June 30, 1921. [Madison] September, 1921. 11 pp.*

During the year 53,393 persons applied for work, 54,050 requests for help were made, 50,989 persons were referred to positions, and 39,438 positions were secured.

—— *State Board of Education. Adult education. Madison, December, 1921. 40 pp. Wisconsin's educational horizon, Vol. 4, No. 2, Part 2.*

—— —— *"Dual" control in Wisconsin. Madison, December, 1921. 27 pp. Wisconsin's educational horizon, Vol. 4, No. 2, Part 1.*

—— —— *Fundamentals of the curriculum and of the course of study [for continuation schools]. Special subjects. Suggested programs. Madison, October, 1921. 74 pp. Wisconsin's educational horizon, Vol. 4, No. 1, Part 1.*

—— —— *Genesis and purpose of vocational school survey. Beginnings of continuation schools in Wisconsin. History of continuation schools in Wisconsin. Madison January, 1921. 23 pp. Wisconsin's educational horizon, Vol. 3, No. 5.*

—— —— *The rehabilitation of the handicapped. Madison, January, 1921. 31 pp. Wisconsin's educational horizon, Vol. 3, No. 4.*

—— —— *Scholarships in continuation schools. Madison, October, 1921. 16 pp. Wisconsin's educational horizon, Vol. 4, No. 1, Part 2.*

—— —— *Technical and trade training through the continuation school. Madison, May, 1921. 23 pp. Wisconsin's educational horizon, Vol. 3, No. 6.*

UNITED STATES.—*Department of Agriculture. Bureau of Chemistry. A recently developed dust explosion and fire hazard. Washington, 1921. 7 pp. Department circular 171.*

A study of the fire and explosion hazard due to the use of unprotected electric lights in dusty industries.

—— —— *Bureau of Markets. Market statistics. Washington, 1921. 279 pp. Bulletin No. 982.*

A statistical report which includes prices of live stock; dressed meats; wool; dairy products; poultry and oleomargarine; grain, hay, feed, and seeds; fruits and vegetables; and cotton, for different periods from 1910 to 1920.

—— —— *Bureau of Markets and Crop Estimates. Prices of farm products in the United States. Washington, 1921. 72 pp. Charts. Bulletin No. 999.*

For a summary of this report see pages 88 to 91 of this issue of the MONTHLY LABOR REVIEW.

—— *Department of Labor. Bureau of Labor Statistics. Personnel research agencies. A guide to organized research in employment management, industrial relations, training, and working conditions. Washington, 1921. 207 pp. Miscellaneous series. Bulletin No. 299.*

—— —— *Children's Bureau. Promotion of the welfare and hygiene of maternity and infancy. Text of act of November 23, 1921, and maximum amounts available to the States. Washington, 1921. 7 pp. Bureau publication No. 95.*

UNITED STATES.—*Department of the Interior. Bureau of Education. Part-time education of various types. A report of the commission on the reorganization of secondary education, appointed by the National Education Association. Washington, 1921. 22 pp. Bulletin, 1921, No. 5.*

Presents various types of part-time education, including continuation classes, and indicates desirable administrative features in connection with them.

—— *Federal Board for Vocational Education. Child care and child welfare. Outlines for study. Washington, October, 1921. 502 pp. Bulletin No. 65. Home economics series No. 5.*

This bulletin was prepared by the United States Children's Bureau in cooperation with the Federal Board for Vocational Education. One section deals with child labor.

—— —— *Industrial rehabilitation. Services of advisement and cooperation. Washington, 1921. 35 pp. Bulletin No. 70. Industrial rehabilitation series, No. 3.*

Foreign Countries.

AUSTRALIA.—*Bureau of Census and Statistics. Pocket compendium of Australian statistics. Melbourne, 1921. 137 pp.*

Of interest to labor are the data on cost of living, friendly societies, maternity allowances, old-age pensions, price index numbers, prices of commodities, purchasing power of money, rents, strikes and lockouts, trade-unions, unemployment, and wages.

