

U. S. DEPARTMENT OF LABOR
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MONTHLY LABOR REVIEW

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Conditions in the Glass Manufacturing Industry

By JAMES J. DAVIS, SECRETARY OF LABOR¹

I AM glad to have the opportunity to meet with the glass manufacturers of this country at a time when you have reason to make merry. The unprecedented building boom of the last two or three years has had its effect upon your volume of production. You are making a lot of glass. Prices are good, and the long-expected and long-delayed Supreme Court decision has kept you out of jail. What more could you ask?

I grant that you did not get as high a tariff on small bracket sizes as you wanted, and that the tariff has not operated to hold back importation to anything like the extent that was expected. From the first of the year up to September 30, 1925, the imports on window glass had reached 35,381,329 pounds, or 5,000,000 pounds more than the imports for the entire year of 1924, and the value of imports during the nine months had exceeded the total value of imports for the entire previous year by well over \$100,000. Plate-glass imports for nine months of 1925 reached well over 12,000,000 square feet, whereas the total imports for the previous year were something over 16,700,000 square feet. Apparently the imports of plate glass are going to run about what they did last year, while the imports of window glass will very materially exceed those of 1924.

I do not know how much of this imported window glass comes within the so-called small bracket sizes on which the tariff rates are alleged to be too low. I do not undertake to say how much the size of this importation revolves around the question of quality, but it is my firm conviction that a tariff which lets in such a quantity of material in an industry where we are equipped to produce two or three times as much as we can use needs a radical revision. I sometimes wonder if our whole theory of tariff might not be restudied with profit to all.

In the steel industry, nearly three-fourths of a million tons of iron in various stages of manufacture were imported from various foreign countries during the year ending June 30, 1925. The value of these imports was \$24,996,243. Much of this iron importation, and I take it that the same is probably true of glass importation, was the result of the disadvantage in freight rates growing out of the fact that our manufacturing plants are located so largely in the interior while our population is so largely on or near our coast lines. It costs so

¹ Address delivered at a dinner given by the National Glass Manufacturers' Association to the jobbers in the glass industry, Pittsburgh, Pa., Dec. 8, 1925.

much in freight rates to get our manufactured material to the point of consumption that our foreign competitors, having the advantage of ocean freight rates, can undersell us at the shore line.

It seems rather a farce, even under our present theory of tariff protection, to attempt to protect ourselves only at the point of manufacture, utterly ignoring the point of sale. Nearly 35 years ago the Bureau of Labor Statistics pointed out that a tariff on steel rails which was ample protection for Pittsburgh amounted to free trade in New Orleans and San Francisco.

I note that the window-glass production in 1923 was back to about 510,000,000 square feet, and that the plate-glass output this year (1925) will be in the neighborhood of 115,000,000 square feet. I do not know how this compares with the demand in view of the present building activities. I suppose the window-glass industry, like all others, is having its difficulties in selling its products in view of the almost limitless possibilities in its capacity for production. In the modern idea of building, and by "modern" I mean the ideas of very recent years, you have an advantage in that the people are demanding and architects are planning for very much more light and air which necessitates a more liberal use of your products. I wish I had some definite statistics as to the proportion of window-light surface area in the modern building as compared with that of a generation ago, but no doubt there has been a greater increase in the use of glass than in the amount of building. In other words, the home market is expanding. On the other hand, the conditions in European markets the last few years have rendered the opportunities for export anything but satisfactory.

Quantity Production Versus Quality Production

AT THE risk of being accused of dealing too much in ancient history, I want to say that it is unfortunate, from my way of thinking, that the hand-made-glass factories, in the years when they felt they must increase their production in order to drive out the machine, threw off all restraint and so lowered the quality of their product that it is hard for them now to claim any superiority for hand-made glass. I do not wish to be misunderstood. I do not believe in limitation of output as that term was generally understood by the older trade-unions, but neither do I believe in a speed rate which destroys the worker or puts him on the scrap heap at the age of 40, nor in a production rate which destroys both the worker and the quality of the product.

Limitation of output should work both ways, where it is practiced at all. If a blower, to conserve his health and strength, is to make but nine rollers an hour, then to preserve the quality, standards, and reputation of hand-made glass he should put in one hour's full work on nine rollers. In my judgment, had that been done, factories which failed to open this year because they did not care for another year's competition with machine-made glass, would be taking advantage to-day of the demand for higher-grade glass in the building trades and would be running merrily on.

If the increase of the limit from the 46 boxes per week on single strength and 30 boxes on double strength, which was the limit 30 years ago, to the 50-rollers-per-day limit in the agreement of 1920 and

the 65 rollers per day in the present agreement—if these concessions were made at the expense of quality they should never have been made by the workers and they never should have been accepted by the employers. I want to repeat that I am not in favor of limitation of output as such and for its own sake. The American industries are too slowly swinging back from the wild days of extravagant overproduction, measured in quantity and price, coupled with wilder extravagances in deterioration of quality and service that came upon us during the war and particularly during the boom of 1920.

Let us remember that that excess was produced for the purpose or in the hope of selling it abroad. We forgot all standards; we forgot all of our records. Men with trade-marks that meant something to them and meant something to the public forgot all this and put material into their products which would not hold together. Let us learn from the buyers' strike of 1921-22, which was against quality more than against price. Our production must embody our pride in workmanship, our manhood, honesty, and character, or sooner or later we shall have none of these.

Need of Preservation of Hand-Glass-Blowing Industry

THIS is also ancient history, but I always admired the owners of the window-glass machine in their attitude toward their hand-made glass competitors. In the nature of things, as the development of the machine went on, a great many more machine plants were established and a great many more types of machines were invented, and the ownership of machines became more and more diffused, so the continuance of this attitude was of course impossible. But I want to say that I think it would be a great misfortune to have hand window-glass blowing pass forever from the face of the earth. Millions of dollars have been spent and hundreds of men have put in their lives seeking to restore some of the lost arts and handicrafts of the people who have gone before us. What would we not give to-day to know how Damascus steel was made! The art of hand blowing was lost to Europe for over a thousand years, though in the meantime it may have been preserved in some of the so-called uncivilized, unchristian countries.

Unlike pottery making, which developed independently in every part of the world, the manufacture of glass appears to have originated in Egypt and from there to have spread over practically the whole eastern continent in ancient times. Glass was unknown in the western hemisphere at the time of its discovery by Columbus. On the eastern continent, however, with all the changes in civilization, even the final downfall of the later Egyptian culture resulting from the Saracen capture of Alexandria, the secret of glass-making was not lost until the downfall of Rome. For a thousand years from the downfall of Rome the art of glass making was lost. In the year 1090 A. D. there is mention of a glass worker in Venice, and a trade list of the population of Venice in 1224 mentioned 29 glass workers. In 1302, a window glass was made in France, but only to be used by the king. The art that had been lost in the downfall of Rome was slowly being rediscovered. It must be remembered that the window glass of ancient Rome was cast or molded, not blown. Its manufacture seems to have ceased about 400 A. D. It is not quite clear as to whether the

glass made for the French king in 1302 was cast or blown. The English window glass was so poor that in 1439 a contractor agreed not to use it in the building of a chapel at Warwick. The interpretation I put upon that contract is this: Possibly the contractor was pledged not to use window glass in the chapel because of a prejudice against building new things into the churches.

A reference to English-made window glass in 1435, however, indicates that while it was very much dearer it was considered better than "Dutch, Venice, or Normandy glass," and up to the year 1500 glass windows were used only in the houses occupied by royalty or by the very wealthy. Window glass was about in the same class as the Rolls Royce automobile of to-day—people took off their hats when they saw it.

Even now the use of window glass in the homes and public buildings in Europe is not at all in proportion to that in the United States. In other words, while the population of Europe as a whole greatly exceeds that of the United States, the consumption of glass in proportion to population is very much less. Why? Because in the population of any European country there are comparatively few able to buy, and their trade, measured in volume, is never very significant. The volume of sales in anything and anywhere is measured by the ability of the working masses to buy.

Advantages of Handling Home-Produced Glass

THE American worker has more windows in his house, the American factory has more light and ventilation, the American office building has more window space in its outside walls, than is true of any other country in the world, and it is of prime interest to the jobbers and dealers in glass that this condition should continue in America and that the wages of American workers should be such that more of them can build their homes—can build better homes, with more windows. It is to the interest of the jobbers to see that the American worker not only wants more and more but is able to buy more and more of the things he makes.

It may not seriously interest the American manufacturer, who is also the European manufacturer, whether or not the American market is protected and whether or not the wages of the American workmen are kept up to a high standard, since he sells you the glass that is imported as well as the glass made at home. Tariff may not be as vital to him in the future as it has been in the past, but you, as jobbers, are buying glass to sell and your interest is not only in the price but in the power of the people to pay that price. The greater the purchasing power of the masses the larger will be your sales. For this reason, too, the jobbers should handle home-produced glass rather than imported glass wherever possible. Sales of imported glass in this country help no American workers to build their homes and to that extent prevent the workers in that industry from being a part of your market.

There should be closer contact between the manufacturers of glass, the jobbers of glass, and the architects—the people who plan the types of buildings in this country. As stated above, the use of glass in all types of buildings has greatly increased in the past generation,

but it could increase much more and still be within the bounds of wise and hygienic home building plans.

An educational campaign through architectural associations, building and loan associations, and home-building societies of all kinds, carried on under the slogan "More light," would help your business and improve our homes. This sort of education pays; it pays the manufacturers and jobbers, and the consumer is pleased that he followed the lead.

Glass Industry's Solution of Overdevelopment Problem

THERE is, however a very much more important phase of the situation that I wish to discuss, and that is the regulation of the running time. I was especially gratified by the decision of the United States Supreme Court in the national window-glass case. Everywhere we have approximately the same overdevelopment of productive capacity that we have in the window-glass industry. Twenty-four per cent of the bituminous coal mines, if they ran full time, could produce all the coal we could use or sell. A very much smaller per cent than this of the boot and shoe factories could make all the boots and shoes we could use; a still smaller per cent of the flour mills, etc., could produce all the flour we can use, and so on all down the line. All of these industries are working spasmodically and haphazardly two days a week, three days a week, tying the men to their jobs the year round, but giving them only half-time employment.

Lest we forget, I want to say to you that in my judgment the early struggles of the window-glass industry, with its overproduction problem, developed a solution for overproduction that challenges the attention of every industry to-day, and will eventually challenge the admiration of and be imitated by every industry where its principles can be made to apply.

Prior to 1879 this industry was as fitful in its employment as any other. That year the edict went forth that all plants must close from June 30 to September 1. This gave time for all necessary repairs and for getting the plant ready for the next year's production. Later this was changed so that plants were closed from June 15 to September 15. This not only gave time for repairs but was a definite step toward measuring the time of production of plants by the need of the market. Later, when all the glass that could be sold could be made in 18 weeks, the industry agreed on 18 weeks' operation. Employers and employees, sitting around the conference table, said in effect, "If we have but 18 weeks' actual work why spread it over 52 weeks' time? Why not do it in 18 weeks and have the rest of the time in which to plan intelligently something else?" I believe that this is the most intelligent scheme ever adopted for handling seasonal industries and overdeveloped industries. Out of it might grow a certain amount of general shifting of men from certain short-time industries to other short-time industries during definite parts of the year, so that our people could be employed the year round.

I know the stock objection, that a coal miner will not do anything else but mine coal, and that a glass blower will not do anything else but blow glass. I have heard that plenty of times. Within certain limits it is true, but it is true largely because of the fact that the

industries are so disorganized and also because a fellow can get a day's work or two days' work a week at his particular occupation, and so has not the proper incentive to go into something else. If the coal miner who has 140 days' work in a year obtained this work in 140 consecutive working-days and knew there would be no more coal mining for 160 days to come, his whole attitude of mind would change.

If all the industries were organized thoroughly on both sides so that all could get together, employers and employees, much practical good would come from such association in this matter of stabilizing employment, and after all that is the real problem before the American people to-day.

There was no restriction of output in any real sense of the word. The manufacturers knew practically what the next year's sales would be; knew that 500,000,000 square feet, or approximately 10,000,000 boxes of glass, would be sold during the year; that is to say, the building trades and other industries could absorb that amount. It was known that with the equipment at hand this could be produced in a certain number of weeks, and while agreeing upon a scale of wages or piece rates an agreement was then and there made as to the length of fire, every factory starting on the same day. The industry worked in the winter when the power of the heat of furnaces to reduce the length of life of the man was least. The idle time, which must come because of the overdevelopment of industry, was bunched into a solid block. The men could use the rest of the time as they pleased. As much of it could be used in leisure as was necessary to renew the vigor, manhood, and strength for the coming winter's toil. As for the rest of it, there was plenty of time in advance to make arrangements for profitable use of their labor power.

I repeat that the more I think of it the more it seems to me the early window-glass blowers and their employers took the most sensible view of this thing, and as I get a wider view of the industries of the country I feel sure that sooner or later this system will be vindicated not only by the Supreme Court as not being illegal, but by being adopted by many, if not most, of the industries.

I do not mind telling you that I am not sure but that in some industries—let us take the clothing industries in some localities and possibly other industries—a more or less bogus strike is instigated in the spring or summer months, the beginning of the dull season in that particular industry. There is a suspension of work, which after all is not a real strike but the voice of nature in man demanding that his idle time shall be a period of consecutive rest.

Knowing that they will actually lose nothing and being unable to get any agreement for suspension of work with their employer as the window-glass workers did, the workers simply agree to quit until work shall be really needed in the industry again. And while this is done under the guise of a strike it is not the fiery economic struggle that we generally understand by the word "strike." I do not know how far this is the incentive, but you will readily understand how it might become so. In the building trades, for instance, normally the carpenter and the bricklayer will do all the work they can get to do in from 65 to 70 per cent of the time; a meaningless strike would serve to bunch their leisure and bunch their work.

Effect on Prices

This agreement between the window-glass employers and their union workers had gone on perfectly satisfactorily for years when some easily frightened persons became alarmed at the possibility of price control. As a matter of fact, the possibility of price control is present in a great many instances where there is no resort to it and no inclination on the part of the manufacturers to take advantage of such possibility. For instance, the Commissioner of Labor Statistics tells me that the price of window glass did not go as high as many other articles in the production of which the workmen are not organized at all. The price of window glass at the peak was 195.2 per cent above the average price in 1913. It is no secret that this is an industry in which organization on both sides was practically complete, and in which the two sides had agreed that the factories should work so many weeks, all beginning at the same time and closing at the same time, or, as the later scheme was, half of the factories should work for 18 weeks (or whatever number of weeks was agreed upon) and then close, the other half then to start up and work for 18 weeks, and then close. Yet, the product of the unorganized turpentine industry increased in price 501.8 per cent over the base price of 1913 and there is no combination in that industry worth mentioning. Plate glass went up 229.5 per cent and that is essentially an unorganized industry. The building-material index figure advanced nearly 200 per cent. Since the slump began window glass has dropped back more than many of the articles in which labor is entirely unorganized.

The law under which an attempt was made to break up this agreement is a law that was begotten of fear and born of terror, and I may say here that so far as I know, no law which resulted from an outburst of popular fear has ever worked well in actual practice. This law came into effect when the people were being stirred up over the supposed menace of trusts and industrial combinations. Much of this agitation was dishonest; most of it rested upon no economic thought or study, and all of it was inspired by fear. Most of the combinations that did attempt to boom prices are now things of the past, and the overdevelopment of all our industries to-day is awakening in our people a conviction that this must be controlled and controlled by the industries themselves; that if it is not controlled we are headed toward a state of chronic unemployment and partial employment which will be a worse menace and a more actual source of danger than the trusts were theoretically considered to be a few years ago.

If, then, some of our laws are outworn, the law-making power still remains with the people, and they can unmake the laws they make. I feel sure that some of our friends who very recently were looked upon as criminals because they wanted to apply common-sense principles to their industries will yet come to be looked upon as the real pioneers in the solution of a problem which otherwise may become not only a political but a social menace. I have no fear or dread of that unemployment which is understood six months in advance and can be arranged for. Let unemployment come in bunches and consecutively in various industries. This will enable us to distribute it, not only among our whole people, but more

evenly during the year. Such an arrangement by all of the industries would, I think, tend to decrease the rush to the city, except in as far, of course, as an industry might be already centered in the city. Such an arrangement would have much to do with our present attitude toward work as the final object and purpose of man.

I often ask myself whether any real stability can be hoped for in a civilization which crowds 51 per cent of the population into the cities within a century, and if any social arrangement can last which builds itself upon the theory that man was made for work rather than that work was made for man. According to that theory the greatest possible production per man is the social and economic purpose of life, rather than that the greatest happiness and soul development are the purpose, and that industry and commerce must be made incident thereto. When He said that the Sabbath was made for man and not man for the Sabbath, did He not express a social theory which must be applied to all of our institutions?

The Bituminous-Coal Situation

By JAMES J. DAVIS, SECRETARY OF LABOR¹

THE great trouble with the coal industry is that it is too much enveloped in smoke. Its great need is to have the smoke blown away and the light turned on. When that is done, the chief thing that is wrong with the industry will stand out clearly, and we may then be able to do something about it. This wrong thing affects operators and miners alike. Neither is to blame for it, though both suffer from it. The evil provokes them to constant differences, which will continue as long as it is allowed to remain. This primary evil of the bituminous coal industry is simply overdevelopment.

Overdevelopment of the Industry

THE United States Bureau of Labor Statistics informs me that in Illinois there are 338 coal mines with railroad tipples, aside from the 694 local wagon mines. The 338 shipping mines operated, on an average, 139 days in the year. As a matter of fact, only 55 per cent of them operated for even that average of 139 days, and 10 per cent operated for only 60 days during the year. Yet if the largest 84 of these 338 mines in Illinois had been operated for 300 days during the year, they could have produced 77,733,800 tons of coal, or 7,000,000 tons more than all the shipping mines did produce in 1924, and 5,000,000 tons more than was produced by both the shipping and local wagon mines in the same year.

The meaning of this is that 254 of the 338 principal mines in a single State represent, as capital invested, an unnecessary expenditure of money, and they prevented the necessary number of mines from producing an adequate amount of coal, with the necessary number of men employed for a reasonable number of days during the year.

The turnover in the coal mines of Illinois is over 85 per cent. Conditions like this are not confined to any particular State and can

¹ Address delivered before the American Mining Congress, Washington, Dec. 10, 1925.

result only in unprofitable returns. They often mean business straits for many operators and a continuous struggle for existence for thousands of miners who have families to support on part-time work and pay. In these circumstances we are faced with a disturbed relationship between operator and miner, often based on open suspicion and hostility. Confronted with problems of such complexity, the leaders on both sides often simply throw up their hands.

The coal industry was one of the first to introduce the principle and practice of real collective bargaining through interstate joint wage agreements. At first these joint conferences were held annually, then biennially, and the present agreement, known as the "Jacksonville agreement," is for a three-year period. In many industries business men advocate a long-term contract as stabilizing the industry by providing a fixed major item of cost, provided the terms are respected by all of their competitors. As I understand it, this was the purpose of the Jacksonville agreement and it was the general belief that in the case of an industry as overdeveloped as the bituminous coal industry, there should be some method of contract for a given period to provide that regularity of operation which is the imperative need of the industry if it is to be spared the demoralization that follows ruthless competition, which means poor returns, if any, on the investment and no fair distribution of work between the miners.

It is these economic faults in bituminous production that bring about most of the suspensions and strikes, and when these occur the whole problem is then passed on to the public, like a great case in equity being referred to the supreme court of public opinion. Unfortunately this great jury is rarely supplied with the real basic facts in the case and is usually powerless to force a final and equitable adjustment.

In the event of a stoppage of work, the urgent need of coal brings together again the two great parties to the case, through joint conference a new agreement is signed, and industrial relationship is then determined and resumed, but the fundamental evil of overproduction remains. When each new agreement is signed there remain unsettled ills that are certain to breed a new difference. What is to be done about it? Is there no remedy to be applied?

We possess no means of putting pressure on the owners of the poorly productive, uneconomic, and superfluous mines that clutter the industry and of forcing them to close. No legal or even moral right exists for that purpose. As this would amount to the virtual confiscation of property, I am convinced that such action would be unconstitutional from the legal angle and also repugnant morally. We have nothing, therefore, to rely upon but the inexorable economic law and the ancient rule of the survival of the fittest to weed out those who, innocently enough, create this evil of overdevelopment.

But I think it is possible to assist this process in such a way as not to injure unduly the innocent offender and yet rid the industry of the damage done.

No one needs to be reminded that coal is the very basis and motive power of life to-day, and no one needs to be told that even above the question of business profits, fair wages, and good relations between miner and operator in the coal industry lies the public interest in

getting its regular and needed supply of coal. The first service we can render this supreme public interest is to provide the public with a better understanding of the intricate economic problems of the coal industry.

The longest possible step in this direction was taken in the appointment of the United States Coal Commission, and in solving the problem of coal we now have the first practical guidance in the report of this commission to the President and Congress. It is the first glimmer of daylight through the smoke.

It is not my purpose to debate the findings and recommendations of the Coal Commission beyond offering the opinion that it is at least a step out of the murk which has so long surrounded the first of our basic industries.

Loss of Time From Strikes and Other Causes

IN ANY consideration of strikes in the bituminous coal fields, let us remember always that "strikes," especially in this industry, attract general public attention because of wide publicity and inconvenience to the general public, all due largely to the sudden suspension of operation in a basic industry.

It is quite natural that this should be the case. People are always aroused by spectacular events widely discussed, but is it not a reflection upon our national good judgment that the serious, ever-present problem in the matter of coal receives little or no attention from legislators, trade and civic bodies, and the press?

Let us consider the proportionate loss in man-days as set forth by the Geological Survey. In 23 years—1900 to 1922—207,414,000 man-days were lost as a result of strikes in coal fields, the bulk of the loss being due to suspensions during wage negotiations. But in the same period, in the same fields, 1,282,670,000 man-days were lost through other causes. In other words, 14 per cent of the loss in the bituminous mining fields for 23 years was due to strikes and 86 per cent to other causes—no markets, car shortage, mine disabilities, etc. These calculations are on the basis of a workable year of 308 days.

This loss of a billion and a quarter man-days in a score of years from causes other than strikes makes the strike loss look small by comparison. And with all this lost time, though we hear a great deal about coal shortage during every strike, the Nation goes on, and after a settlement we always catch up in coal production. At the beginning of the twentieth century our annual output of bituminous coal was about 212,000,000 tons. To-day it is approximately 525,000,000 tons in a normal year. In 1921, the survey shows, the average daily capacity was equivalent to 860,000,000 tons for a full-time year. In 1922 the number of men employed was 687,000 and the daily output for the 143 days worked that year was equivalent to a total of more than 900,000,000 tons for the full-time year of 308 days.

Our national industries and domestic needs require a little more than 500,000,000 tons of soft coal per year. With mines, men, and equipment capable of producing in 1922 nearly 400,000,000 tons more than our requirements, is it any wonder that the bituminous-coal business as a whole is faced with the most serious problem present in any American industry?

Need of Change in Railroad's Policy in Coal Purchases

THERE is another phase of the coal industry that the public knows little about and which deserves greater publicity, and that is the policy of the railroads as to their fuel purchases from the coal mines.

It is an important fact that the railroads use 28 per cent of our coal. The question of the period of the year when many railroads take this fuel is one that holds possibilities of much relief. For example, I understand that it is the practice of some roads to make their contracts with individual mining companies for daily shipments of railroad fuel so elastic that they range from 5 to 20 cars a day. The unfortunate practice of calling for the minimum number of cars during the dull spring and summer months and for the maximum during the fall and winter months materially interferes with the profitable operation of the mines when commercial and domestic fuel commands its most profitable rates and greatest markets.

It strikes me that a reversal of this railroad policy, by taking the maximum quantity during the slack spring and summer months and the minimum during the busy fall and winter months would contribute to greater regularity of mining operation and greater profits to the owners, by virtue of the larger share of commercial business that they could serve during the rush seasons.

While I appreciate that the fuel purchases of the railroads contribute very often and in a very material way to the stabilization of operations by greater opportunity to regulate shipments, still is it fair that, as reported by several coal companies to the Department of Labor, the railroads in many cases also make it a policy to dictate their purchase prices on so close a margin that there is left little or no profit for the coal operator? Is it true that this price is too often governed by the price for which railroads can purchase coal from fields located on other railroads where the physical operating conditions may be much better than those of the mines located on their own lines, and where the cost of production is lower not only on account of those better physical conditions, but also on account of lower wage scales?

In the pioneer days of each coal district the railroads encouraged the development of mines; often their cooperation in fuel purchases, based on a small margin of profit, created or helped to create along their lines mining communities and centers of population running into the thousands. These communities in turn contributed not a little to the prosperity of the railroad through freight consumption and passenger patronage.

It seems to me to be a strange policy, if true, for the railroads, in order to save a few cents a ton on their coal purchases, to transfer their patronage to mines of other railroads and thereby bring about a suspension of operations which destroys the earning and purchasing power of communities to whose development in earlier days they had so materially contributed. Is it wise for the railroads to ignore their contribution to the maintenance of prosperity of communities located on their own roads?

Systems not guilty of going off their own lines for the purchase of their fuel are reported as too prone to fix the fuel price without due regard to the cost of production. This, if true, not only contributes

to the reduction of the purchasing power of their local communities, but also forces general industrial disturbances through the effort of the employers to adjust wages and working conditions to enable them to conform to the mandatory demands of the railroad's lower prices.

I am inclined to the belief that it would be helpful to the coal industry if all the coal roads showed a greater degree of cooperation which would insure to the mines located on their roads a reasonable profit on railroad fuel.

Railroad rates are formulated to enable the railroads to earn a return on their investment. Would not the bituminous coal industry in all States be in a much healthier condition if the railroad fuel prices were also gauged so that the coal companies could realize a profit on their railroad fuel loadings? The latter is as essential to the prosperity of the coal mines as the first is to that of the railroads.

Joint Effort of Interested Parties Necessary to Correction of Present Situation

FOLLOWING to a logical conclusion the findings of the United States Coal Commission, my thought is that a complete and satisfactory survey of the problems of overdevelopment and the consequent evil of overmanning, with its constant overhead expense, now rests primarily with the directly interested parties—the operators and miners themselves.

I am of the opinion that the intelligent business men engaged in the bituminous coal industry and its efficient and capable workers can by a real genuine joint effort do more toward the correction of the recognized faults of the present coal situation than can any other agency. The fact is conceded that there are "too many mines, too many miners, and too many companies" in the bituminous-coal industry of the United States. This situation can result, as it has resulted, only in unprofitable business for the vast majority of coal operators and part-time employment for the mine workers. Surely no men are better equipped by knowledge and experience than the operators and miners themselves to devise a plan of correction that will gradually place bituminous mining on a steady substantial business basis.

If this suggestion should eventuate in a real genuine effort, the various agencies of the Federal Government, legal, statistical, technical, and clerical, could be utilized to aid and supplement the work undertaken.

The very thorough survey and findings of the United States Coal Commission as set forth in the report of that body would prove of inestimable value in the search for corrective measures to be undertaken by a joint voluntary commission made up of representative operators and miners. Perhaps it would be wise to have a neutral chairman, who should see that such a voluntary commission functions without any avoidable delays.

During very recent years many Federal, State, and industrial committees and agencies have wrestled with bituminous-coal problems. Committees of the United States Senate and House of Representatives have gone into mining conditions in different fields. A Fuel Administration directed the mining industry during the war period. Bituminous coal commissions appointed by the President,

as well as joint scale-committee meetings of the operators and miners, have convened under Government auspices. The governors of coal-producing States have been concerned over different phases of the situation which affect their immediate districts. But so far no general constructive workable plan has been devised to put an end to the real basic difficulty of the industry as a whole.

Inasmuch as little, if any, progress has been made toward a solution of the problems existing in bituminous mining, it would appear that a real inside-of-the-industry effort might follow the report and findings of this agency that would solve the difficulties of the business and bring about a change, though a gradual one, that would benefit both operators and miners as well as the public interests. Can not the industry itself provide a scientifically developed plan having for its object the voluntary reduction of the number of high-cost mines, a limit on the opening of new mines, some adjustment that will transfer a certain percentage of the surplus mine workers into other industrial activities, and the adoption of a policy of discouraging the employment of casual mine workers in busy seasons by confining the work to those who are regular employees of operating companies?

I know the many obstacles to be overcome and the radical changes necessary to accomplish this program. But the result—stable employment, stable output, stable markets—will mean satisfactory and constant employment for workers, satisfactory and profitable returns for operators, and a steady and regular flow of coal to supply the needs of industrial and domestic consumers.

In any plan of the character mentioned the earnest cooperation and aid of the rail and transportation companies, the manufacturing enterprises, and the public utilities companies would be essential. But all of these, and all our people, and the Federal and State Governments would be tremendously benefited by a constructive plan that would "cure the ills" and result in the stabilization of this most important basic industry.

The anthracite industry, by reason of its physical and geographic advantages, its higher cost of development, and the necessary preparation of its products, is not affected by the ills of overdevelopment that affect the soft-coal industry. The workers employed in the anthracite mines have fairly steady employment. A majority of the operations are said to be reasonably profitable and the market is pretty generally developed to absorb the annual output. It is true that occasionally suspensions occur as a result of disagreements arising over the making of new contracts, but, taking one year with another, the anthracite miners and operators occupy a highly favored position as compared with those engaged in the bituminous industry.

I am chiefly concerned with the problem of reaching some broad adjustment in the bituminous industry and it certainly deserves our best thought and efforts. If for no better reason than their own protection, the American people will not permit the present chaos in coal to go on much longer. And I think too many of our people hold the erroneous view that the worst, and even the only, evil in coal is the "strike." Such strikes as have occurred in the past few years, unfortunate as they were, have been those surface eruptions which have served to bring out the disease and without which the disease

beneath would have gone without remedy and even without notice by the people.

Now once more a difference in the industry has forced a busy nation to think of the problems of coal, and I firmly believe that some system of letting in the light and keeping the light turned on is due and coming. Both operator and miner should welcome such light. The miner wants his case better understood—and by that I mean his personal problems, his dangerous occupation, his family responsibilities, the limits to his annual earnings set by slackness of work, the latter being another result of overdevelopment in the industry. The situation of the operator needs to be understood. The case of the so-called “coal baron” is often the fact that he is barren on the wrong side of the ledger. Give the public light on both sides of the deal, and I believe the industry will hold a better place in the public mind.

One of the first things the public will then discover is that neither operator nor miner wants a strike. If they feel hostility toward each other, it is purely because both have been vexed by these technical and economic matters, such as overdevelopment, which lie at the bottom of every difference. I believe that at heart the operator wants peace in industry as ardently as the miner does. In the past both have suffered from conditions which have baffled us all. Abolish these technical ills or even abate them, as I feel sure is about to happen, and the coal industry will lose its reputation as a chronic breeder of disruption to industry in general.

Let me enlarge on my suggestion of a real fact-finding commission built up within the industry, with a neutral chairman who would enjoy the fullest confidence of operators and miners alike. I believe such an agency could bring about many remedial changes in present-day practice. I have particularly in mind consolidation of mines producing the same kind of coal in contiguous districts and competing in the same market. Such consolidations should be within the law—a law itself modified to conform to modern business conditions. We now entertain less fear of monopolies, so called, and we hold greater respect for those combinations which have eliminated waste and brought about stability of markets, earnings, and wages.

Arbitration in the Coal Industry

I KNOW you expect me to say a word about the subject of arbitration in the coal industry—particularly in view of the fact that strikes frequently result from the very differences arising out of making new contracts.

Much is heard of arbitration in labor disputes, especially in those associated with the coal industry. I am in thorough accord with the principle of voluntary arbitration. I believe it is not difficult to find honest and sincere men to act as arbitrators when the occasion demands. Nevertheless many obstacles arise when it comes to securing the consent of the disputants to leave to a third party the issues that divide them. If each interest involved selects its own arbitrators, these generally divide along partisan lines, and a compromise is the result. If there is a third or fifth member of the board, as is usually the case, generally he has to decide the award or work

out a compromise. To the credit of American employers and workers it must be recorded that when they agree to abide by the decision of an arbitration tribunal, they do so even when they disagree with its findings.

In the President's Bituminous Coal Commission of a few years ago, the three arbitrators, representing employers, employees, and the public, divided and the result was a majority and minority report, though the award of the majority was accepted. Later the President's Anthracite Commission divided and two reports were again submitted, though the award was respected until its expiration.

There is a general sentiment among workers that arbitration commissions to decide wage rates and working conditions fairly should take cognizance of earnings of companies, salaries paid officials, royalties, cost of supplies, commissions of sales agencies, and all matters entering into the cost of production, in order to give a just and reasonable wage award. Many employers, on the other hand, object to this because they hold that their business interests would suffer from competitors and others by disclosure of private records and facts pertinent to their success.

Arbitration presents a most difficult problem in itself. Compulsory arbitration has not found favor with the American worker or employer.

At this moment there is controversy in the anthracite field, and a demand for arbitration. If we had the fact-finding commission as I have suggested, would we have the demand or the need of arbitration? Would we have the controversy itself? I think not. Is it too late, even now, to organize such a fact-finding commission, to cover both the anthracite and the bituminous industries? Again I think not.

Regardless of the occasional great coal strikes we have in this country, a comparison of the trade disputes among our 41,000,000 gainfully employed Americans with those in other countries shows that the United States is enjoying a much more peaceful situation than any other industrial country in the world. At no time in our history have we ever had more than 2½ per cent of our working population engaged in strikes at one time, and that was in only one year of our industrial history. This, to my mind, is due entirely to our extensive resort to the principles of collective bargaining, as generally exercised by American industry, and to our utilization of conciliation and mediation as exercised by some of the States and by the Federal Government. These, supplemented by voluntary arbitration, can not but be most helpful in all industrial disputes.

As Secretary of Labor I can say with the greatest satisfaction that the spirit of mutual good will is spreading in American industry. There is far less hostility than there was between worker and employer; there is far more harmony and readiness to work in the partnership which should exist.

The coal industry, like all others, feels the need of the spirit of cooperation. That spirit it has maintained to a remarkable degree, considering that the industry is afflicted with more irritants than almost any other. As I said before, the coal operators and the miners were the first to enter into long-term agreements as one way out of the state of constant disturbance that once prevailed. Once the evils so well known and so fully catalogued by the United States Coal

Commission are removed or reduced, and once the industry realizes that its salvation must come from within, I believe it will become a model for keeping the peace in industry. And the effect of this on industry in general is certain to be great.

Additional Corrective Measures

IN CONCLUSION, let me leave with you another thought. The fact-finding body I suggest having been formed, the facts having been found, the needs of the industry having been brought into the light, the findings and recommendations having been accepted, it may be necessary in applying corrective measures, to create a further agency to administer and guide the industry.

It may be heroic measures will be necessary. In this connection, have you ever considered the possibility of the selection of an outstanding national figure, a man with ability, administrative experience, a knowledge of law and business, and above all these a man who commands the respect and confidence of the American people? Is not such a suggestion worthy of the serious consideration of the interests concerned? I believe it is.

Are Average Wage Rates Keeping Pace with the Increased Cost of Living?

By ETHELBERT STEWART, UNITED STATES COMMISSIONER OF LABOR STATISTICS

THE term "cost of living" as used in this article means "living" at the standard actually found in the canvass of 12,096 families in 92 localities of the United States, as represented by the actual purchases made and the prices paid by those families in 1918. Admittedly, these were workers' families, as no salaried officials earning more than \$2,000 per annum were included.

It may be interesting to state that, in all the possible comparisons we have made, the quantitative consumption of this group of families checks up almost exactly with the average consumption in the country as a whole.

This actual cost of living in 1918 has been reduced to a 1913 base by adjusting the quantities of articles purchased to a 1913 price. The wage rate indexes have also been computed on the 1913 base. It must be emphasized that these are hourly wage rates and not annual earnings. They indicate what workers receive when they work and what the earnings would be if employment were constant. When the textile mills work three days a week instead of six, it follows, of course, that the income for the three days must be spread over living costs for twice that number of days. However, the securing of the actual annual earnings of any large number of individuals is such a stupendous statistical undertaking that we will probably be compelled to be satisfied with deductions from wage rates for a number of years to come.

In Table I I have attempted to compare the changes in union rates of wages per hour in relation to the concurrent changes in the cost of living from 1906 to 1925.

TABLE 1.—COMPARISON OF CHANGES IN UNION RATES OF WAGES PER HOUR AND IN COST OF LIVING, 1906 TO 1925

[1913=100]

Year	Index numbers of union rates of wages per hour	Index numbers of cost of living	Relative purchasing power of wages as measured in living cost	Changes in purchasing power of wages as compared with 1913
				<i>Per cent</i>
1906	85.0	78.7	108.0	+8.0
1907	89.7	82.0	109.4	+9.4
1908	91.0	84.3	107.9	+7.9
1909	91.9	88.7	103.6	+3.6
1910	94.4	93.0	101.5	+1.5
1911	96.0	92.0	104.3	+4.3
1912	97.6	97.6	100.0	0.0
1913	100.0	100.0	100.0	0.0
1914	101.9	103.0	98.9	-1.1
1915	102.8	105.1	97.8	-2.2
1916	107.2	118.3	90.6	-9.4
1917	114.1	142.4	80.1	-19.9
1918	132.7	174.4	76.1	-23.9
1919	154.5	188.3	82.0	-18.0
1920	199.0	208.5	95.4	-4.6
1921	205.3	177.3	115.8	+15.8
1922	193.1	167.3	115.4	+15.4
1923	210.6	171.0	123.2	+23.2
1924	228.1	170.7	133.6	+33.6
1925	237.9	173.5	137.1	+37.1

In this table it is assumed that the rate of wages per hour in 1913 enabled the worker to live at the standard he had attained, or in other words, that the purchasing power of his wages exactly met his cost of living at his then standard. The table means that in 1906, while his wages were only 85 per cent of his 1913 wages, his cost of living was 78.7 per cent of his 1913 cost; that the relative purchasing power of his wage rates was 108 as compared with 100 in 1913, and he was 8 per cent better off, measuring his wage rates with his cost of living in 1906, than he was in 1913.