—— (QUEENSLAND).—*Department of Labor. Report of the director of labor and chief inspector of factories and shops for year ended June 30, 1921. Brisbane, 1921. 48 pp. C. A. 52.—1921.*

Statistics presented for the year covered in the report show that there were in Queensland 3,398 registered factories employing 32,772 persons; 4,341 shops employing 21,724 persons, and 3,707 shops without employees. The total number of accidents in factories was 409. The industrial awards in operation numbered 202; industrial agreements, 82. Women in Brisbane factories worked 21,391 hours of overtime, while the total overtime worked by both men and women in Brisbane shops was 24,854½ hours. During the year 44,426 persons registered as applicants for employment, a decrease on the previous year's figure of 574. Employment was secured for 12,607 of those registering. Tables giving wages paid in many individual industries are also shown.

—— *Public service commissioner. First annual report for the year ended June 30, 1921. Brisbane, 1921. 28 pp. C. A. 47.—1921.*

Particulars regarding increases granted to State employees under State service awards of 1920–21 appear in this report.

—— (SOUTH AUSTRALIA).—*Inspector of Factories. Report, 1920. Adelaide, 1921. 25 pp. No. 57.*

—— (TASMANIA).—*Government Statistician. Statistics for the year 1919-20. Hobart, 1920. 447 pp. 2 appendixes.*

This report contains statistics concerning the number of persons employed in various industries, wage rates, and labor legislation. Section II deals with friendly societies, life assurance, building societies, and other subjects.

—— (VICTORIA).—*Labor Department. Chief inspector of factories and shops. Report for the year ended December 31, 1920. Melbourne, 1921. 36 pp. 6 appendixes.*

In 1920 there were in the State of Victoria 8,631 factories, employing 116,846 persons, an increase of 410 factories and 477 employees over the totals for the preceding year. The number of factory accidents reported was 862 as compared with 362 in 1919. Appendix B gives the average weekly wages in the various trades for which wage boards have been appointed; appendix C, the average weekly wages in trades not regulated by wage-boards.

—— *Registrar of Friendly Societies. Report, 1920. Melbourne, 1921. 6 pp.*

AUSTRALIA.—(WESTERN AUSTRALIA).—*Registrar of Friendly Societies. Report of proceedings * * * for the year ended 30th June, 1921. Perth, 1921. 28 pp.*

The total membership at the end of 1920 was 18,675, an increase of 287 over 1919, but still considerably below the membership in 1914. The total capital of the registered societies increased from £278,653 ($1,356,065, par) in 1919 to £294,120 ($1,431,335, par) in 1920. The amounts in the funds at the end of 1920 were: Sick and funeral, £267,507 ($1,301,823, par); medical and management, £12,183 ($59,289, par); other funds, £14,429 ($70,219, par).

BELGIUM.—*Caisse Générale d'Épargne et de Retraite. Compte rendu des opérations et de la situation. Années 1915, 1916, 1917 et 1918. Bruxelles [1921]. 84 pp.*

This report gives an account of the operations of the different branches of the general savings and retirement fund of Belgium for the years 1915 to 1918.

CANADA.—*Bureau of Statistics. Canada yearbook, 1920. Ottawa, 1921. xiii, 768 pp. Maps.*

The section on labor deals with labor legislation, labor organization, trade disputes, employment, wages, and wholesale and retail prices. The total trade-union membership reported by the department of labor at the end of 1920 was 373,842, including the international unions and the local unions of various types, a decrease in membership over the preceding year of about 4,000. There were 285 industrial disputes during the year 1920 with a loss of 886,754 working days, an improvement over 1919 in which nearly 4,000,000 working days were lost.

The report of the employment service shows that during the fiscal year ending March 31, 1920, there were 470,250 applications for employment and 328,937 permanent and 51,663 casual placements made. The employment service was coordinated in 1919 under the supervision of a director and at the end of 1919 there were nearly 100 free employment offices in the Dominion. The percentage of unemployment among trade-union members was 16.12 per cent in February, 1921. Rates of wages for 21 classes of occupations as compared with the average for 1913 show an increase of 179.3 per cent for weekly rates and 190.3 for hourly rates. The index number of wholesale prices fell from 356.6 in May, 1920, to 290.5 in December, or 18.5 per cent, while retail prices of the commodities considered in the family budget declined only from $26.92 in July to $25.67 in December, 1920, or 4.65 per cent.

—— (ONTARIO). *Workmen's Compensation Board. Report for 1920. Toronto, 1921. 64 pp.*

A digest of this report appears on pages 187 to 189 of this issue of THE MONTHLY LABOR REVIEW.

DENMARK.—*Statistiske Departement. Statistisk aarbog 1921. Copenhagen, 1921. xxiv, 236 pp. Danmarks Statistik.*

The 1921 statistical yearbook for Denmark. Contains statistical tables on workmen's accident insurance, unemployment funds, employment agencies, strikes and lockouts, wages, trade-union organizations, employers' organizations, housing, prices, sick funds, etc.

FRANCE.—*Ministère du Travail. Office du Travail. Tarifs de salaires et conventions collectives pendant la guerre (1914–1918). Tome premier. Paris, 1921. 172 pp.*

This is a collection of laws, decrees, and circulars relative to rates of wages and collective agreements enacted in France during the war.

GREAT BRITAIN.—*Board of Education. Chief medical officer. Annual report, 1920. London, 1921. 223 pp. Cmd. 1522.*

Among the subjects treated in this report are physical efficiency and juvenile employment, including the health problems of children of continuation-school age, medical inspection for employment, and the works school and health conditions.

—— [*Board of Trade.*] *Mines Department. Copies of correspondence between the Mines Department and the Mining Association of Great Britain regarding the operation of Part II of the mining industry act, 1920, together with proceedings at a meeting between the secretary for mines and a deputation from the association. London, 1921. 19 pp. Cmd. 1551.*

GREAT BRITAIN.—*[Board of Trade] Mines Department. Mines and quarries: General report, with statistics, for 1920. Part II—Labor. London, 1921. 85 pp. 6 charts.*

The total number of persons employed at mines and at the quarries under the quarries act in the United Kingdom and the Isle of Man during 1920 was 1,337,297. Of these 1,269,547 were employed in or about mines; 67,750 in or about quarries. Of the miners, 1,002,650 worked underground and 266,897 above ground. Of the latter number 8,532 were females. In comparison with statistics for 1919 these figures show an increase of 44,517 males working underground, and an increase of 13,171 males and a decrease of 1,115 females working above ground, resulting in a total net increase of 56,573 persons. The number employed during 1920 in connection with the quarries which fall under the quarries act of 1894 was 67,750 persons, of whom 43,544, including 89 females, worked inside the actual pits, holes or excavations; 24,206, including 256 females, were employed in factories and workshops outside. These figures show a total increase of 10,674 persons employed in or about the quarries over the 1919 report. The report contains also statistics relating to accidents, safety appliances, etc. The number of persons killed by accidents at mines during 1920 was 1,130.

—— *[Ministry of Labor.] National Insurance (Unemployment) Acts, 1911 to 1919. Unemployment insurance. Decisions given by the umpire respecting claims to benefit. Vol. IV, Nos. 1501–1821. (Given up to 27th April, 1921, together with index for all decisions 1–1821.) London, 1921. 294 pp.*

JAPAN.—*Département Impérial de Recensement. Statistique des causes de décès de l'Empire du Japon, 1918. Tome I. Tokio, 1921. [578 pp.]*

This report by the Japanese census department on causes of death in the Japanese Empire in 1918 gives tables showing number of deaths and causes according to industrial occupations.

NETHERLANDS.—*Centraal Bureau voor de Statistiek. Overzicht van den omvang der vakbeweging op 1 Januari 1921. (Statistique du mouvement syndical au 1er janvier 1921.) 's-Gravenhage, 1921. 20, xxxviii pp. Bijdragen tot de statistiek van Nederland. Nieuwe volgreeks. No. 326.*

Statistical report on trade-unions, January 1, 1921. The total membership on that date was 651,215, a decrease of 32,253 as compared with the previous year.