This percentage of advantage, however, dropped consistently until 1910 when it was only 1.5 per cent. Although there was a material increase in 1911, it was entirely wiped out in 1912. Then follows a period of seven years of loss, during which he either reduced his standard or drew upon any savings he may have had, or met the shrinking purchasing power of his wage rate by the earnings of the wife or children, or went into debt. In 1914 he was at only a slight disadvantage, his loss in purchasing power being only 1.1 per cent and probably not seriously felt anywhere. However, by 1916 when it had reached practically 10 per cent it was felt, and in 1918 when the purchasing power of his wage rate was 23.9 per cent less than in 1913, measured by the standards of 1913, the reader can readily imagine the difficulties which faced the married wage earner of the country. His wage rates had increased practically 33 per cent in five years and this could easily be quoted to convince him of his theoretical happiness. It was easy enough to quote this fact while saying nothing about the fact that living costs had increased 74.4 per cent, and that the purchasing power of his wage rate was but 76.1 per cent of what it had been in 1913.

In 1920 there was a very marked increase in wage rates, and while the cost of living took a jump also, the spread between wage rates and living costs was narrowed almost to the fading point. Since 1921, hourly wage rates of organized workers have been going

consistently up, with the exception of a break in 1922, while on the other hand cost of living has not varied sharply.

To-day the average union wage rate in the United States will buy 37.1 per cent more of living on the 1913 standard than it would in 1913. The above table refers, as stated, to union or organized labor only. The figures for 1925 cover 717,916 workers distributed through 66 of the principal cities, and cover 78 trades.

That the standard of living has materially increased in many of the families of these workers since 1913 is hardly open to doubt. Some of these improvements in standards have been forced upon them by the housing situation. People have been forced into the suburbs, which made the use of an automobile necessary to get them to their work on time, and many other new requirements in even the most humble homes will readily suggest themselves, so that it must not be understood that all of this represents possible savings.

The foregoing refers, as stated, exclusively to members of organized labor, and some of the readers will doubtless wonder whether or not this represents labor as a whole.

In an attempt partially to answer this question I have in Table 2 applied the above methods to the employees in three industries: The manufacture of boots and shoes; the woolen industry; and the cotton industry. These are in each instance pay-roll figures and represent earnings for a pay-roll period reduced to hourly rates. Subsequent to 1914, the wage investigations upon which this table is based were made only in alternate years, hence from then on no wage index numbers are shown for the odd years.

TABLE 2.—COMPARISON OF CHANGES IN HOURLY WAGES AND IN COST OF LIVING, 1906 TO 1924
[1913=100]

Year	Boot and shoe factories				Woolen mills				Cotton mills			
	Index numbers of rates of wages per hour	Index numbers of cost of living	Purchasing power of wages		Index numbers of rates of wages per hour	Index numbers of cost of living	Purchasing power of wages		Index numbers of rates of wages per hour	Index numbers of cost of living	Purchasing power of wages	
			Index numbers measured in living cost	Per cent of change as compared with 1913			Index numbers measured in living cost	Per cent of change as compared with 1913			Index numbers measured in living cost	Per cent of change as compared with 1913
1906.....	86	78.7	109.3	+9.3	86	78.7	109.3	+9.3	78	78.7	99.1	-0.9
1907.....	91	82.0	111.0	+11.0	92	82.0	112.2	+12.2	89	82.0	108.5	+8.5
1908.....	89	84.3	105.6	+5.6	87	84.3	103.2	+3.2	88	84.3	104.4	+4.4
1909.....	93	88.7	104.8	-4.8	88	88.7	99.2	-8	85	88.7	95.8	-4.2
1910.....	92	93.0	98.9	-1.1	90	93.0	96.8	-3.2	88	93.0	94.6	-5.4
1911.....	94	92.0	102.2	+2.2	91	92.0	98.9	-1.1	90	92.0	97.8	-2.2
1912.....	93	97.6	95.3	-4.7	102	97.6	104.5	-4.5	99	97.6	101.4	-1.4
1913.....	100	100.0	100.0	0.0	100	100.0	100.0	0.0	100	100.0	100.0	0.0
1914.....	101	103.0	98.1	-1.9	103	103.0	100.0	0.0	103	103.0	100.0	0.0
1915.....		105.1				105.1				105.1		
1916.....	108	118.3	91.3	-8.7	127	118.3	107.4	+7.4	120	118.3	101.4	+1.4
1917.....		142.4				142.4				142.4		
1918.....	140	174.4	80.3	-19.7	193	174.4	110.7	+10.7	179	174.4	102.6	+2.6
1919.....		188.3				188.3				188.3		
1920.....	232	208.5	111.3	+11.3	355	208.5	170.3	+70.3	324	208.5	155.4	+55.4
1921.....		177.3				177.3				177.3		
1922.....	208	167.3	124.3	+24.3	268	167.3	160.2	+6.2	222	167.3	132.7	+32.7
1923.....		171.0				171.0				171.0		
1924.....	214	170.7	125.4	+25.4	301	170.7	176.3	+76.3	251	170.7	147.0	+47.0

* 1924 figures cover: For the boot and shoe industry, 45,460 employees in 106 establishments in 13 States; or the woolen industry, 41,622 employees in 72 establishments in 9 States; for the cotton industry, 77,995 employees in 114 establishments in 12 States.

The striking thing about these figures is the fact that the lean years for the comparatively unorganized labor in the factories occurred earlier in the period under consideration and were subject to more violent fluctuations than was true in the case of organized labor (shown in Table 1).

It must be understood that the absolute rate of wages in cotton mills, woolen mills, and boot and shoe factories was very much lower in 1913 than was the trade-union rate. For instance, the average wage of trade-unionists covered by the investigation of 1913 was 45.9 cents an hour, as against \$1.09 an hour in 1925; the average wage in the cotton mills in 1913 was 14.8 cents, as against 37.2 cents an hour in 1924; in woolen mills the rate was 17.7 cents in 1913, as against 53.3 cents in 1924; and in the boot and shoe industry it was 24 cents as against 51.6 cents in 1924.

It will thus be seen that factory labor started at the base period on a very much lower level of wages, and the purchasing power of wage rates as shown in Table 2 is based upon the assumption that the low standard of living which was the best the mill workers could attain in 1913 was maintained throughout the period.

The hourly rates of workers in woolen mills increased 201 per cent over the rates in 1913, making an index of 301 in 1924. Since cost of living increased 70.7 per cent (making an index of 170.7) the apparent purchasing power of the wage rate measured in terms of the 1913 standard of living was 176.3, a clear gain of 76.3 per cent.

Possibly some of these workers pinched and saved all this margin; others may have increased their standards of living, using up all of the additional units of living they could earn. Undoubtedly many pursued an intermediate course by raising their standards of living to a considerable extent, and still saved a part of the increase earned in these years. However, as intimated elsewhere, the wage figures represent hourly wage rates received only when actually employed, and the earnings therefrom had to be stretched over any idle time that occurred.

It should be understood that in the three industrial studies both men and women employees are included, while in the trade-union table practically men only are considered.

That the readers may have the purchasing power of the dollar before them to compare with the purchasing power of hourly wage rates, I have compiled the following table which gives the purchasing power of the commercial 1913 dollar, and of the cost-of-living 1913 dollar from 1906 to June, 1925:

TABLE 3.—PURCHASING POWER OF THE DOLLAR, 1906 TO JUNE, 1925

Year	Purchasing power of 1913 dollar (commercial)	Purchasing power of 1913 dollar (cost of living)	Year	Purchasing power of 1913 dollar (commercial)	Purchasing power of 1913 dollar (cost of living)
1906.....	\$1.129	\$1.271	1916.....	\$0.789	\$0.845
1907.....	1.070	1.220	1917.....	.564	.702
1908.....	1.110	1.186	1918.....	.515	.573
1909.....	1.032	1.127	1919.....	.484	.531
1910.....	.991	1.075	1920.....	.442	.480
'911.....	1.075	1.087	1921.....	.681	.564
1912.....	1.009	1.025	1922.....	.672	.598
1913.....	1.000	1.000	1923.....	.651	.584
1914.....	1.019	.971	1924.....	.668	.586
1915.....	.992	.951	1925 (June).....	.635	.576

In explanation of this table, I may say that the commercial dollar is based upon the wholesale price index covering 404 articles entering into general commerce. The cost-of-living dollar is computed from the index numbers of retail prices of food from 1906 to 1912, and from the index numbers of cost of living compiled by the Bureau of Labor Statistics from 1913 to June, 1925. The first is a measure of the buying power of the dollar, generally speaking, measured by wholesale prices. The other is the buying power of the dollar for purchases which are confined to household necessities. One is the dollar of commerce. The other is the dollar of the home.

Industrial Pensions for Old Age and Disability

By MARY CONYNGTON, OF THE UNITED STATES BUREAU OF LABOR STATISTICS

THE problem of the care of old age is becoming more insistent as the general idea of social responsibility is widening, and various efforts are being made to cope with it. England has accepted the principle that it is the duty of the State to see that provision for such care is made, and her latest insurance act, passed in the summer of 1925 (see MONTHLY LABOR REVIEW, November, 1925, pp. 196-198), divides the burden between the individual and the Government by compelling contributions to an insurance fund during all periods of employment and guaranteeing weekly benefits after the worker has reached a certain age. Several of our own States have attempted to establish old-age pensions by law, but so far not much has been accomplished. Pennsylvania's law providing for assistance to the old has been declared unconstitutional, and the status of the work attempted in other States is doubtful. Under the circumstances it is of interest to see what private employers are doing in the way of securing for their employees some provision for old age, and with this purpose in view the Bureau of Labor Statistics undertook an inquiry into the extent and character of the pension systems of private employers.

In such an inquiry several points stand out as of special importance. Do employees in general contribute to the pension fund, or do employers assume the whole cost? Are pensions provided for all, or only for those doing special kinds of work, or receiving certain rates of compensation? At what age is an employee considered ready for retirement, and what are the usual requirements as to length of service? What should be done about an employee who breaks down before he has fulfilled the conditions as to age or length of service? Is there any recognized standard of what a pension should amount to, and, if not, how is it usually determined?

To secure information on these and other points, inquiries were sent to all employers known or believed to maintain a pension system. Replies were fairly complete, and when published reports did not contain the data desired, further information was often added.

Growth and Extent of Pension Systems

PROBABLY there has never been a time when humane employers did not expect to provide to some extent for employees who had grown old in their service, but the definite provision involved in an organized pension system is largely a growth of the present century. The Baltimore & Ohio Railroad established its system in 1884, and a few other plans were in effect before 1900, but for the most part those now in force have been inaugurated within the last 20 years. From 1910 to 1916, inclusive, some 69 systems were established, but after 1916 the movement slackened, though it has never ceased entirely. It is difficult to say how widely pension plans are in use at any given

time. Some employers are averse to establishing a formal pension system, although they make much the same provision for their aged employees that other employers do through a system. In the present inquiry, for instance, 10 large corporations, some of which are well known for their fair and considerate attitude toward their employees, replied that they had never had a pension system, preferring to treat each individual case as circumstances seemed to require. Other employers establish a system tentatively, and it may be in force for some time before any public mention is made of it.

In 1916, when the Bureau of Labor Statistics published a survey of civil service retirement plans and industrial old-age pensions, it listed 117 plans as then being carried on by private employers. (See MONTHLY LABOR REVIEW, June, 1916, p. 110.) The number has increased since then, but it is difficult to make a valid comparison since in several cases a single plan has been extended to cover a whole group of allied enterprises. Thus, a single plan received in answer to the questionnaire of June, 1925, covers the gas and electric light companies of eight different municipalities, and some of the railway plans include allied lines operating throughout a whole section of the country. In some of these cases there has been a consolidation of plans existing separately in 1916. Thus the earlier list showed five pension plans maintained by telephone and telegraph companies. In 1925 only two such plans were reported, but these cover telephone and telegraph systems in practically every part of the country, and apply to some 280,000 employees. Allowing for such combinations, it is probable that the systems listed in the present article cover well over 200 companies and corporations, while it is impossible even to guess at the number of employees brought within their scope.

Kinds of Pension Plans

THERE are two main classes of pension plans—contributory systems, in which the employee is required to contribute from his earnings to a fund from which pensions are paid, and noncontributory, in which no such contribution is required. There is some question as to whether these are fundamentally different.

Whether the contribution to a pension fund be taken wholly from an employee's wages or salary, or be paid wholly by the employer, or be derived in part from each, these contributions are in all three cases to be regarded as in reality a deduction from wages or salary. It is the opinion of students of the pension problem that the existence of a pension system in connection with any position or employment is taken into account by both parties to the contract of employment, and that, broadly speaking, wages and salaries actually paid are in due course reduced below what they otherwise would be by the amount of the total contributions from both the employer and employee to a pension fund. The employee will thus pay for his pension by deductions from his wages or salary whether he is conscious of it or not. (Illinois, Pension Laws Commission, Report, 1916, p. 282.)

Various economists hold this theory,¹ and the civil-service employees of England were so convinced of its truth that they strove for years to have their pensions changed from a noncontributory to a contributory basis, in order that their share in providing them might be recognized, and the right acknowledged of their families to some share in their accrued interest in the fund in case of the death of employees

¹American Economic Review, June, 1913, p. 287: "Pensions as wages," by Albert de Roode.

before reaching the age of retirement. Generally speaking, however, in the past this point of view has been ignored, and it has been assumed that in noncontributory systems the employer bears the whole cost.

Apart from the matter of contributions, the plans vary widely. Some employers establish a pension fund by an initial appropriation, provide for its investment and for future appropriations to keep it up to a fixed sum, establish a pension committee or board to manage the system defining strictly their duties and powers, safeguard the pension with elaborate provisions as to how it is to be obtained and retained, and generally plan every detail of the system in advance. Others, when establishing their plan, prepare little beyond a statement that every employee who has served a certain length of time and has reached a certain age shall receive such and such a pension, and still others draw up plans of all degrees of elaboration between these extremes.

Purpose of Pension Plans

GENERALLY speaking, the underlying purpose of such plans is to make life easier for employees who have grown old in the service; in other words, it is on the whole humanitarian, though a number of other purposes may play a part. Most employers hope through the working of the pension plan to enlist the loyalty and friendly feeling of their workers, to secure better service, and to diminish turnover. Sometimes such a purpose is given as the reason for instituting the plan.

The company hopes that this voluntary establishment of a pension system which will assure to faithful employees an income when unable to work, either by reason of age or permanent incapacity, will confirm to them this company's appreciation of faithful service, and its interest in their welfare, and thereby increase their desire to render long service and devote their best efforts to the company, as so many employees have done in the past.

Sometimes the plan is intended to act as a deterrent to labor troubles and especially to hinder employees from joining in strikes, and certain of the plans contain provisions that anyone quitting the employer's service, even for one day, forfeits all claim to a pension, and if he is taken back, must come in as a new employee so far as pensions are concerned. The contributory plans are sometimes used to give the employer a kind of insurance against dishonesty, it being provided that in the event of the employee's leaving or being dismissed, any amount which he may be owing to the employer shall be deducted before his contributions to the fund are returned to him. Other subsidiary purposes may enter in, but it is evident that the humanitarian impulse and the desire to secure more permanent and devoted service are the leading motives.

Some Leading Features of Plans Studied

THERE are a few important features, such as the conditions under which pensions are given, and the manner of calculating their amount, which, though they may vary in detail, must form a part of any pension system. The following table shows the most important features of the plans studied:

PRINCIPAL FEATURES OF OLD-AGE AND DISABILITY PENSION PLANS OF PRIVATE INDUSTRIAL COMPANIES

Banks, insurance, and financial companies (contributory)

[241]

Company	Date of plan	Employees included	Source of funds	Retirement allowance				Disability allowance	
				Amount		Requirements		Amount	Requirements
				Basis (per year of service)	Maximum	Service	Age		
Bankers' Trust Co., New York.	1913	All (except executives) entering service under 40.	Company, indefinite; employees, 3 per cent of salary.	$\frac{3}{100}$ of final salary up to $\frac{3}{100}$.	<i>Per year</i> \$5,000. For life, after 25 years' service; under that for period of service.	15 years.....	65, compulsory; 60, optional.	Same as for retirement.	15 years' service.
Farmers & Mechanics Savings Bank of Minneapolis.	1912	All except those under "lawful" age.	Company, indefinite; employees, 3 per cent of salary up to \$4,000 a year.	$\frac{1}{100}$ of average pay for last 5 years, up to $\frac{3}{100}$, omitting all over \$4,000.	For life after 25 years' service; under that for period of service.	.....do.....	.....do.....	.....do.....	Do.
First National Bank of Chicago.	1899	All.....	Company, not stated; employees, 3 per cent of salary.	$\frac{1}{100}$ of salary up to $\frac{3}{100}$.	.....do.....	.....do.....	.....do.....	.....do.....	Do.
First & Old Detroit National Bank.	1913	.....do.....	Company, indefinite; employees, 3 per cent of salary up to \$4,000 a year.	$\frac{1}{100}$ of final pay up to $\frac{3}{100}$, omitting all over \$4,000.	For life after 25 years' service; under that for period of service.	.....do.....	.....do.....	Duration at discretion of trustees.	Do.
First National Bank of the City of New York.	1911	All but president, vice presidents, and cashier.	Company, indefinite; employees, 5 per cent of salary.	$\frac{1}{100}$ of average pay for last 5 years up to $\frac{3}{100}$.	\$5,000. For life, after 25 years' service; under that for period of service.	.....do.....	65.....	Calculated as for retirement, substituting $\frac{3}{100}$ for $\frac{1}{100}$.	Do.
Northwestern National Bank.	1911	All.....	Company, indefinite; employees, 3 per cent of salary, omitting that over \$4,000 a year.	$\frac{1}{100}$ of average pay for last 10 years, up to $\frac{3}{100}$, omitting all over \$4,000.	For period of service, if under 25 years.	.....do.....	65, compulsory; 60, optional.	Same as for retirement.	Do.
Speyer & Co.....	1906	Male employees over 21.	Company, not stated; employees, 2 per cent of salaries up to \$3,000, and 3 per cent on salaries over \$3,000.	.....do.....	75 per cent of average salary for last 10 years.	25 years.....	.....do.....	.....do.....	Do.

Banks, insurance, and financial companies (noncontributory)

Central Savings Bank, New York.	1916	All.....		2 per cent of average pay for last 3 years, up to 60 per cent.		20 to 30 years.	60, after 20 years' service; at any age after 30 years' service.	Same as for retirement.	20 years' service.
Commercial Trust Co. of New Jersey.	1916	do.....		do.....	\$3,000		65, compulsory; 60, optional.	For first year 80 per cent, second 50 per cent, third 25 per cent of final salary; thereafter nothing.	Total incapacity after 10 years' service.
Guaranty Trust Co. of New York.	1914	do.....	Company; appropriations from time to time, plus interest on same.	2 per cent of average pay for last 3 years, up to $\frac{3}{4}$ %.	\$5,000; minimum, \$300.	(a) 45 years; (b) 15 years.	(a) No age set; (b) 65.		At discretion of board of directors.
National Bank of Commerce of New York.	(1)	do.....	Company.	2 per cent of aggregate pay while in service.	\$5,000		65, compulsory; 60, optional.		
National City Bank of New York.	1912	do.....		2 per cent of average pay for last 3 years up to 60 per cent.	\$5,000		do.....		
National Shawmut Bank of Boston.	1911	do.....			30 per cent of average salary at time of retirement.	15 years.	do.....		
Prudential Insurance Co. of America.	1912	All but executive officers and directors.		1 per cent of average pay for last 10 years.	<i>Per month</i> \$150; minimum, \$50.	25 years.	Men, 70, compulsory; 65 optional. Women, 65, compulsory; 60 optional.	Duration and amount vary with length of service. For permanent total disability after 25 years' service, same as for retirement.	
— Insurance Co.	1913	All.....		$\frac{1}{5}$ of final salary up to 50 per cent.	\$300	(a) Not specified; (b) 30 years.	(a) 65; (b) 60.	Varies from 20 to 50 per cent of salary, according to length of service; minimum, \$300; maximum, \$3,600 a year.	5 years' service.

¹ Not reported.

PRINCIPAL FEATURES OF OLD-AGE AND DISABILITY PENSION PLANS OF PRIVATE INDUSTRIAL COMPANIES—Continued

Banks, insurance, and financial companies (noncontributory)—Continued

Company	Date of plan	Employees included	Source of funds	Retirement allowance				Disability allowance	
				Amount		Requirements		Amount	Requirements
				Basis (per year of service)	Maximum	Service	Age		
Union Trust Co., Chicago.	1912	All but those entering service after 45.	Appropriations by company, gifts, legacies, and interest on funds.	1 per cent of average pay for 5 consecutive years of highest salary.	<i>Per month</i> \$500; minimum, \$25.	20 years.....	Men, 65; women, 60.	Same as for retirement.	Permanent disability after 20 years' service.

Railroads (noncontributory)

[26]

Atchison, Topeka & Santa Fe Railway Co.	1907	All entering service under 50.	Company.....	1¼ per cent of highest average pay for any 10 consecutive years, plus ¾ per cent of such pay over \$50 a month.	\$75; minimum, \$20.	15 years.....	65.....	Same as for retirement.	Permanent incapacity after 15 years' service.
Atlantic Coast Line Railroad Co.	1903	All.....	do.....	1 per cent of average pay for last 10 years.	Minimum, \$15..	10 years.....	Officers and employees, 70; train and yard crews, track foremen, etc., 65.	do.....	Permanent incapacity between 61 and 70, after 10 years' service. Under 61, after 20 years' service.
Baltimore & Ohio Railroad Co.	1884	All who have belonged to relief association for 4 years.	do.....	Varies with salary and length and class of membership in relief association.	\$1.37½ (a day); excluding Sunday; minimum, 25 cents a day.	do.....	65.....		

74735°-26†-3 [27]	Boston & Maine Railroad and subsidiaries.	1901	All.....	do.....	(Up to 40 years) 1 per cent of average pay for last 10 years.	\$75.....	30 years.....	No age fixed; granted only for permanent total disability.		
	Buffalo, Rochester & Pittsburgh Railroad.	1903	do.....	do.....	2 per cent of average pay for last 10 years.	\$75; minimum, \$25.	20 years.....	70, compulsory; 65 to 69, optional.	Same as for retirement, at discretion of president.	At 60 to 64, after 20 years' service.
	Canadian Pacific Railway Co.	1902	All entering service under 42, and all in service before July 5, 1904.	do.....	1 per cent of average pay for last 10 years.	Minimum, \$20.	10 years.....	65, compulsory; 60 to 65, at discretion of pension committee.		
	Chicago, Burlington & Quincy Railroad Co.	1922	All.....	do.....	do.....	\$150; minimum \$25.	20 years.....	70, for trainmen, yardmen, foremen; 65, at discretion of board.	Same as for retirement.	25 years' service.
	Chicago & North Western Railway Co.	1901	do.....	Company; up to \$200,000 annually.	do.....	Minimum, \$12.	do.....	70.....	do.....	Permanent incapacity, after 20 years' service.
	Chicago, Rock Island & Pacific Railway Co., and Chicago, Rock Island & Gulf Railway Co.	1910	All entering service at or under 50.	Company.....	do.....	\$150; minimum \$20.	do.....	do.....	do.....	Total incapacity after 25 years' service.
	Chicago, St. Paul, Minneapolis & Omaha Railway Co.	1906	All.....	Company; up to \$105,000 annually.	do.....	Minimum, \$12.	do.....	do.....	do.....	Permanent disability after 20 years' service.
	Delaware, Lackawanna & Western Railroad Co.	1902	do.....	Company.....	do.....	Minimum (established August, 1920), \$25.	25 years.....	do.....	do.....	At 60 to 69, after 25 years' service.
	Grand Trunk Railway Co. of Canada.	1908	do.....	do.....	1 per cent of highest average pay for any 10 consecutive years.	Minimum, \$200 (a year).	15 years.....	65.....	do.....	At 60 to 64, after 20 years' service. At any age, after 10 years' service if incapacity is due to injuries received in service.
	Great Northern Railway Lines.	1916	All, except executive officers.	Company; initial sum of \$1,000,000.	1 per cent of average pay for last 10 years.	\$75; minimum \$25.	20 years.....	70; 65, optional.	do.....	Permanent incapacity after 25 years' service.

PRINCIPAL FEATURES OF OLD-AGE AND DISABILITY PENSION PLANS OF PRIVATE INDUSTRIAL COMPANIES—Continued

Railroads (noncontributory)—Continued

Company	Date of plan	Employees included	Source of funds	Retirement allowance				Disability allowance	
				Amount		Requirements		Amount	Requirements
				Basis (per year of service)	Maximum	Service	Age		
Illinois Central Railroad Co.	1901	All except those entering service after 45.	Company	1 per cent of average pay for last 10 years.	<i>Per month</i> Minimum \$25.	15 years	70, compulsory	Same as for retirement.	25 years' service for men; 20 for women; in special cases, 15 years.
[28] Minneapolis, St. Paul & Sault Ste. Marie Railway Co.	1910	All	do	do	Minimum, \$15.	do	65; may be extended to 70.	do	15 years' service.
	1914	do	do	do	Minimum, \$10 to \$20.	10 years	(a) Train and track service, 65 years; (b) others, 70 years.	At discretion of pension board.	Permanent incapacity, 20 years' service.
New York Central Lines.	1910	do	do	do	\$250; minimum \$10.	15 years	70	do	20 years' service.
New York, Chicago & St. Louis Railroad Co.	1914	All who enter service under 45.	do	do	\$200; minimum \$5.	10 years	do	do	Do.
New York, New Haven & Hartford Railroad. ²			do	1 per cent of average pay for last 10 years, up to 40 per cent.		30 years	At any age, if certified, by company's doctor as unfit for further service.		
Norfolk & Western Railway Co.	1917	All	do	1 per cent of average pay for last 10 years.	Minimum, \$20.		70 compulsory; 65, optional after 25 years' service.	Same as for retirement.	20 years' service
Pennsylvania Railroad System.	1900	do	do	do	Minimum, \$15.		70	do	At 65-69, after 30 years' service.

Philadelphia & Reading Railway Co.	1902	do.	do.	do.		30 years.	do.	Amount and duration at president's discretion.	Total incapacity 65-69. If due to injury while at work, at any age.
Rock Island Lines.	1909	do.	do.	do.	\$150; minimum \$20.	20 years.	Clerical employees and officers, 70; train crews, yardmen, and foremen 65.	do.	Permanent incapacity after 25 years' service.
Southern Pacific Co. and Southern Pacific Lines in Texas and Louisiana.	1903	do.	do.	do.		do.	do.	do.	At 60-70 years after 20 years' service. Permanent incapacity at any age after 25 years' service for men, 20 for women.
Union Pacific System.	1910	do.	Company; initial sum of \$100,000; and up to \$50,000 a year.	do.	Minimum, \$25	do.	do.	do.	Do.
Union Pacific System, Oregon-Washington Railroad & Navigation Co.	1910	do.	do.	do.	do.	do.	do.	do.	Do.
Western Maryland Railway Co.	1916	do.	Company.	do.	\$100; minimum \$15.	do.	65; at any age, after 45 years' service.	do.	At discretion of executive committee.

Street railways (contributory)

Philadelphia Rapid Transit Co. ³	1911	All members of welfare association.	Company and employees each \$1.50 a month for each member of association. ⁴		\$40	25 years.	65 if unable to discharge duties of position.		
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² Company states that it has no defined system, but that its practice is to give allowances as herein described.

³ Provisions for dependents of pensioned workers and for refunds of employees' contributions not reported.

⁴ This payment also secures life insurance and sick benefits.

PRINCIPAL FEATURES OF OLD-AGE AND DISABILITY PENSION PLANS OF PRIVATE INDUSTRIAL COMPANIES—Continued

Street railways (noncontributory)

[30]

Company	Date of plan	Employees included	Source of funds	Retirement allowance				Disability allowance	
				Amount		Requirements		Amount	Requirements
				Basis (per year of service)	Maximum	Service	Age		
Brooklyn Rapid Transit System.	1909	All members of employees' benefit association, except those receiving over \$1,500 for five years.			<i>Per month</i> (a) 50 per cent; (b) 40 per cent; (c) 30 per cent of average pay for last 10 years; minimum, \$20.	(a) 35 years; (b) 30 and less than 35 years; (c) 25 and less than 30 years.	70; 65-69, if incapacitated.	Same as for retirement.	30 years' service.
Columbus Railway, Power & Light Co.	1914	All members of beneficial association.			\$30	25 years	65		At discretion of company.
Interborough Rapid Transit Co.	1916	All	Company; up to \$50,000 a year.	1 per cent of average pay for last 10 years.	Minimum, \$20	do	70	Same as for retirement.	Permanent disability after 25 years' service.
Louisville Railway Co.	1905	do			\$12, \$15, or \$25, according to occupation and salary.	do	70; 65 if incapacitated.	do	At any age or length of service, if due to injury received in service.
Milwaukee Electric Railway & Light Co.	1912	do	Company annually sets aside one-half of 1 per cent of operating revenue.	1½ per cent of average pay for last 10 years.	\$750 (a year); minimum, \$300.	15 years	70, compulsory; 60-69, optional.	Same as for retirement. Duration for life if retirement is at 60 or over, otherwise 14.1 years.	Permanent and total incapacity after 15 years' service.
Newport News & Hampton Railway, Gas & Electric Co.	1915	All except those receiving over \$1,800 for more than 10 years.		1 per cent of average pay for last 10 years.	Minimum, \$20	25 years for those under 70.	70; 60-69 if physically disqualified.	Same as for retirement.	After 25 years' service, if due to injury received in service.
New York Railways Co.	1916	All	Company; up to \$50,000 a year.	do	do	25 years	70	do	Permanent disability after 25 years' service.

Omaha & Council Bluffs Street Railway Co.	1916	All earning less than \$125 per month.	Company-----	(a) Conductors and motormen \$1 per month; (b) others 1¼ per cent of final salary.	(a) \$30; (b) \$50 (a year); minimum, \$240.	20 years-----	70, compulsory; 65, optional.	do-----	Permanent disability, due to accident received in service, after 20 years' service.
Third Avenue Railway System.	1918	All members of benefit association.	Company; and surplus from benefit association.		\$25-----	25 years-----	No age set-----		
Twin City Lines-----	1915	All members of employee's benefit association.	Company-----	1½ per cent of average pay for last 10 years.	\$60-----	20 years-----	70, compulsory; 60, optional.		
United Electric Railways Co., Providence, R. I.	1901	All-----	do-----	(a) 2 per cent, (b) 1¾ per cent (c) 1½ per cent, (d) 1¼ per cent, and (e) 1 per cent of average pay for last 10 years, up to 100 per cent.		(a) 35 years, (b) 30-34 years, (c) 25-29 years, (d) 20-24 years, and (e) under 20 years.	70-----		
United Railways Co. of St. Louis.	1915	do-----	Company; up to one-fourth of 1 per cent of operating expenses annually.	1½ per cent of average pay for last 10 years.	\$50; minimum, \$20.	20 years-----	do-----	Same as for retirement.	At 60 or over after 15 years' service.
Washington Railway & Electric Co.	(1)	All members of relief association.	Company; up to \$10,000 a year.	A percentage of average pay for last 10 years, varying from 20 per cent after 15-19 years to 30 per cent for 25 years, plus 2 per cent for each year over 25.		15 years-----	do-----	do-----	At 55 or over after 15 years' service; under 55, if injured in service. Special pensions at discretion of board.
Washington-Virginia Railway Co.	1916	All-----	Company-----	do-----	Maximum, \$50; minimum, \$20.	do-----	do-----	do-----	At 55-69, after 15 years' service; under 55, if injured in service. Special pensions at discretion of board.

¹ Not reported.

PRINCIPAL FEATURES OF OLD-AGE AND DISABILITY PENSION PLANS OF PRIVATE INDUSTRIAL COMPANIES—Continued

Telephone and telegraph companies (noncontributory)

32

Company	Date of plan	Employees included	Source of funds	Retirement allowance				Disability allowance	
				Amount		Requirements		Amount	Requirements
				Basis (per year of service)	Maximum	Service	Age		
American Telephone & Telegraph Co. and associated Bell operating cos. in the United States. (Covers 18 companies.)	1913	All.....	Companies; initial sum of \$9,855,090 and up to 2 per cent of annual pay roll. ¹	1 per cent of average pay for last 10 years, or 10 consecutive years of highest pay.	<i>Per month</i> Minimum, \$30..	(a) 20 years; (b) 25 years; (c) 30 years.	(a) Men, 60; women, 55; (b) men, 55; women, 50; (c) any age.	Same as for retirement, but duration at discretion of pension committee.	Total incapacity after 15 years' service.
Western Electric Co. (New York, Delaware, and California corporations), and International Western Electric Co. (Inc.).	1913	do.....	do.....	do.....	do.....	do.....	do.....	do.....	Do.

[32]

Other public utilities (noncontributory)

Boston Consolidated Gas Co.	1919	All.....	Company.....	2 per cent of average annual pay for last 10 years.	\$2,500 (a year); minimum \$360.	30 years.....	Men—Compulsory, 70; optional, 65. Women, compulsory, 65; optional, 60.	Same as for retirement.	Total disability after 20 years' service.
Consolidated Gas, Electric Light & Power Co., of Baltimore.	1911	do.....	do.....	1½ per cent of average pay for last 5 years.	Minimum, \$20..	15 years.....	65.....	do.....	Permanent disability after 15 years' service, or after 10 years if disability is due to injuries received in service.

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Consolidated Gas Co. of New York.		do.		2 per cent of average pay for last 5 years, up to 60 per cent.		25 years.	50 or over, at discretion of employer.		
Edison Electric Illuminating Co., Boston.	1913	do.	Company	1 per cent of average annual pay for last 10 years.	Minimum, \$300 (a year).	15 years.	Optional—men, 65; women, 60.		
Malden Electric Co.	1910	All except those entering service over 50.	Company; up to \$1,200 a year.	do.	Minimum, \$200 (a year).	20 years.	60 or over, if physically disqualified.	Same as for retirement.	Incapacity after 20 years' service, due to injuries received in service.
Concord Electric Co.	1910	do.	do.	do.	do.	do.	do.	do.	Do.
Haverhill Electric Co.	1910	do.	do.	do.	do.	do.	do.	do.	Do.
Springfield Gas Light Co.	1910	do.	Company; up to \$1,250 a year.	do.	do.	do.	do.	do.	Do.
Salem Electric Lighting Co.	1910	do.	Company; up to \$1,200 a year.	do.	do.	do.	do.	do.	Do.
Suburban Gas & Electric Co.	1910	do.	do.	do.	do.	do.	do.	do.	Do.
Malden & Melrose Gas Light Co.	1910	do.	do.	do.	do.	do.	do.	do.	Do.
Fitchburg Gas & Electric Light Co.	1910	do.	do.	do.	do.	do.	do.	do.	Do.
Niagara Falls Power Co.	1919	All.	Company	(a) 1½ per cent of highest annual pay within last 10 years. (b) If (a) exceeds \$100, percentage reduced to 1.	(a) \$100; minimum \$25. (b) \$250.	10 years.	65.	do.	Disability at 50 or over after 15 years' service.
Philadelphia Electric Co.	1911	do.	do.	2 per cent of average annual pay for 10 consecutive years of highest pay.	Minimum, \$15.	For employees in service April 30, 1911, 10 years; for those entering afterward, 15 years.	Men, 65; women, 60.	Same as if they had reached retiring age.	15 years' service at any age, for total incapacity, due to injuries received in service.
Southern California Edison Co.	1919	do.	do.	A percentage of average monthly pay during 5 years of highest pay; 2 per cent of first \$200 of such pay; 1½ per cent of next \$500; 1 per cent of next \$500; ¾ per cent of next \$1,000, and ½ per cent of all above \$2,000.	Minimum, \$25.	15 to 20 years.	Men—65 after 15 years' service; 60, after 20 years. Women—60 after 15 years' service, 55 after 20 years.	At discretion of committee.	20 years' service; at discretion of committee, service requirement may be waived.