—— (AMSTERDAM).—*Gemeentelijk Arbeidsbureau. Verslag, 1920. [Amsterdam] 1920. 48 pp. Tables. Verslagen van bedrijven, diensten en commissiën der gemeente Amsterdam. No. 17.*

Report of the Department of Public Works of the city of Amsterdam for the year 1920.

NEW ZEALAND.—*Pensions Department. Annual report for the year ended 31st March, 1921. Wellington, 1921. 8 pp.*

Deals with war, old-age, widows', miners', epidemic, and police pensions.

NORWAY.—*Departementet for Sociale Saker. Meglingsinstitusjonens virksomhet i 1920. Christiania, 1921. 113 pp. Sociale Meddelelser. Tilleggshefte Nr. 2, 1921.*

This is supplement No. 2. of Sociale Meddelelser, official publication of the department of social affairs, and deals with the work of the mediation institution during 1920, that year being the fifth year of its activities.

SWEDEN.—*Socialstyrelsen. Yrkesinspektionens verksamhet år 1920. Stockholm, 1921. 151 pp. Illustrated.*

Report of the factory inspection service for Sweden.

—— *Stastiska Centralbyrån. Ut-och invandring år 1920. Stockholm, 1921. 39 pp. Sveriges Officiella Statistik. Folkmändgen och dess förändringar.*

Report on immigration and emigration for Sweden during 1920. There were 10,242 emigrants, of whom 6,691 went to the United States.

UNION OF SOUTH AFRICA.—*Office of Census and Statistics. Quarterly abstract of Union statistics. Johannesburg, October, 1921. 98 pp. No. 8.*

SERIES OF BULLETINS PUBLISHED BY THE BUREAU OF LABOR STATISTICS

[The publication of the annual and special reports and of the bimonthly bulletin was discontinued in July, 1912, and since that time a bulletin has been published at irregular intervals. Each number contains matter devoted to one of a series of general subjects. These bulletins are numbered consecutively, beginning with No. 101, and up to No. 236 they also carry consecutive numbers under each series. Beginning with No. 237 the serial numbering has been discontinued. A list of the series is given below. Under each is grouped all the bulletins which contain material relating to the subject matter of that series. A list of the reports and bulletins of the Bureau issued prior to July 1, 1912, will be furnished on application. The bulletins marked thus are out of print.]*

Wholesale Prices.

* Bul. 114. Wholesale prices, 1890 to 1912.
Bul. 149. Wholesale prices, 1890 to 1913.
* Bul. 173. Index numbers of wholesale prices in the United States and foreign countries.
Bul. 181. Wholesale prices, 1890 to 1914.
* Bul. 200. Wholesale prices, 1890 to 1915.
Bul. 226. Wholesale prices, 1890 to 1916.
Bul. 269. Wholesale prices, 1890 to 1919.
Bul. 284. Index numbers of wholesale prices in the United States and foreign countries. [Revision of Bulletin No. 173.]
Bul. 296. Wholesale prices, 1890 to 1920. [In press.]

Retail Prices and Cost of Living.

* Bul. 105. Retail prices, 1890 to 1911: Part I.
Retail prices, 1890 to 1911: Part II—General tables.
* Bul. 106. Retail prices, 1890 to June, 1912: Part I.
Retail prices, 1890 to June, 1912: Part II—General tables.
Bul. 108. Retail prices, 1890 to August, 1912.
Bul. 110. Retail prices, 1890 to October, 1912.
Bul. 113. Retail prices, 1890 to December, 1912.
Bul. 115. Retail prices, 1890 to February, 1913.
* Bul. 121. Sugar prices, from refiner to consumer.
Bul. 125. Retail prices, 1890 to April, 1913.
* Bul. 130. Wheat and flour prices, from farmer to consumer.
Bul. 132. Retail prices, 1890 to June, 1913.
Bul. 136. Retail prices, 1890 to August, 1913.
Bul. 138. Retail prices, 1890 to October, 1913.
* Bul. 140. Retail prices, 1890 to December, 1913.
Bul. 156. Retail prices, 1907 to December, 1914.
Bul. 164. Butter prices, from producer to consumer.
Bul. 170. Foreign food prices as affected by the war.
Bul. 184. Retail prices, 1907 to June, 1915.
Bul. 197. Retail prices, 1907 to December, 1915.
Bul. 228. Retail prices, 1907 to December, 1916.
Bul. 270. Retail prices, 1913 to 1919.
Bul. 300. Retail prices, 1913 to 1920. [In press.]