PRINCIPAL FEATURES OF OLD-AGE AND DISABILITY PENSION PLANS OF PRIVATE INDUSTRIAL COMPANIES—Continued

Miscellaneous (contributory)

[34]

Company	Date of plan	Employees included	Source of funds	Retirement allowance				Disability allowance	
				Amount		Requirements		Amount	Requirements
				Basis (per year of service)	Maximum	Service	Age		
Armour & Co.-----	1911	All salaried employees entering under 40 (women, 35); service under age of 20 not reckoned.	Company, indefinite; employees, 3 per cent of salary, up to \$6,000.	1 per cent of average pay for last 10 years, omitting all over \$6,000 a year	<i>Per month</i>	(a) Men, 30; women, 25 years; (b) men 40; women, 30 years.	(a) Men, 65; women, 55. (b) men, 60; women, 50.	Same as for retirement.	Permanent total incapacity after 25 years' service.
Elgin National Watch Co.	(1)	All officers and employees 21 or over (women 18 or over).	Company, initial sum of \$100,000 and annual sum equal to contributions of officers and employees; employees, 2 per cent of salary up to \$4,000.	(Up to 25 years) $\frac{1}{2}$ % of average pay for last 10 years, plus $\frac{1}{2}$ of 1 per cent for each year over 10 of contribution to fund, omitting all salary over \$4,000.	-----	20 years, with 10 years' contributions to fund.	Men, 65; women, 55.	At discretion of board but not to exceed one-half of retirement allowance.	10 years' service and 5 years' contributions to fund.
Fairbanks, Morse & Co. (Inc.). ⁶	1917	All salaried employees, after 6 months' service.	Company, sum equal to contributions of employees, plus occasional special contributions; employees, 3 per cent of salary up to \$4,000.	2 per cent of average salary for last 10 years.	\$4,000 (a year); minimum, \$300.	20 years.-----	65, compulsory; optional, for men, 60; women, 50.	At discretion of trustees.	15 years' service.
Hibbard, Spencer, Bartlett & Co.	1905	All over 18 entering under 40; entrants between 40 and 55, on approval by company.	Employer, sum equal to contributions of employees; employees, 2 per cent of salaries but not more than \$60 a year (those entering at 40 or over pay higher rates).	-----	$\frac{3}{8}$ of average pay for last 5 years, maximum \$1,500 (a year). For life after 20 years' contributions to fund; under that, for term equal to period of contributions.	15 years.-----	Compulsory; men 65, women, 60. At discretion of pension committee, 60 for men.	Same as for retirement, for period not over time of contributions to fund.	Permanent incapacity.

Pittsburgh Coal Co. (mine employees). ³	1902	All.....	Company, initial sum of \$10,000, thereafter monthly sum equal to employees' contributions; employees, 10 cents a month.	-----	\$15.-----	10 years-----	At any age, if incapacitated through age, illness or accident.	-----
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Miscellaneous (noncontributory)

American Brake Shoe & Foundry Co.	1911	All.....	Company.....	1 per cent of average pay for last 10 years.	Minimum, \$20..	20 years-----	60.....	-----	-----
American Brass Co..	1913	do.....	do.....	2 per cent of average pay for last 3 years up to 60 per cent.	\$5,000 (a year) -	25 years-----	65.....	Same as for retirement.	15 years' service.
American Express Co.	1921	All entering service under 40.	do.....	1½ per cent of first \$1,200 of average pay for last 10 years plus 1 per cent of excess over \$1,200	\$5,000 (a year); minimum, \$360.	(a) 20 years; (b) 25 years.	(a) Compulsory—men, 70; women, 60; optional—men, 65; women, 55; (b) men, 60; women, 50.	At discretion of executive committee.	Permanent or total incapacity after 15 years' service.
American Smelting & Refining Co.	1913	All.....	do.....	1 per cent of average pay for last 10 years.	\$3,000 (a year); minimum, \$300.	20 years-----	Men, 60; women, 50.	-----	-----
American Sugar Refining Co.	1912	All in service before Oct. 12, 1924.	Company initial appropriation \$300,000. Others as needed.	do.....	\$5,000 (a year); minimum, \$240.	15 years. If over 65 (women, 60) no service requirement.	Men 65, women 60; after service of 30 years for men, 25 for women, at any age. At any age after 15 years' service, at discretion of committee.	At discretion of pension committee.	Permanent incapacity after long service.
Bancroft, Joseph, & Sons Co.	1915	All.....	Company.....	1 per cent of average earnings for last 10 years.	-----	20 years-----	Men, 65; women, 55.	Same as for retirement. Duration at discretion of committee.	Total disability after 15 years' service.
Beechnut Packing Co.	1912	do.....	do.....	2 per cent of final salary for salesmen and of day wage for others.	-----	10 years-----	70; earlier if infirm.	-----	-----

¹ Not reported.³ This company also has a noncontributory plan.

PRINCIPAL FEATURES OF OLD-AGE AND DISABILITY PENSION PLANS OF PRIVATE INDUSTRIAL COMPANIES—Continued

Miscellaneous (noncontributory)—Continued

Company	Date of plan	Employees included	Source of funds	Retirement allowance				Disability allowance	
				Amount		Requirements		Amount	Requirements
				Basis (per year of service)	Maximum	Service	Age		
Butler Bros.....	1907	All.....	Company.....	1 per cent of average pay for last 5 years.	<i>Per month</i> \$1,000 (a year); minimum, \$300.	20 years.....	60.....	Same as for retirement.	20 years' service.
Calumet & Hecla Consolidated Copper Co.	1904	do.....	do.....		\$25; minimum, \$15.	do.....	do.....		
Case, J. L., Threshing Machine Co.	1915	do.....	Charged to operating expenses.	1 per cent of highest annual salary within last 10 years.	\$50; minimum, \$18.	do.....	65.....	Same as for retirement. Duration not to exceed period of service.	Do.
1931 Cheney Bros.....	1910	All members of benefit association.	Reserve fund based on actuarial calculations, plus annual appropriations.	1 per cent of average monthly pay for last 10 years with addition of 10 per cent of same average pay, up to total of 50 per cent.	\$125.....	25 years.....	Men, over 70; women, over 65.	Same as for retirement. For total incapacity, deduction for each year under 65 for men and 60 for women.	Partial incapacity, after 25 years' service—men, 65-69; women, 60-64. Total incapacity, after 25 years' service—men, 55-64; women, 50-59.
Cleveland Cliffs Iron Co.	1909	All in mining, furnace, land, and lumbering departments.	Company.....	1 per cent of average monthly earnings for last 10 years.	\$200; minimum, \$18.	do.....	70 compulsory, 65 optional.		20 years' service.
Cleveland Metal Products Co.	(1)	All.....	do.....	1 per cent of average monthly pay for last 5 years, plus \$10. This sets pension for first month after which rate is varied monthly according to changes in average hourly earnings.	\$250; minimum, \$30.	20 years.....	Men, 65; women, 55.	(a) Same as for retirement; (b) for 5 years, total payments not to exceed \$2,500.	(a) 15 years' service; (b) permanent total disability, after 5 years' service

[37]	Colorado Fuel & Iron Co. (and subsidiaries).	1917	All but president.	do	do	30 per cent of average monthly pay for last 10 years; minimum, \$20. Reduction in percentage for those entering service after 45.	(a) 20 years; (b) 30 years.	(a) Men, 65, women, 55, compulsory; (b) men, 60, women, 60, at discretion of board.	At discretion of board.	Permanent incapacity at any age incurred in service.
	Commonwealth Edison Co.	1911	All	do	1½ per cent of average pay for 5 years of highest consecutive pay. For those entering service before 1913, 2 per cent.	\$6,000 (a year); minimum, after 15 years' service, \$300; less than 15 years, \$100 (a year).	(a) 30 years; (b) 15 years; (c) 5 years.	(a) 55; (b) 60; (c) 65.		
	Deere & Co.	1908	do	do	1½ per cent of average pay for last 10 years.	\$150; minimum, \$18.	20 years	65		On permanent total incapacity, payment of sum proportioned to length of employment in lump sum or annual installments.
	Du Pont de Nemours, E. I., & Co.	1904	do	do	(a) Service prior to Jan. 1, 1925, 1½ per cent of average pay for last 10 years. (b) Service after that date—1 per cent.	(b) \$100	15 years	Permanent total incapacity without regard to age, except that employee must have entered service under 45, unless employed prior to 1923.		
	Fairbanks, Morse & Co. ⁷	1917	Machine-shop employees paid by hour.	do	2 per cent of average pay for last 5 years.	Minimum, \$300 (a year).	20 years	Compulsory—men, 70; women, 60. Optional—men, 65; women, 55.		
	General Electric Co.	1920	All	do	1½ per cent of average pay for last 10 years.	do	do	Men, 70; women, 60.	Same as for retirement.	Permanent incapacity after 20 years' service, at discretion of board.

¹ Not reported.⁷ This company has a contributory plan for salaried employees. See page 34.

PRINCIPAL FEATURES OF OLD-AGE AND DISABILITY PENSION PLANS OF PRIVATE INDUSTRIAL COMPANIES—Continued

Miscellaneous noncontributory—Continued

Company	Date of plan	Employees included	Source of funds	Retirement allowance				Disability allowance	
				Amount		Requirements		Amount	Requirements
				Basis (per year of service)	Maximum	Service	Age		
General Fire Extinguisher Co. (and associated companies).	(1)	All-----	Company-----	(Up to 30 years), 1 per cent of average pay for last 10 years; 2 per cent for each of first and 3 per cent for each of next 5, up to 55 per cent.	<i>Per month</i> \$1,500 (a year); minimum, \$420.	25 years-----	Compulsory, 70; optional with either side, 65; at option of directors, 55.	At discretion of pension committee, not to exceed retirement pension.	25 years' service, at discretion of executive committee.
[381] Goodrich, B. F., Co. (and certain subsidiaries).	1915	.....do-----	.....do-----	1½ per cent of average pay for last 10 years.	\$100; minimum, \$30.	(a) Not specified; (b) 20 years; (c) 25 years; (d) 30 years.	(a) Compulsory—men, 70; women, 65. (b) Men, 65; women, 60, optional. (c) Men, 60; women, 55. (d) At any age.	Same as for retirement.	Permanent total incapacity after 15 years' service.
Gorham Manufacturing Co.	1903	.....do-----	Company appropriates for pension fund 1 per cent monthly of total pay roll, until yearly balance exceeds \$20,000, then ¾ of 1 per cent until balance sinks to \$10,000.	1 per cent of final or highest pay, at discretion of committee.	.....do-----	Men, 25; women, 20 years.	Men, 65; women, 55 years.	Same as for retirement. Duration at discretion of pension committee.	5 years' service.
Huyck, F. C., & Co.	1911	All members of pension and benefit department.	Company contributes not less than 1 per cent of aggregate wages and salaries of members of department.do-----	30 per cent of average yearly earnings for last 10 years.do-----	Men, 70; women, 65.	(3)	(3)

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International Harvester Co. (and subsidiary companies).	1908	All.....	Appropriations by directors as needed.	1¼ per cent of average pay for 10 consecutive years of highest pay.	\$175; minimum, \$27.	(a) 20 years, (b) 30 years.	(a) Men, 65; women, 50. (b) Men, 60.	-----	-----
International Silver Co.	1912	do.....	Company.....	1 per cent of average pay for last 10 years with addition (to total) of 10 per cent of average pay for last 3 years.	\$100.....	Men, 25 years; women, 20 years.	Men, 60, women, 50, on request. Men, 70, women 60, by right.	Same as for retirement.	Permanent total incapacity after 20 years' service.
Miner-Hillard Milling Co.	(1)	All members of relief association.	do.....	1 per cent of average annual pay at time of retirement.	\$50; minimum, \$20.	20 years, with 10 years' membership in relief association.	65.....	-----	-----
Murphy Varnish Co.	(1)	All officers and employees.	do.....	2 per cent of average pay for last 10 years.	\$200.....	20 years.....	70.....	Same as for retirement.	At 60 or over, after 20 years' service; if due to accident or illness at any age, after 10 years' service.
National Lead Co.	1912	All.....	do.....	1 per cent of average pay for last 10 years.	Minimum \$30.....	do.....	Men, 65, women, 55.	-----	-----
Newport News Shipbuilding & Dry Dock Co.	1915	do.....	do.....	do.....	-----	Men—(a) 25 years, (b) 30 years. Women—(a) 20 years, (b) 30 years.	Compulsory—Men, 70; women, 60. Optional—Men (a) 65, (b) 60; women (a) 55, (b) 50.	-----	-----
Parke, Davis & Co.	1910	do.....	do.....	1½ per cent of average pay for last 10 years.	\$150; minimum, \$30.	20 years.....	Men, 65, women, 55; optional, 5 years earlier.	-----	-----
Phelps Dodge Corporation, Copper Queen branch.	(1)	do.....	Company appropriates \$150,000 each year.	2 per cent of average annual earnings during service. Reduced if employee retires under 58.	\$125; minimum, \$25.	22 years.....	Normally 58.....	Same as for retirement.	15 years' service.
Pittsburgh Coal Co.	1919	All salaried employees.	Charged to operating expenses.	1 per cent of average pay for last 10 years.	\$100; minimum, \$30.	25 years.....	Compulsory, men, 70, women, 60; optional, 5 years earlier.	do.....	Permanent total incapacity after 15 years' service.

¹ Not reported.² This company has a contributory plan for salaried employees. See p. 35.⁸ Disability covered by separate, contributory system.

PRINCIPAL FEATURES OF OLD-AGE AND DISABILITY PENSION PLANS OF PRIVATE INDUSTRIAL COMPANIES—Continued

Miscellaneous (noncontributory)—Continued

Company	Date of plan	Employees included	Source of funds	Retirement allowance				Disability allowance	
				Amount		Requirements		Amount	Requirements
				Basis (per year of service)	Maximum	Service	Age		
Procter & Gamble Co. (and subsidiaries).	1915	All members of pension and benefit plan.	Company contributes annually an amount equal to \$16 per \$1,000 of aggregate yearly wages of employees participating.	2½ per cent of average pay for last 5 years, up to 75 per cent.	<i>Per month</i> \$1,800 (a year); minimum, \$200.	20 years.....	Compulsory, men, 65; women, 55; optional, 5 years earlier.	First year, special disability benefits; thereafter, same as for retirement.	Total disability. For partial disability, reduced benefits in discretion of board.
[401] Pullman Co.....	1913	All entering service under 45.	Company.....	1 per cent of average pay for last 10 years.	Minimum, \$15.....	20 years.....	Men, 70; women, 65.	Same as for retirement.	Permanent disability after 20 years' service.
Sherwin - Williams Co. (and subsidiary and affiliated companies).	1911	All members of benefit association	.....do.....	1 per cent of average pay for last 10 years plus \$10 a month.	\$100.....	25 years.....	Compulsory, men, 70; women, 60. Optional, men, 65; women, 55.	.....do.....	20 years' service.
Simonds Manufacturing Co.	1908	All.....	.....do.....	1½ per cent of average pay for last 5 years.	\$100; minimum, \$20.	20 years.....	70, compulsory; 65, optional.	.....do.....	Permanent incapacity after 20 years' service.
Sprague, Warner & Co.	1915	.....do.....	.....do.....	(a) Service of 20 to 24 years— $\frac{1}{3}$ of total earnings for last 5 years. (b) Service of 25 to 29 years— $\frac{2}{3}$. (c) Service of 30 years or over— $\frac{3}{4}$.	(a) \$20, (b) \$22, (c) \$24, per week.	.....do.....	60, optional.....	.....do.....	20 years' service in discretion of directors.

	Standard Oil Co. of New Jersey.	1918	do	Initial sum by company plus any necessary annual appropriations.	2 per cent of average pay for last 5 years, up to 75 per cent.	Minimum, \$25.	(a) 20 years, (b) 30 years.	Regular (a) men, 65; women, 55; (b) Men, 55; women, 50. Compulsory—men, 70; women, 60.	At discretion of board.	Permanent total incapacity after 10 years' service.
	Stanley Rule & Level Co.	1915	do	Company pays into fund 1 per cent of pay roll annually, and also 4 per cent on each year's balance.	1 per cent of average pay for last 10 years.	\$1,200 (a year); minimum, \$250.	(a) 25 years, (b) 30 years.	(a) Compulsory—men, 70; women, 60. Optional with employee—men, 65; women, 55. At discretion of company—men, 60; women, 50. (b) At any age in discretion of company.	Same as for retirement.	Permanent total incapacity after 20 years' service.
	Studebaker Corporation.	1919	All receiving \$3,000 or less a year.	Company	Flat yearly rate of 25 per cent of average earnings for last 5 years.	Minimum, \$30.	20 years	60		
[11]	Sullivan Machinery Co.	1915	All	do	1 per cent of average pay for last 10 years, or 10 consecutive years of highest pay.	Minimum, \$20.	(a) 20 years, (b) 25 years, (c) 30 years.	(a) Men, 60; women, 55; (b) Men, 55; women, 50. (c) At any age.	At discretion of committee.	Total incapacity after 15 years' service; at discretion of committee.
	Swift & Co. (and subsidiary corporations).	1916	All who enter service under 40.	Initial fund \$2,000,000. Company adds to this at its option.		One-half of average annual pay for last 5 years, up to \$5,000 (a year); minimum, \$360.	25 years	Compulsory—men, 65; women, 55. Optional—men, 60; women, 50.	After 25 years' service, same as for retirement. After 15 to 24 years, for each year of service $1\frac{1}{2}$ per cent of average pay for last 5 years.	Permanent incapacity after 15 years' service, at discretion of board.
	Talbot Mills	1903	All, except officers of company.	Company	Up to 35 years—1 per cent of average pay for last 10 years. Over 35 years—50 per cent of same average pay.	\$500 (a year)	15 years	70	Same as for retirement.	15 years' service.

PRINCIPAL FEATURES OF OLD-AGE AND DISABILITY PENSION PLANS OF PRIVATE INDUSTRIAL COMPANIES—Continued

Miscellaneous (noncontributory)—Continued

Company	Date of plan	Employees included	Source of funds	Retirement allowance				Disability allowance	
				Amount		Requirements		Amount	Requirements
				Basis (per year of service)	Maximum	Service	Age		
Tide Water Oil Co.	1925	All	Company	2 per cent of average annual pay for last 10 years.	<i>Per month</i> Minimum, \$40.	(a) 20 years, (b) 25 years.	(a) 70, compulsory; 60, on recommendation of committee. (b) 65, optional.		
Bayonne Refinery of Tide Water Oil Co.	1925	do	do	do	do	do	do		
United Cigar Stores Co. of America.	1924	All except agents	do	2 per cent of average pay for last 5 years, up to 50 per cent of final pay.	\$200	25 years	Men, 60; women, 55.	Same as for retirement.	Permanent incapacity after 15 years' service.
United States Steel & Carnegie Pension Fund.	1910	All	Company initial fund, \$12,000,000.	1 per cent of average pay for last 10 years.	\$100; minimum, \$12.	do	Compulsory—men, 70; women, 60. Optional—men, 65; women, 55.	do	Permanent total incapacity after 15 years' service.
Van Brunt Manufacturing Co.	1912	do	Company	1½ per cent of average pay for last 10 years.	Minimum, \$18.	20 years	65	At discretion of pension board.	Total incapacity after 10 years' service, at discretion of company.
Vermont Marble Co.	1913	do	do	1 per cent of average pay for last 10 years.	Minimum, \$10.	do	65		
Victor Talking Machine Co.	1924	All whose salaries at time of retirement do not exceed \$300 a month.	do		\$50 (flat rate)	do	Men, 65; women, 55.		

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Virginia Bridge & Iron Co.	1914	All.....	do.....	2 per cent of average pay for last 10 years.	\$100; minimum, \$12.	do.....	Compulsory—men, 70; women, 60. Optional—men, 60; women, 50.	Same as for retirement.	Permanent total incapacity after 20 years' service at discretion of company.
Wallace, R., & Sons Manufacturing Co.	1912	do.....	do.....	1 per cent of average pay for last 10 years with addition (to total) of 10 per cent of average pay for first 5 years.	\$100; minimum, \$15.	do.....	Compulsory—men, 70; women, 60. Optional—men, 65; women, 55.	do.....	Do.
Wells Fargo & Co.	1903	All salaried employees.	do.....	¹ 2 per cent of average pay for last 10 years, up to \$100 a month, and 1 per cent on any over that.	\$125; minimum, \$30.	(a) 25 years, (b) 40 years, (c) 25 years.	(a) 70, compulsory; (b) 60, optional; (c) 60, if incapacitated for efficient work.	For each year of service, 1 per cent of average pay for last 10 years. Minimum, \$25, maximum, \$75 a month.	Permanent disability after 15 years' service.
Westinghouse Air Brake Co.	1908	All members of relief department.	Company appropriation of \$110,000; additions as needed.	1 per cent of average pay for 10 years of highest pay.	\$100; minimum, \$30.	None set.....	70, compulsory; 60, optional.	(?).....	(?).
Westinghouse Electric & Manufacturing Co.	1915	do.....	Company.....	1 per cent of average pay for last 10 years.	\$100. Minimum; normal, \$20; for retirement, under 20 years' service, \$1 monthly per year of service.	20 years.....	70.....	(?).....	(?).
Winchester Repeating Arms Co.	1915	All.....	do.....	(a) Classes A and B, 1 per cent of average pay for last 5 years, (b) Class C, at discretion of company.	(a) Minimum, \$20.	(a) 25 years, (b) 30 years, (c) no specified period.	(a) Men, 60; women, 55; at company's option; (b) men, 55; women, 50, at own request; (c) at any age at company's option.	.....	.....

¹ Not reported.² Disability covered by separate plan.

A few of the contributory plans make specific provision for the payment of a certain proportion of a deceased annuitant's pension to his widow, minor children, or other dependents; also for the refund of the employee's contributions, in case he dies, leaves the service, or is dismissed. The table below shows, for the plans containing these features, the provision made:

PROVISIONS FOR DEPENDENTS OF PENSIONERS AND FOR REFUNDS OF EMPLOYEES' CONTRIBUTIONS IN CONTRIBUTORY PENSION PLANS

Company	Provision for dependents	Refunds of employees' contributions—
Bankers Trust Co., New York.	One-half of pension to widow, children, or dependent mother.	With interest at 3 per cent compounded semiannually, on withdrawal or dismissal; at 4 per cent, compounded semiannually, in case of death under 15 years' service.
Farmers & Mechanics Savings Bank of Minneapolis.	One-half of pension to widow or children.	With interest at 4 per cent on withdrawal with consent of bank; otherwise without interest. At 4 per cent in case of death under 15 years' service.
First National Bank of Chicago.	One-half of pension to widow.	
First & Old Detroit National Bank.	One-half of pension to widow and children.	With interest at 3 per cent, compounded semiannually, on withdrawal or dismissal; at 4 per cent in case of death under 15 years' service.
First National Bank of the city of New York.	One-half of pension to widow or children.	Without interest on withdrawal or dismissal. At 4 per cent in case of death under 15 years' service.
Northwestern National Bank.	One-half of pension to widow and children, for not more than 7 years.	Without interest, in case of withdrawal, dismissal, or death under 15 years' service.
Armour & Co.-----	One-half of pension to widow, widower, or children under 18, for 10 years. Payments to widow or widower cease on remarriage; to children, on reaching 18.	Without interest, on resignation or dismissal. On death before retirement—to widow, widower, or children, for 10 years, one-half of regular retirement pension; to named beneficiaries of unmarried employees, employee's contributions to fund, with interest at 4 per cent.
Elgin National Watch Co.	One-half of pension to widow or children under 18, for 5 years.	Without interest, on resignation or dismissal. In case of death before qualifying for pension, board may grant temporary pension to dependents, or return contributions with interest at 4 per cent.
Hibbard, Spencer, Bartlett & Co., Pittsburgh Coal Co. (mine employees).	.....do..... \$75 for funeral expenses...	With interest at 3 per cent, in case of resignation, dismissal, or death.

Date of Establishment of Plans

THIS is a somewhat misleading item, for employers have often found it necessary to modify a plan, after some years of operation, to such an extent that it becomes almost a new scheme. In the table only the earliest date reported is given. Most of the plans take into account the probable need for future changes, and include a provision authorizing the alteration, abrogation, or suspension of all or any part of the plan, at the will of the company.

Inclusiveness of Plans

IT WILL be noticed that the plans commonly apply to all employees of the company, but there are various limitations upon this. Several plans exclude the executive officers of the company, and several others limit the pension to those drawing a salary not over a certain sum, the limit varying from \$1,500 to \$3,600 a year. Four confine the operation of the plan to salaried employees. Ten

restrict it to those entering the service under a certain age, varying from 40 (35 for women) to 50, and a number of others really enforce a similar regulation by providing that employees shall not be taken on over a certain age. Contributory systems sometimes provide that an employee above the prescribed age at entrance may qualify for a pension if he chooses by paying a larger contribution than is usually required, the amount varying with his age. Nearly a dozen plans restrict the pension to members of a relief or beneficial association maintained among the employees of the company, and sometimes it is stipulated that this membership must have lasted for a given period. In these cases, the plan invariably states that the employer will defray all expenses of the pension fund, while the employee's membership dues go to furnish sick, death, and funeral benefits, or to help in social and welfare activities. In the contributory plans it is not unusual to find a stipulation that employees under 21 shall not be required to contribute, but, on the other hand, the years before they commence their contributions are not counted in as part of the period of continuous service which qualifies them for a pension. In general, however, there are few limitations, and the whole body of employees is usually eligible for pensions, subject to the conditions as to service and age.

Methods of Determining Amount of Pensions

THE commonest method of determining the benefit is to fix the pension at a certain percentage of the average salary for a specified period, multiplied by the number of years of service. The period over which the salary is averaged is usually 10 years, and while the usual custom is to take for this purpose the 10 years immediately preceding retirement, in a few instances it is specified that the 10 consecutive years of highest salary shall be used. The percentage fixed in the plans here listed varies from 1 to 2½. Sometimes the initial percentage is increased in proportion to the length of service. Sometimes the salary is divided and different percentages are used for the different parts, while in other cases all of the salary above a given amount, varying from \$4,000 upward, is omitted from the calculation.

Not all the plans provide for this method of determining the pensions. Five companies set a flat rate, the amount varying from \$12 to \$50 a month. Sometimes, when membership in a relief or beneficial society is required, the amount of the pension is related to the length of membership, as well as to the term of service. One plan has a unique provision for varying the amount of the pension. The payment for the first month is determined in much the usual way, after which the following provision applies:

In order to provide a means of readjusting pensions in accordance with the value of the dollar, as expressed in terms of living expenses, the average hourly earnings of all employees upon an hourly wage basis shall be figured monthly, and the percentage of increase or decrease over the average hourly earnings of the preceding month shall be used as a basis to increase or decrease all pension allowances to be paid during the ensuing month, except initial payments.

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Minimum, Maximum, and Average Pensions

VERY commonly, in connection with the method of calculating the amount, the plans set a minimum and a maximum for the pension. In the plans here shown the minima range from \$5 to \$50 a month, \$20 and \$25 a month appearing more frequently than any other amounts, while the maxima range from \$25 to \$500 a month. Sometimes the maximum is set as a percentage of the average salary for the last 5 or 10 years, or of the salary at time of retirement. These percentages range from 30 up to 100, the latter being found in only one instance.

There does not seem to be any close relation between these limits and the average amount actually received. When the pension is calculated as a percentage of the average salary over a period of years, multiplied by the number of years of service, it is evident that at even the most liberal rate, which in these plans is 2½ per cent, few workers would have salaries sufficient to bring their pensions up to the higher maxima. The United States Steel and Carnegie Pension Fund, which has published very full reports of the working of its pension plan, affords an illustration of this. The maximum pension allowed under this plan is \$100 a month, but in 1924 the average pension received was \$41.50 a month, and this was the highest average paid since the fund began operation in 1911. Comparatively few companies publish these figures, but a number were kind enough to send data concerning the average pension paid during their latest fiscal year, from which the following table was compiled:

Average pension—	Number of plans
Under \$20 a month.....	3
\$20 and under \$30.....	8
\$30 and under \$40.....	14
\$40 and under \$50.....	19
\$50 and under \$60.....	5
\$60 and under \$75.....	4
\$75 and under \$100.....	2
\$100 and over.....	4

A study of these plans shows that there is much variation in the average pension, even when the same maxima and minima are set. Five of those included had maxima ranging from \$200 a month upward, and the average pensions paid during the latest fiscal year were respectively \$28, \$33, \$36, \$85, and \$110 a month. Six had maxima ranging from \$125 to \$175, inclusive; the average pensions paid under these were in two cases \$40, in one \$47, in one \$37, in one \$55 and in one \$57 a month. Four had maxima of \$100 a month, and paid average pensions of \$34, \$37, \$49, and \$60 a month, and two with a maximum of \$75, paid average pensions of \$40 and \$41.

On the whole, these data showed that the average pension tended to approximate the minimum more closely than the maximum limit, but the approach was seldom close in either direction. Of three companies having a minimum of \$18 a month, one paid an average pension of \$24, one of \$28, and the third of \$36 a month. One company with a minimum of \$50 a month paid an average of \$55, while another with a minimum of \$25 a month paid an average of \$100. In a group of nine companies which had not included in their plans any minimum limit the average paid ranged from \$10 to

\$63 a month, but in only two of these cases was the average pension less than \$35 a month, while in five it was \$40 or over. The cases in which the average pension fell below \$25 a month were very few.

Age and Service Requirements

PRACTICALLY all the plans call for age and service qualifications. The length of service demanded ranges from 10 to 45 years, but both of these limits are exceptional, 20 and 25 years being the periods commonly set. One company allows employees to retire at 65 after five years' service, but in such cases limits the pension to \$100 a year. Five railroads, three public-utility companies, and one miscellaneous business permit retirement after 10 years, while for transportation companies 15 years is not an uncommon limit. Eight financial houses and four miscellaneous businesses also set this figure. Sometimes a plan sets a service period, with an age requirement, but gives also a longer period with the proviso that the worker may retire after having completed such a term of service, regardless of age. Thus one company, whose plan places the normal age of retirement at 65, after 15 years' service, permits retirement at any age after a service of 45 years. More often, a longer period of service is linked with retirement at an early but specified age. Thus, the plan of one company provides that men may retire at 65 after a service of at least 30 years, but at 60 if by that time they have served 40 years.

There is a good deal of elasticity about the age requirements. Generally the plans provide one age at which retirement is expected, the so-called compulsory age, and another at which it is permitted, but neither of these is absolutely fixed. Usually the employers reserve the right to continue the employee in service after the compulsory age is reached, if in their discretion that seems best, and usually retirement at the optional age depends upon the consent or approval of the pension committee, or the directors, or some other official body. In a few plans no age limit is fixed, but the whole matter is left to the discretion of the officials. In a few others, completion of a certain term of service qualifies the employee for a pension, without regard to age. In the majority of plans, however, definite limits are set. Sixty-five and 70 are the ages usually set for compulsory retirement, while the age for optional retirement ranges from 50 upward. Twenty-six plans make no provision for early retirement, setting 70 as the normal age; in 46 plans 65 is the highest age limit set, while 54 permit or require retirement at 60. In some of these cases a special length-of-service requirement is coupled with the permissive age. Sixteen plans set the retirement ages, whether compulsory or optional, for women at 5 and 26 at 10 or more years earlier than for men. One plan puts it at 15 years earlier. Only three of these, however, make a similar reduction in the required period of service, so that women must enter the employ of these companies at from 5 to 10 years earlier in life than men in order to qualify for pensions.

The wording of the plans frequently suggests that the employees are not anxious to retire earlier than they must, an attitude which is entirely comprehensible in view of the fact that even the most liberal pensions are considerably smaller than the normal salaries. Three companies furnished data showing the average age at retirement

and the average length of service of those pensioned during the operation of their plans, from which it is apparent that while many employees are not able to continue in service until 70 the majority do not avail themselves of the retirement privilege as early as they might. The plan of the first of these companies set 70 as the normal retirement age for men and 60 for women, but permitted it five years earlier if the employee had served for 25 years. The average age at retirement was practically 68, and the average length of service 35 years. The second plan allowed retirement at 60 for men and 55 for women after 25 years of service, and permitted it for each sex five years earlier if the period of service had reached 30 years. The average age of those pensioned under this plan was 63, and the average length of service 35 years. The third plan set 70 as the retiring age after a service of at least 20 years, but pensioned those who became totally incapacitated after 25 years of service, no matter what their age. In this case the average age at retirement was 66 years 9 months, and the average length of continuous service 33 years 6 months.

Pensions for Disability

A NUMBER of the plans make provision for those who become disabled or incapacitated before fulfilling the age and service requirements for a pension. Usually some definite length of service is required as a qualification for a disability pension, but this is apt to be shorter than that for old-age pensions. The periods set in the different plans range upward to 30 years. Quite often, even when a period is set, the grant of a pension is left to the discretion of the employers, and sometimes neither age nor length of service is mentioned, the administering officials having full power to act as they think the situation requires. It is often specified that a pension will not be granted for incapacity or disability due to the employee's own conduct or carelessness, and it is sometimes provided that a pension will be paid only if the employee's illness or injury is due to the work done for the employer. In some cases it is specifically provided that a pension shall be given, regardless of whether or not the sufferer is drawing compensation under the workmen's compensation law, but more generally compensable cases are not regarded as subjects for disability pensions.

The duration of the disability pension is often left to the discretion of the administering officials, especially when only a short period of service is required as a qualification. The plans differ as to pensions for temporary disability, quite a number requiring that the employee must be "permanently and totally incapacitated." Others pension for temporary and partial incapacity, but usually require that the company's own medical officers shall certify to the genuineness of the disability and to its duration. Such a certificate from the company's doctors is often required also in cases of total and permanent disability. Sometimes an age as well as a service qualification is required, in which case the distinction between the old-age and the disability pension is rather vague. The amount is frequently determined in the same way as for an old-age pension, but in a number of cases this, like the duration of the pension, is left to the discretion of the administering officials.

In a number of cases in which no disability pensions are provided welfare or beneficial associations are maintained among the employees, which care for cases of illness, injury, or disability.

Contributory Pension Systems

CONTRIBUTORY systems do not seem to have found much favor among the companies covered by this study. Only 13 such systems were reported, 7 of which were maintained by banks or financial houses, 5 by miscellaneous business enterprises and 1 by a transportation company. They differ from the noncontributory systems mainly in their requirements as to contributions, and in their provisions for the disposition of the contributions in case of the employee's death or withdrawal from the service.

The contributions are usually a fixed percentage of the salary deducted from it at regular intervals. Of the 13 plans listed, 7 call for 3 per cent, 3 for 2 per cent and 1 for 5 per cent of the salary, while 2 require flat-rate contributions of a specified amount each month. The percentage plans frequently place a limit upon the amount to be contributed. Four plans call for 3 per cent and 1 for 2 per cent of the salary up to \$4,000 a year, omitting all above that amount from the contribution; 1 calls for 3 per cent on all up to \$6,000; 1 alters this arrangement by requiring 2 per cent on the salary up to \$3,000 and 3 per cent on all above that amount; 1 calls for 2 per cent of the salary, not to exceed \$60 a year, and only 3 call for a straight percentage contribution without modification or limitation. The two flat-rate contributions are found in plans which apply mainly to wage earners rather than to salaried workers.

Nine of the plans provide that in case of the death of a pensioner one-half of his pension shall be continued to his widow or minor children, from three companies no report on this point was received, and one pays a flat sum at the time of the pensioner's death to assist in meeting funeral expenses. If the employee leaves the company's service or dies before having qualified for a pension, it is customary to return the amounts he has contributed to the fund, but there is some variation as to the payment of interest. Two plans provide that on withdrawal or dismissal the contributions shall be returned with interest at 3 per cent, compounded semiannually; one provides for simple interest at the rate of 4 per cent if the employee leaves with the employer's consent, but if he leaves without it no interest is paid. One allows interest at 4 per cent and four provide for the return of the contributions without interest. In case of the employee's death, it is in some cases left to the discretion of the officials whether the contributions shall be returned, with or without interest, or whether a pension shall be allowed the dependents for a limited time.

Miscellaneous Provisions

THE above discussion covers the features common to all pension plans, but a number of the systems include other provisions. Since a service qualification is commonly required for a pension, some plans set an age limit for entering the employment such that the worker shall have had at least the minimum period of service required before reaching the retiring age. This is sometimes modified to permit

the engagement of workers over the age limit, provided they renounce any claim to a share in the pension plan.

Whether the pensioner may enter other employment after retirement is a matter taken up in some but by no means in all of the plans. Frequently it is expressly authorized, provided the business entered upon is not prejudicial to the interests of the pensioning company. Sometimes the pensioner is prohibited from entering any business of the same nature as that of his former employers, but may take up any other line of work. Sometimes he is permitted to work for anyone except his former employers, and sometimes he is warned that "engaging in any other business or employment may, in the discretion of the company, be deemed sufficient cause to terminate such pension allowance." Very commonly it is stipulated that the pensioner must secure the consent of the pensioning company before he may undertake any other business or employment.

The suspension or termination of a pension is another matter on which there is considerable diversity. One of the commonest provisions is that the pension may not be assigned, and that any attempt to evade this prohibition will be considered grounds for its annulment. Another provision, almost equally common, is that the pension may be revoked in case of gross misconduct on the part of the recipient, the employer being the judge of what constitutes such misconduct. Bankruptcy of the pensioner, conviction of any felony or misdemeanor, or the entry of any judgment or decree or order of any court of law or equity are also rather commonly given as grounds for suspending or revoking the pension. Sometimes it is provided that the pension shall be forfeited if the pensioner engages in conduct inimical to the interests of the company, and sometimes the whole matter is left to the discretion of the administering body, which is given wide powers. For example, one plan states that pension payments "may be suspended or terminated at any time by the directors, if in their judgment the conduct of the pensioner may seem unworthy of this bounty," and another provides that a pension "may be refused, suspended, or terminated at the discretion of the executive committee for such reasons as it may deem sufficient, and its judgment in that regard shall be conclusive."