Wages and Hours of Labor.

Bul. 116. Hours, earnings, and duration of employment of wage-earning women in selected industries in the District of Columbia.
* Bul. 118. Ten-hour maximum working-day for women and young persons.
Bul. 119. Working hours of women in the pea canneries of Wisconsin.
* Bul. 128. Wages and hours of labor in the cotton, woolen, and silk industries, 1890 to 1912.
* Bul. 129. Wages and hours of labor in the lumber, millwork, and furniture industries, 1890 to 1912.
* Bul. 131. Union scale of wages and hours of labor, 1907 to 1912.
* Bul. 134. Wages and hours of labor in the boot and shoe and hosiery and knit goods industries, 1890 to 1912.
* Bul. 135. Wages and hours of labor in the cigar and clothing industries, 1911 and 1912.
Bul. 137. Wages and hours of labor in the building and repairing of steam railroad cars, 1890 to 1912.
Bul. 143. Union scale of wages and hours of labor, May 15, 1913.

Wages and Hours of Labor—Concluded.

Bul. 146. Wages and regularity of employment and standardization of piece rates 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, 1907 to 1918.
Bul. 171. Union scale of wages and hours of labor, May 1, 1914.
Bul. 177. Wages and hours of labor in the hosiery and underwear industry, 1907 to 1914.
Bul. 178. Wages and hours of labor in the boot and shoe industry, 1907 to 1914.
Bul. 187. Wages and hours of labor in the men's clothing industry, 1911 to 1914.
*Bul. 190. Wages and hours of labor in the cotton, woolen, and silk industries, 1907 to 1914.
*Bul. 194. Union scale of wages and hours of labor, May 1, 1915.
Bul. 204. Street railway employment in the United States.
Bul. 214. Union scale of wages and hours of labor, May 15, 1916.
Bul. 218. Wages and hours of labor in the iron and steel industry, 1907 to 1915.
Bul. 221. Hours, fatigue, and health in British munition factories.
Bul. 225. Wages and hours of labor in the lumber, millwork, and furniture industries, 1915.
Bul. 232. Wages and hours of labor in the boot and shoe industry, 1907 to 1916.
Bul. 238. Wages and hours of labor in woolen and worsted goods manufacturing, 1916.
Bul. 239. Wages and hours of labor in cotton goods manufacturing and finishing, 1916.
Bul. 245. Union scale of wages and hours of labor, May 15, 1917.
*Bul. 252. Wages and hours of labor in the slaughtering and meat-packing industry, 1917.
Bul. 259. Union scale of wages and hours of labor, May 15, 1918.
Bul. 260. Wages and hours of labor in the boot and shoe industry, 1907 to 1918.
Bul. 261. Wages and hours of labor in woolen and worsted goods manufacturing, 1918.
Bul. 262. Wages and hours of labor in cotton goods manufacturing and finishing, 1918.
Bul. 265. Industrial survey in selected industries in the United States, 1919. Preliminary report.
Bul. 274. Union scale of wages and hours of labor, May 15, 1919.
Bul. 278. Wages and hours of labor in the boot and shoe industry, 1907–1920.
Bul. 279. Hours and earnings in anthracite and bituminous coal mining.
Bul. 286. Union scale of wages and hours of labor, May 15, 1920.
Bul. 288. Wages and hours of labor in cotton goods manufacturing, 1920.
Bul. 289. Wages and hours of labor in woolen and worsted goods manufacturing, 1920.
Bul. 294. Wages and hours of labor in the slaughtering and meat-packing industry in 1921. [In press.]
Bul. 297. Wages and hours of labor in the petroleum industry. [In press.]
Bul. 302. Union scale of wages and hours of labor, May 15, 1921. [In press.]
Bul. 305. Wages and hours of labor in the iron and steel industry, 1907 to 1920. [In press.]