Attitude Toward Pension Plans

Employers

THE merits of the pension system from the employer's standpoint are readily perceived. It prevents destitution among those who have grown old in the service, and makes it possible to lay off employees who through age, injury, or decrepitude have become inefficient, without involving them in severe hardship. It tends to secure greater stability, efficiency, and good will in the labor force; it probably diminishes labor troubles, especially strikes, though this effect is rendered less important by the fact that many of the systems are established among the class of employees who do not strike; and it tends to stabilize wage rates.

Against these advantages must be set the cost of maintaining a system, and what is far more serious, the uncertainty of the cost under the common method of establishing pension systems. At first the expense is usually not serious. When a plan is initiated there are

apt to be but few employees who have reached the retiring age, and for some years pensioners may be few, but as new workers each year reach the age limit and are added to the roll, while those already on it are apt to remain there for some time, the cost mounts rapidly. One company, whose plan calls for a service qualification of 25 years, and a pension of 1 per cent of the average earnings of the final 10 years multiplied by the number of years of service, presented figures covering the first 12 years during which the plan was in operation, which show how rapidly the annual payments increased:

	Annual payments		Annual payments
1913.....	\$37,031	1919.....	\$120,780
1914.....	43,030	1920.....	113,273
1915.....	55,267	1921.....	134,923
1916.....	83,897	1922.....	156,323
1917.....	96,425	1923.....	173,428
1918.....	109,911	1924.....	199,100

It will be seen that not only has the annual cost of the system increased more than fivefold, but that it is steadily rising, with the constant load not yet in sight.

The cost, however, is not so serious an objection as the uncertain basis on which many of the plans are established. A pension system involves definite commitments for the future, and if it is adopted without full provision for meeting the coming demands, it is a very unsafe proposition. In many of the plans studied the actuarial basis on which the system should have been established has been ignored. In some cases a considerable reserve fund was set aside at the beginning to meet pension costs; in others, the corporation appropriates year by year what is found to be necessary; in others, an initial reserve fund is supplemented by annual appropriations not to exceed a fixed amount. In general, the reserve funds and annual appropriations appear to have been determined rather arbitrarily, without reference to the age distribution of the employees at the time the plan was established, or any study of the prospective rates of retirement, the rates of withdrawing before becoming pensionable, the death rate both for those in active service and on the pension roll, and other factors which go to determine the future demands on the pension fund. Some of these plans deal with only a small number of employees and the systems will probably never grow beyond the ability of the corporation to handle them; in other cases the failure to provide a sound basis may lead to serious and embarrassing consequences.

The danger of this position is recognized by all who have studied existing pension systems. A committee of employers, appointed in 1920 to investigate the whole matter, in discussing the principles on which pensions might safely be established, laid special emphasis on this point:

No pension system should be started without competent actuarial guidance. The projection into a considerable future of the cost of a pension system is a highly expert task, based upon the scientific collection of the appropriate data, the scientific analysis of those data, and a wide acquaintance with pension formulae and experience. It is not fair dealing, either with the corporation or with its employees not to forecast, in such an accurate manner, the cost of the proposed pension plan.

The employees are entitled to a pension system which has set up an actuarial balance over the years in which any one of them can expect to be affected. If

the employee is required to contribute to the pension system, this is only honest. Even if the pensions are apparently the free gift of the corporation, and the economic possibility of this for a considerable period is doubtful, the employee is entitled to look forward with assurance to the pension promise. A pension promise that is uncertain involves an uncertain morality.—Merchants' Association of New York, Special Committee on Industrial Pensions, Report, p. 6.

Frequently the plans contain some provision designed to protect the employing company against the possibility of costs increasing beyond their expectations. For example, one plan states that—

The board of directors of this company reserve the right to establish a new and lower basis of pension allowance, if at any time it shall be found that the basis adopted will create demands in excess of the sum fixed by the board of directors as the maximum amount to be expended for pension allowances in any one year.

Such provisions protect the companies, but make it impossible for the employees to take the pension into consideration as a reliable factor in their plans for the future.

Workers

Naturally no individual employee who has reached the age of retirement is averse to taking a pension which he feels he has earned, but organized labor as a whole looks with disfavor upon such systems. The objections may be summed up under three heads: First, such plans reduce the mobility of labor, tend to make the worker submit to poor conditions without vigorous resistance, and to tie him to one job, especially as he grows older. The acceptance of a lower wage scale than could be secured by fighting for increases is prominent among the effects to which they object. Second, pension systems may be used to keep the worker from taking part in strikes or other action intended to secure an improvement or prevent a worsening of conditions, and may even be used as a strong lever to force him into strike breaking. Third, even after fulfilling every condition set, the worker has no legal right of any kind to a pension, but receives it purely as a gratuity which may be suspended, reduced, or revoked at the employer's option.

As to the objections grouped under the first head, it will be noted that they are, for the most part, the very purposes frequently cited as grounds for establishing the systems. To lessen labor turnover, to promote loyal and faithful service, and to induce cordial and efficient efforts on the part of the employees to forward the plans of the employer are often given in the outline of pension systems as ends to be obtained by their establishment. Whether or not the noncontributory systems tend to keep down the wage level is perhaps open to argument, but it is a view accepted by many who study the theory of pensions, and the workers themselves hold it strongly.

As to the second point, that pension systems may be used to prevent collective action on the part of labor, the wording of many of the plans confirms the charge. A very common provision is that in order to qualify for the pension a worker must give continuous service, and the definition of "continuous" is such as to bar any one who takes part in a strike. Voluntary withdrawal from the service constitutes a breach of continuity, and if the worker is reinstated he comes in, so far as pensions are concerned, as a new employee, or may forfeit his pensionable status altogether. Some plans put the matter more explicitly. One limits pensions to employees who

"have not been engaged in demonstrations detrimental to the company's best interests." Another states that "employees who leave the service of their own volition or under stress of influences inimical to the company, or who are discharged by the company, thereby lose all benefits of the benefit and pension system," while another states flatly that "employees who leave the service under strike orders forfeit all claims to pension benefit." Under such provisions a man who has worked all his days for one company and is on the verge of retiring with a pension may find himself forced to choose between giving up all hope of the pension he has earned or, as he sees it, being false to his fellows and to his own lifelong principles as a union man.

The possibility of being called upon to act as a strike breaker is not so common, but exists under some of the plans. A number contain clauses giving the company power to revoke pensions at their discretion, or in case "the conduct of the pensioner may seem unworthy of this bounty," or if "the pensioner displays a decided lack of appreciation of the company's liberality in granting the pension." It is evident that a refusal to come back to the service, in the event of a strike, might easily be construed as lack of appreciation or unworthy conduct, or as justifying the company in using its discretion to revoke the pension. A few plans distinctly provide that a pensioner must come back whenever called.

On request of the company at any time, pensioned employees will be expected to give it the benefit of their knowledge and experience and to act as advisers whenever called upon.

The employing company reserves the right to recall pensioners to the service of the company, in which event pensions cease for the time being, and wages are paid in accordance with the standard wage rates for the occupation for which the pensioner has been recalled. This right of the company terminates when the pensioner shall have reached the age of 70 years.

The acceptance of a pension allowance does not debar a retired employee from engaging in other business, provided it is not prejudicial to the interest of this company, but such person shall hold himself in readiness, and be subject to any reasonable call of the company.

Such clauses are by no means universal, however, and at least one company distinctly provides against a retired employee being forced into service against his will, by stipulating that while the company has the right to continue pensioners in service if it wishes, no pensioner "shall be compelled to accept such employment, and if he refuse, it shall in no wise affect his rights to a pension."

Naturally enough, the plans which provide for recalling pensioned employees to the service are found mainly in industries in which labor troubles have played a considerable part, and in which the existence of a body of potential strike breakers may be of value to the employers. Organized labor cites cases in which employers have exercised this right, and superannuated workers have found themselves obliged to accept service against their comrades or to forfeit in old age the pensions for which they have qualified by long and faithful service.

The third objection, the worker's lack of any contractual right to a pension, is considered by many to be an almost fatal objection to the system. The worker has no rights whatever in the matter, even when he has fulfilled every condition laid down in the plan. The

plans are frequently explicit on this point. The following provision is only a trifle more outspoken than those of numerous other plans:

This pension system is established voluntarily by the company and may be amended, suspended, or annulled, and any pension granted under the same may be revoked at any time at the pleasure of the company, it being expressly understood that * * * every pension allowance hereunder will be granted only at the discretion of the company and continued only at its pleasure.

Even in the case of contributory pension systems, the employee has no right to anything beyond the return of his contribution. This question came before the courts in connection with the sale of one of the large packing businesses, in which a contributory pension system had been established and carried on for some 10 or 12 years. On the sale of the business the purchaser returned from the fund the contributions of such of the employees as had not yet reached pensionable age, and used the remainder to pay the pensions already earned for as long as the fund should hold out. The pensioners sought to have the return of the contributions halted, on the ground that they had fulfilled all the conditions for securing pensions, that they had a right to the pensions, and that the pension fund should not be used for any other purpose than paying pensions. The decision of the court was that the employees had acquired no rights beyond the return of their contributions, that many of the pensioned employees had already received more than they had put into the fund and therefore had no claim to anything, and that the company in establishing and maintaining the pension system had not in any way bound itself to continue in business or to perpetuate the fund.

Substitutes for Pension Systems

THE disadvantages of the pension system are so great, in the opinion of many, that efforts have been made to find a substitute which shall avoid its drawbacks and yet retain the advantage of aiding the employee to avoid destitution in old age. The plan which seems to have won most favor is the purchase of an annuity for each employee, payments being made for each individually each year, and each account being kept separate from all others. The annuity is to be purchased through some well-established insurance company, and its cash surrender value naturally increases with each year for which payments are made. The employer may bear the whole cost, or the employee may be required to contribute. The plan may be optional or obligatory for the individual employee, he may have a right to the cash surrender value of the policy at any time, or may be unable to realize anything from it until he reaches the age at which the annuity is to begin, or other variations may be introduced.

The outstanding advantages of the plan are that it puts the whole matter on a business basis, instead of making it a matter of the employer's liberality; that it is fair to the employees as among themselves, since each receives his own amount, and one who leaves the employment before retirement gets back what he has earned by his period of service instead of having contributed for the benefit of those who remain; that it gives the worker a contractual instead of only a moral right, so that he may plan his future with more assurance; that it can not be used, as the pension system may, for dis-

disciplinary purposes; and that since the annuity is written by a strong insurance company, even the employer's failure or withdrawal from business does not affect the worker's surety. From the employer's standpoint, it secures the great advantage of a pension system in that it enables him to retire employees who are becoming less efficient, without undue hardship to them, while at the same time it enables him to calculate his costs accurately and it involves him in no future obligations. The payments of each year are a completed transaction, and if at any time he should find it necessary to give up the system, each worker would still receive the full benefit of all payments made on his account up to that time. In other words, there is no pension fund which must be maintained unless old employees are to be disappointed in their legitimate expectations, and which may come to grief if the employer fails, dies, or retires. Moreover, it meets the complaint that the pension is really deferred pay, which the man who withdraws before reaching retiring age never gets, since every worker under such a plan gets his own deferred pay, his return being greater or less as his period of service varies.

Several companies have already adopted this general plan, their systems varying in several points. As an example, one of these may be given in some detail. The plan first provides that any employee may notify the company of his intention to apply to a designated insurance company for an "independence monthly income bond," and may authorize the company to allot from his salary any sum, not less than \$5 a month, toward the purchase of this bond. The company will thereafter duplicate the amount of the employee's allotment, up to 5, 7½, or 10 per cent of his salary, depending upon his length of service. The plan then continues:

The amount allotted from the salary, together with the company's addition thereto, will be handed you monthly on the 15th, in the form of a check to the order of the insurance company. At the end of each quarter you will forward the checks thus received to the insurance company, in payment of the quarterly installment then due on your bond.

At your option, any amount up to one-half of the checks issued to you may be applied to the purchase from the insurance company of any form of endowment insurance, the dividends on which shall be allowed to accumulate as long as this company's contributions continue.

The insurance company will issue to you upon application and without medical examination (unless disability feature is desired) an independence monthly income bond, embracing the following features:

(a) Monthly income payable to you, commencing at age 65 (or other age, if you prefer), and continuing for life.

(b) In the event of your death before the monthly income commences, your beneficiary will receive in one payment an amount equal to the combined payments made by you and this company, after deducting the cost of the disability feature.

(c) In the event of your death after the monthly income has commenced, but before 120 monthly payments have been made, your beneficiary will receive the balance of 120 payments. Monthly income is thus payable for 10 years in any event, and as much longer as you may live.

(d) In the event of permanent total disability (if medical examination has been submitted to with satisfactory results) all further payments by you will cease, and your monthly income will commence at once, and continue as long as you live.

(e) After the contract has been in force one year, it will have cash surrender or loan values comparable with those shown in the accompanying table.

(f) Upon reaching the age of 65 (or other selected age) you will have the option of receiving a lump sum instead of the monthly income.

(g) All dividends on the contract shall be allowed to accumulate as long as this company's contributions continue.

The bond above described will be issued to you directly by the insurance company. It becomes your property and all amounts contributed thereto by this company are irrecoverable.

In the event of the termination of your employment by this company, the bond may be continued by you at its full amount, or it may be reduced in amount to offset the loss of this company's further contributions, or it may be canceled, and its cash surrender value withdrawn by you, or it may be converted into a paid-up annuity.

At your option, the amount of the bond may be increased or reduced at any time; or the age at which the monthly income payments to you will commence may be altered if you wish.

Against such a system as this it is sometimes urged that as the years go on the increasing cash surrender value of the policy becomes an inducement to the employee to leave his employer's service in order to secure the lump sum at once. A second company which has recently adopted the general principle underlying this plan varies its operation in such a way as to eliminate this possibility. For each employee who has been in its service for five years or more, the company purchases annually a bond providing an annuity of \$1 a month commencing at the normal retirement age, which is set at 65 for men and 60 for women. These bonds remain the property of the company until the employee either retires or completes 30 years of service, when they are delivered to him. If he continues in the service after 30 years, the company continues to buy an annual bond on his account, which is delivered to him on purchase. The employee can not at any time get a cash surrender value on these bonds, and if he leaves the service before he has either reached the retiring age, or completed the 30-year period, he receives no benefit whatever from the plan. The company maintains, in addition, however, a contributory plan, under which the employee may make monthly deposits to which the company will add an amount increasing with the employee's age, for the purchase of additional retirement bonds. This enables the worker to secure a more liberal income after retirement, at a very low cost to himself. Should he withdraw from the service, or cease depositing before reaching the retirement age, he is entitled to the return of his own contributions, with 4 per cent interest, compounded annually. This modification of the system does not meet the issue of deferred pay—i. e., if the worker leaves before the set period he receives nothing for the time he has served, but it does insure his getting the pension if he remains to the end, regardless of what may befall his employer's business.

It is evident that this use of the annuity principle avoids most of the objections urged against pension systems, and that it is adaptable to varying conditions. In theory such plans are highly approved by many students of the subject, but as yet there is little experience showing how they stand the test of actual working.²

²On July 1, 1925, the New York Stock Exchange and its affiliated companies put into effect a service annuity plan covering all employees under 60 who had completed one year of active service. For each employee the companies purchase annually an annuity, beginning at age 65, varying in amount from \$1 to \$3 a month, according to the salary received. These amounts are doubled for employees who authorize a deduction of not less than 3 per cent from their salaries for the purchase of additional annuities. If an employee leaves the service or wishes to withdraw from the plan he may (1) continue on his own account the full payments to the insurance company; (2) cease payment and receive at 65 such annuity as has already been paid for; (3) withdraw and receive back all his own contributions, without interest. This leaves the matter of deferred pay to the employee's own decision. If he prefers to withdraw his contributions, he receives nothing but what he has himself put in; if he chooses to wait, he receives all that the company has paid for on his account, as well as what he has purchased himself.

Brazil's Department of Labor

[By JAMES A. ROWAN, OF RIO DE JANEIRO

THE Labor Department of Brazil is a division of the Ministry of Agriculture, Industry, and Commerce, and is incorporated into a body called the National Council of Labor. The work that this council may accomplish and the service it may render to the Brazilian Republic are largely matters of conjecture as yet, although the council unquestionably will become an influential part of Brazil's progress when the country becomes industrialized. At present the Brazilian Labor Department, which is the National Council of Labor in its embryonic stage, consists of a small staff which is gathering statistics and general information on the relations between the employers and the employees. Heretofore, working conditions in Brazil have been looked after by the Department of Public Health, a powerful institution with a prestige gained from its victories over various tropical diseases. It is intended that the National Council of Labor shall eventually take over some of the duties of the Health Department in matters pertaining to working conditions in industry.

An obstacle in the path of the newly created Council of Labor is found in the disinclination of labor organizations to give any information to the council. Not long ago the council, which is supposed to be representative of labor as well as of capital, requested certain information from all the labor organizations in Rio de Janeiro, and received a reply from only one.

The law of 1923 which created the National Council of Labor gives it the authority over all matters relating to labor organization, social legislation, remuneration of labor, collective agreements, systems of conciliation and arbitration, woman and child labor, apprenticeship and technical instruction, industrial accidents, old-age pension funds (including those of the railroad employees; see MONTHLY LABOR REVIEW for December, 1925, pp. 1-4), popular credit institutions for workers, and agricultural credit funds.

The council is composed of 12 unpaid members chosen by the President of the Republic, 2 of whom are selected from among the workers, 2 from the employers, 2 from high officials of the Ministry of Agriculture, Industry, and Commerce, and 6 persons of "recognized competence" in the matters with which the council is created to deal. There is also a salaried general secretary whose duty it is to participate in the deliberations of the council, superintend the investigations made by the council, and collect documents "relating to different problems of social economy."

The council meets normally twice a month but may also hold special meetings called by the president of the council or on petition of at least two members.

The staff provided for by the law includes only one labor expert, one clerk, two typists, and one porter. In cases of necessity, however, additional clerks may be detailed to the council from the Ministry of Agriculture, Industry, and Commerce.

Provision is made in the law for the establishment of a social museum and a library on social economy.