Employment and Unemployment.

*Bul. 109. Statistics of unemployment and the work of employment offices.
Bul. 116. Hours, earning, and duration of employment of wage-earning women in selected industries in the District of Columbia.
Bul. 172. Unemployment in New York City, N. Y.
Bul. 182. Unemployment among women in department and other retail stores of Boston, Mass.
*Bul. 183. Regularity of employment in the women's ready-to-wear garment industries.
Bul. 192. Proceedings of the American Association of Public Employment Offices.
*Bul. 195. Unemployment in the United States.
Bul. 196. Proceedings of the Employment Managers' Conference held at Minneapolis, January, 1916.
Bul. 202. Proceedings of the conference of the Employment Managers' Association of Boston, Mass., held May 19, 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.

Women in Industry.

Bul. 116. Hours, earnings, and duration of employment of wage-earning women in selected industries in the District of Columbia.
* Bul. 117. Prohibition of night work of young persons.
* Bul. 118. Ten-hour maximum working-day for women and young persons.
Bul. 119. Working hours of women in the pea canneries of Wisconsin.
* Bul. 122. Employment of women in power laundries in Milwaukee.
Bul. 160. Hours, earnings, and conditions of labor of women in Indiana mercantile establishments and garment factories.
* Bul. 167. Minimum-wage legislation in the United States and foreign countries.
* Bul. 175. Summary of the report on condition of woman and child wage earners in the United States.
* Bul. 176. Effect of minimum wage determinations in Oregon.
* Bul. 180. The boot and shoe industry in Massachusetts as a vocation for women.
Bul. 182. Unemployment among women in department and other retail stores of Boston, Mass.
Bul. 193. Dressmaking as a trade for women in Massachusetts.
Bul. 215. Industrial experience of trade-school girls in Massachusetts.
Bul. 217. Effect of workmen's compensation laws in diminishing the necessity of industrial employment of women and children.
Bul. 223. Employment of women and juveniles in Great Britain during the war.
Bul. 253. Women in the lead industry.

Workmen's Insurance and Compensation (including laws relating thereto).

Bul. 101. Care of tuberculosis wage earners in Germany.
Bul. 102. British National Insurance Act, 1911.
Bul. 103. Sickness and accident insurance law of Switzerland.
Bul. 107. Law relating to insurance of salaried employees in Germany.
* Bul. 126. Workmen's compensation laws of the United States and foreign countries.
* Bul. 155. Compensation for accidents to employees of the United States.
* Bul. 185. Compensation legislation of 1914 and 1915.
Bul. 203. Workmen's compensation laws of the United States and foreign countries.
Bul. 210. Proceedings of the Third Annual Meeting of the International Association of Industrial Accident Boards and Commissions.
Bul. 212. Proceedings of the conference on social insurance called by the International Association of Industrial Accident Boards and Commissions.
Bul. 217. Effect of workmen's compensation laws in diminishing the necessity of industrial employment of women and children.
Bul. 240. Comparison of workmen's compensation laws of the United States.
Bul. 243. Workmen's compensation legislation in the United States and foreign countries.
Bul. 248. Proceedings of the Fourth Annual Meeting of the International Association of Industrial Accident Boards and Commissions.
Bul. 264. Proceedings of the Fifth Annual Meeting of the International Association of Industrial Accident Boards and Commissions.
Bul. 272. Workmen's compensation legislation of the United States and Canada, 1919.
* Bul. 273. Proceedings of the Sixth Annual Meeting of the International Association of Industrial Accident Boards and Commissions.
Bul. 275. Comparison of workmen's compensation laws of the United States and Canada.
Bul. 281. Proceedings of the Seventh Annual Meeting of the International Association of Industrial Accident Boards and Commissions.
Bul. 301. Comparison of workmen's compensation insurance and administration. [In press.]
Bul. 304. Proceedings of the 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 dust and fumes, and methods of protection.
Bul. 141. Lead poisoning in the smelting and refining of lead.
* Bul. 157. Industrial accident statistics.
Bul. 165. Lead poisoning in the manufacture of storage batteries.
* Bul. 179. Industrial poisons used in the rubber industry.
Bul. 188. Report of British departmental committee on the danger in the use of lead in the painting of buildings.
* 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.

Industrial Accidents and Hygiene—Concluded.

Bul. 221. Hours, fatigue, and health in British munition factories.
Bul. 230. Industrial efficiency and fatigue in British munition factories.
Bul. 231. Mortality from respiratory diseases in dusty trades.
Bul. 234. Safety movement in the iron and steel industry, 1907 to 1917.
Bul. 236. Effect of the air hammer on the hands of stonecutters.
Bul. 251. Preventable death in the cotton manufacturing industry.
Bul. 253. Women in the lead industries.
Bul. 256. Accidents and accident prevention in machine building. Revision of Bul. 216.
Bul. 267. Anthrax as an occupational disease. [Revised.]
Bul. 276. Standardization of industrial accident statistics.
Bul. 280. Industrial poisoning in making coal-tar dyes and dye intermediates.
Bul. 291. Carbon monoxide poisoning.
Bul. 293. The problem of dust phthisis in the granite-stone industry. [In press.]
Bul. 298. Causes and prevention of accidents in the iron and steel industry, 1910 to 1919. [In press.]
Bul. 306. Occupational hazards and diagnostic signs. [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. 141. 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.
Bul. 303. Use of Federal power in the settlement of railway labor disputes. [In press.

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. 118. Labor laws of the United States, with decisions of courts relating thereto.
* Bul. 152. Decisions of courts and opinions affecting labor, 1913.
* Bul. 166. Labor legislation of 1914.
* Bul. 169. Decisions of courts affecting labor, 1914.
* Bul. 186. Labor legislation of 1915.
* Bul. 189. Decisions of courts affecting labor, 1915.
Bul. 211. Labor laws and their administration in the Pacific States.
* Bul. 213. Labor legislation of 1916.
Bul. 224. Decisions of courts affecting labor, 1916.
Bul. 229. Wage payment legislation in the United States.
Bul. 244. Labor legislation of 1917.
Bul. 246. Decisions of courts affecting labor, 1917.
Bul. 257. Labor legislation of 1918.
Bul. 258. Decisions of courts and opinions affecting labor, 1918.
Bul 277. Labor legislation of 1919.
Bul. 285. Minimum-wage legislation in the United States.
Bul. 290. Decisions of courts and opinions affecting labor, 1919–1920. [In press.]
Bul. 292. Labor legislation of 1920. [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.
Bul. 222. Welfare work in British munition factories.
Bul. 223. Employment of women and juveniles in Great Britain during the war.
Bul. 230. Industrial efficiency and fatigue in British munition factories.

Labor as Affected by the War—Concluded.

Bul. 237. Industrial unrest in Great Britain.
Bul. 249. Industrial health and efficiency. Final report of British Health of Munition Workers Committee.
Bul. 255. Joint industrial councils in Great Britain.
Bul. 283. History of the Shipbuilding Labor Adjustment Board, 1917 to 1919.
Bul. 287. National War Labor Board. [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.
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Bul. 174. Subject index of the publications of the United States Bureau of Labor Statistics up to May 1, 1915.
Bul. 208. Profit sharing in the United States.
Bul. 222. Welfare work in British munition factories.
Bul. 242. Food situation in Central Europe, 1917.
Bul. 250. Welfare work for employees in industrial establishments in the United States.
Bul. 254. International labor legislation and the society of nations.
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Coal and water gas, paint and varnish, paper, printing trades, and rubber goods.
Electrical manufacturing, distribution, and maintenance.
Glass.
Hotels and restaurants.
Logging camps and sawmills.
Medicinal manufacturing.
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Mines and mining.
Office employees.
Slaughtering and meat packing.
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