INDUSTRIAL RELATIONS AND LABOR CONDITIONS

Labor Passages in the President's Message to Congress

IN THE President's message to the Sixty-ninth Congress, on December 8, 1925, the following subjects were discussed: Government economy, budget, taxation, foreign relations, court of international justice, foreign debts, alien property, immigration, national defense, veterans, agriculture, Muscle Shoals, reclamation, shipping, coal, prohibition, waterway development, water power, railroads, outlying possessions, retirement of judges, mothers' aid, Civil Service, Federal Trade Commission, reorganization of Government departments, and the negro.

A summary is given below of those parts of the President's message bearing most directly on matters of interest to labor.

Immigration

THE results of the present immigration act indicate that it is "on the whole beneficial." It undoubtedly protects the wage earners of the United States. Careful investigation should be made, however, to ascertain whether the law "is working a needless hardship upon our own inhabitants." If it is depriving them of the society and comfort "of those bound to them by close family ties," amendments should be made to relieve this situation, such modifications being in accordance with the principle that our Government's first duty is to our own people. We should remember, however, "the obligations of a common humanity." Immigration restrictions are based largely on economic considerations. These measures are resorted to in order that we "may not have a larger annual increment of good people within our borders than we can weave into our economic fabric in such a way as to supply their needs without undue injury to ourselves."

Agriculture

THE Departments of Agriculture and Commerce, the Farm Loan Board, the intermediate credit banks, and the Federal Reserve Board are all collaborating "to be of assistance and relief," to the farmer. Despite decrease in production, the President predicts that "the farm income for the year will be about the same as last year and much above the three preceding years."

The farmers have been displaying "a very commendable skill" in organizing for cooperative marketing; and the farm products so disposed of this year will represent a business of two and one-half billion dollars, or almost 20 per cent of the total agricultural business. In this connection the farmers are receiving assistance from the Federal Government. "The Department of Agriculture should be strengthened in this facility, in order to be able to respond when these marketing associations want help," and a bill drafted for this purpose

will be presented to Congress. Consideration should also be given to legislation for "leasing the unappropriated public domain for grazing purposes and adopting a uniform policy relative to grazing on the public lands and in the national forests."

The establishment of a closer relation between agriculture and the other business activities of the country is recommended.

Coal

INABILITY to manage and control the immense coal resources of the United States "for the benefit of all concerned is very close to a national economic failure." The coal industry has been investigated again and again and repeated recommendations made for its improvement. The industry, however, "seems never to have accepted modern methods of adjusting differences between employers and employees."

Regional consolidations and greater freedom in forming marketing associations under the supervision of the Department of Commerce are suggested for the more effective control of the industry and the improvement of its service to the public.

At the present time the National Government has little or no authority to deal with this vital necessity of the life of the country. It has permitted itself to remain so powerless that its only attitude must be humble supplication. Authority should be lodged with the President and the Departments of Commerce and Labor, giving them power to deal with an emergency. They should be able to appoint temporary boards with authority to call for witnesses and documents, conciliate differences, encourage arbitration, and in case of threatened scarcity exercise control over distribution. Making the facts public under these circumstances through a statement from an authoritative source would be of great public benefit. The report of the last coal commission should be brought forward, reconsidered, and acted upon.

Railroads

THE railroads of the country are fairly prosperous. A system of consolidations, however, would improve both their condition and their service to the public. Recommendation is made for congressional authorization of such consolidations and also for the enactment into law of joint proposals already substantially agreed upon by railroad managements and employees for the regulation and improvement of their industrial relations if such proposals "seem sufficient also to protect the interests of the public."

Both the railroads and their employees are creating boards for the amicable settlement of their labor controversies. "The solution of their problems ought to be an example to all other industries. Those who ask the protections of civilization should be ready to use the methods of civilization."

A strike is injurious to both labor and capital, and a strike in a basic industry is injurious to "the economic welfare and general comfort of the whole people." Such a conflict tends to create bitterness in the community, dividing it into "warring classes" and weakening "the unity and power of our national life."

Labor can make no permanent gains at the cost of the general welfare. All the victories won by organized labor in the past generation have been won through the support of public opinion. The manifest inclination of the managers and employees of the railroads to adopt a policy of action in harmony with these principles marks a new epoch in our industrial life.

Mothers' Aid

ALTHOUGH more than 40 States in this country have passed laws in the aid of motherhood, the District of Columbia has enacted no such measure. A carefully drafted bill will be submitted to the present Congress, which upon adoption should serve as "a model for all parts of the union."

 Thirteenth Annual Report of the Secretary of Labor

THE thirteenth annual report of the Secretary of Labor summarizes the activities of the various administrative units of the United States Department of Labor for the fiscal year ending June 30, 1925. Brief mention is made below of certain important features of the immense amount of work reviewed in this volume of less than 150 pages.

Work Done During Year

DIVISION of Conciliation.—In 1924-25 the Division of Conciliation handled 559 industrial controversies, involving directly and indirectly 334,009 persons. Adjustments were effected in 392 cases. The 64 cases in which no satisfactory settlement could be brought about involved comparatively small numbers of workers. Of the remaining cases, 42 were pending June 30, 1925, and 61 were "unclassified."

Employment Service.—The United States Employment Service, in cooperation with the State and District of Columbia Services, placed in employment 1,609,977 wage earners from July 1, 1924, to June 30, 1925. Efforts are being made to extend the service to include not only unskilled and skilled laborers, clerks, typists, and stenographers, but also other classes of workers.

The development of the farm labor division of the United States Employment Service is indicated by the following paragraph:

From a field activity supplying from 70,000 to 80,000 seasonal farm laborers in 1921, this activity has grown in three years to a service that in the year under review recruited and directed to employment more than 400,000 seasonal laborers to assist in caring for and harvesting farm crops valued at upward of \$2,000,000,000. It also placed in monthly and yearly employment 16,411 farm hands.

The report above is based on the calendar year and not the fiscal year.

Industrial reports are being received from 530 cities, an increase of 54 industrial centers as compared with the preceding year. This information is disseminated through the Industrial Employment Information Bulletin, the monthly organ of the United States Employment Service.

Housing Corporation.—Since beginning its work of liquidation in July, 1919, the United States Housing Corporation has returned to the Federal Treasury over \$60,676,000. In the fiscal year 1924-25 this agency collected \$4,459,654.55, which did not include \$594,459.89 in receipts from the Government hotels.

Bureau of Labor Statistics.—In addition to the MONTHLY LABOR REVIEW, the United States Bureau of Labor Statistics issued during

the fiscal year 1924-25, 26 bulletins, 4 subject indexes, and 1 pamphlet, while 15 other publications had been sent to the Government Printing Office. (For further details see "Work of the United States Bureau of Labor Statistics," MONTHLY LABOR REVIEW, November, 1925, pp. 4-7.) Studies were also in preparation on the following subjects: Wages and labor conditions in coal mining, in the lace and lace-curtain industry, and in other industries, family allowances, phosphorus poisoning in the manufacture of fireworks and rat paste, radium necrosis as an occupational hazard, and the physical and sanitary condition of American almshouses. Plans were under way for the investigation of the productivity of labor in certain industries, and also for the formation of cooperative alliances with the different States for the purpose of making more complete the system of accident reporting.

The bureau has continued to cooperate with the International Association of Industrial Accident Boards and Commissions, the Association of Governmental Labor Officials of the United States and Canada, and the American Engineering Standards Committee.

Bureau of Immigration.—In 1924-25 according to the report of the Commissioner General of Immigration, the real immigration (immigrant aliens) totaled 294,314 persons, a decrease of 412,582 or 58.4 per cent as compared with the preceding 12 months. Of the immigrant aliens admitted, 75.7 per cent were from northern and western Europe, 10.8 per cent from southern and eastern Europe, and 13.5 per cent from other countries, while in the previous year these percentages were, respectively, 55.6, 27.3, and 17.1.

The establishment of a new land border patrol was an important achievement in connection with immigration activities. An appropriation of \$1,000,000 was made for this service. Among the results of this organization were the capture of 331 alien smugglers, the apprehending of 4,641 aliens who were attempting to evade the immigration laws, and the seizing of vehicles and goods the value of which was estimated at nearly \$500,000.

Bureau of Naturalization.—In 1924-25, 277,218 declarations of intention and 162,258 petitions for naturalization were filed, and \$710,373 was collected in naturalization fees. This was \$134,669.53 below the sum collected in the previous year. During the 19 years of Federal supervision, \$9,058,217.87 has been received in such fees, which sum exceeds by \$218,063.48 all operating expenses charged to the different appropriations and allotments for the bureau's administration of the naturalization laws.

Children's Bureau.—Forty-three States and the Territory of Hawaii are cooperating with the Children's Bureau under the maternity and infancy act, Louisiana, Rhode Island, Vermont, and Hawaii having accepted the provisions of this law during the year under review.

During the same period this bureau continued its studies regarding community control of rickets and posture training. A survey of provisions for crippled children in 8 States was undertaken, a bulletin on play and recreation for blind children was prepared, a miniature model playground was constructed, reports were collected from States and cities on the issue of work permits, and inquiries were made into vocational opportunities for minors, into child labor in New Jersey,

child labor in canneries, rural child labor, and industrial accidents to minors.

A plan was further developed for the uniform reporting of juvenile court statistics and material on domestic-relations courts was assembled.

In 1924-25 this bureau issued 30 new and revised publications on various subjects falling under the following headings: Child hygiene, child labor, child care, child delinquency and dependency, and maternity and infant hygiene. Various other reports were in course of preparation.

The Children's Bureau cooperated in the Fourth Pan-American Child Congress in Santiago, Chile, and in the First Congress of Social Economy at Buenos Aires, Argentina, both held in October, 1924. The chief of the bureau was called into consultation with the advisory committee on the traffic in women and children which met in May, 1925, at Geneva, and was also requested to make suggestions for the future activities of the child welfare committee.

Women's Bureau.—The Women's Bureau is credited with 11 publications in 1924-25 (9 bulletins, its annual report, and a preliminary report on women in Illinois industries). A bulletin on women in the fruit growing and canning industries of the State of Washington and a bulletin on women in Oklahoma industries were in press before July 1, 1925, while the following 5 bulletins were almost ready to be sent to the Government Printing Office at the close of the fiscal year: Women workers and family support; Effects of applied research upon the employment opportunities of American women; Women in Illinois industries; Absenteeism of women in textile mills; Legislation for women in Oregon. Studies were also under way on the status of women in Government service, night work for women, women in Delaware, Mississippi, and Tennessee industries, trend of employment, minimum wage legislation, and the effects of special legislation upon women. The Women's Bureau has also decided to make investigation in the next fiscal year into the home and community facilities and family obligations of employed women, the elimination of unnecessary fatigue, and industrial poisons.

Library.—The catalogued accessions of the library of the Department of Labor in 1924-25 numbered 6,999, making a total catalogued collection of 105,000 books and pamphlets.

Recommendations of the Secretary

AMONG the principal recommendations made by the Secretary in his 1925 report were the following:

That the age limit for the retirement of Federal employees be changed from 70 to 60 after 30 years of service and that the maximum retirement rate be raised from \$60 to \$100 per month.

That some means be devised to counteract the disadvantages to wage earners resulting from the tendency toward overdevelopment in certain industries. American workers should have some guaranty of approximately 300 days' employment per annum if they desire it.

That a division of labor safety be created in the United States Bureau of Labor Statistics (a reemphasis of a recommendation of the preceding year).

That, in order to minimize unemployment, there should be clearing facilities in connection with part-time and seasonal labor.

That a study should be made of jurisdictional disputes, and the elimination of waste resulting therefrom.

That an investigation be made of apprenticeship systems.

That the laws relating to aliens be codified and include provisions for examinations of intending immigrants abroad and a more selective basis for immigration, for a slight revision of quota classes for the sake of humanity, for preference within quotas, for control and more thorough examination of alien seamen, for greater uniformity in deportation measures, for the better control of smuggling, for facilitating naturalization procedure, for the establishment of special naturalization courts, etc.

That model child labor legislation be enacted for the District of Columbia.

That activities be continued for the reduction of infant and maternal mortality, the prevention of so-called "delinquency," the proper care of juvenile lawbreakers, and the prevention and cure of certain children's ailments.

That field investigations be conducted into the various aspects of women's employment and home life and that documentary research be expanded with "ultimate aims toward ideal working and wage conditions for women, the mothers of future Americans."

The Workers' Share in Job Analysis

"JOB study impartially conducted should accomplish substantially the same benefits for workers and management," according to consulting industrial engineer Geoffrey C. Brown in his article published in the November, 1925, issue of the *American Federationist* (pp. 1029-1038). Job analysis, he holds, (1) discloses wasteful methods of work; (2) establishes and standardizes conditions favorable to greater efficiency in production; (3) determines fair output standards for different operations; (4) creates a basis for forecasting operating costs; (5) reveals the extent to which particular jobs are fatiguing, monotonous, or hazardous to the workers; (6) fixes a precise relation between pay and performance; (7) establishes intelligent standards of quality in production and workmanship; and (8) provides data for job specifications and for the preparation of standard practice instructions. In brief, the right kind of job study makes for "equity, safety, interest, and economy in the performance of work."

There is a growing conviction, however, especially among progressive managers and engineers, that the effectiveness of job analysis has been diminished because of the undemocratic manner in which it has been conducted. Management has heretofore had the exclusive control of such study, and the worker, particularly the skilled worker, has had neither need nor opportunity to use his wits. The job, therefore, in a way is no longer his job. He can not take any whole-hearted interest in it nor perform it with maximum efficiency.

An increasing number of farsighted industrialists are realizing that job study must take cognizance of the worker's individuality, that his "subjectivity to his job" must be enhanced in every possible way.

This can be accomplished only by allowing the workers to participate jointly with management in job analysis and in the control and application of the facts established by such analysis.

As a preliminary to this participation, a joint job-study committee should be created, genuinely representative of every one in the shop affected by the job analysis. This committee should have at least one technical member to represent a central planning office which has previously worked out technical details for presentation to the joint committee and which should render it technical aid when necessary. Committees of this character have already been created in various industrial plants.

The duties of such organizations are to receive and consider suggestions for (a) improving the coordination of raw material, supplies, machines, tools, fixtures, mechanical and human energy; (b) proper illumination, adequate safeguarding of mechanical equipment, and ventilators; and (c) the amelioration of fatigue and monotony in the performance of work.

In connection with item (c) a proposal has frequently been made that workers on an uninteresting and tedious job might become proficient in another occupation and be shifted to it for half of the day.

Mr. Brown regards time study as an "indispensable adjunct" of job analysis. In his 15 years of experience he has found time study one of his most valuable single aids in the rehabilitation of a considerable number of establishments and recalls no case in which his use of such studies was not advantageous to labor. Time study may avert bankruptcy. Unions should insist in their collective bargaining that fair output standards be established through time studies when they are necessary and practicable. Time study is "a precision instrument for use in the scientific investigation of work." If time study be abused by unscrupulous management, the remedy lies, Mr. Brown believes, in "the legitimate use of more time study at labor's insistence, to expose fraud and establish truth."

Attention is called to the fact that time study in its incipiency suffered from too close a connection with the calculation of "wage incentive rates." It must be remembered that such study is valuable for various other purposes.

When time study serves and supplements the discussions of a joint job-analysis committee upon which the workers are adequately represented and the results of time study are subject to approval or rejection by that committee, the possibility of discrimination or injustice through such study would seem to be eliminated. As an additional precaution, however, the minutes of the joint committee's meetings should be available for inspection by a representative from union headquarters, who in consultation with the committee could aid in adjusting problematical matters upon which the committee has not been able to come to a decision.

Mr. Brown thinks that the importance of facilities for transmitting suggestions from workers to the joint job-study committee is obvious. Distinctive and systematic appreciation should also be shown for meritorious suggestions. To meet the human craving for honor, successful suggestions should be posted in a conspicuous place at the shop, together with the names of the originators. This kind of recognition, however, should never be substituted for deserved promotion or wage increases.

The following paragraph with which Mr. Brown concludes his article indicates that the successful industrial engineer should also be a psychologist:

Progressive industry is searching for avenues along which workers will find opportunity for the development of genuine interest and self-expression in work. Extreme specialization which discourages human initiative by denying workers a share in the creative and interesting aspects of production, can never attain a high degree of productive efficiency, and should be regarded with apprehension. Anything that tends to curtail the mental growth and impoverish the character of workers can find no permanent abiding place in our industries of to-day and of the future.

Law Creating Trade Councils in France ¹

A FRENCH law dated July 26, 1925, has for its purpose the establishment of trade councils (*chambres de métiers*) for artisans, both master workmen and journeymen, in the different Departments of France. Master workmen (*maîtres-artisans*) are workers of either sex who work at a manual trade either by themselves or with some member of their family or with journeymen or apprentices but do not work for an employer.

The purpose of the law is to provide through the medium of the trade councils a means of expression for this class of citizens analogous to that of other classes. Merchants and manufacturers can secure through the chambers of commerce, a hearing before the Government or Parliament, for the purpose either of registering complaints or giving technical advice, while agriculturalists have a similar opportunity through the chambers of agriculture. The skilled workers, however, have, up to this time, had no means of representing their interests as a class and it is to remedy this situation that the present law was enacted.

The law provides that the trade councils shall be constituted in accordance with decrees which may be issued upon the proposal of the Ministers of Labor, Commerce, and Public Instruction, these decrees to be issued after consultation with the interested organizations of the district. There may be one or several trade councils in a Department and each council may be divided into as many sections as seems necessary. The number of members of a trade council may not be less than 18 nor more than 36, except in Paris where there may be as many as 72 members. The councils are composed of two-thirds master workmen and one-third journeymen; to be eligible for membership a person must be at least 30 years of age and have been actively engaged in his trade for at least 5 years, and if he is retired, for at least 15 years. The departmental inspector of technical education, one labor inspector appointed by the Minister of Labor, and one representative of the departmental committee of technical education have the right to membership in the councils, but in a consultative capacity only, and associate members may be appointed from the list of those eligible for active membership, who may take part in the meetings of the council but without a vote.

¹ Bulletin du Ministère du Travail et de l'Hygiène. Paris, July-Sept., 1925, pp. 299, 300, 113*-117*.

The duties of the councils are to protect the occupational and economic interests of the trades. With this in view the advice of the trades councils should be sought upon all questions having to do with the improvement or development of a trade and upon all general questions interesting the artisan class. Councils may also give advice upon such questions upon their own initiative. The councils are also to participate in the organization of apprenticeship in the different trades under conditions to be fixed by a special law. The departmental committees of technical education, provided for by the law of July 25, 1919, must each include four artisans appointed by the trades council concerned and there must be two such representatives on the local committees established in accordance with the terms of the same law.

Labor Conditions in Porto Rico, 1923-24

THE Governor of Porto Rico in his twenty-fourth annual report calls attention to the improvement in labor conditions in the island during the year, due to decided wage increases, reduction in unemployment, and improvement in living conditions. He notes a more sympathetic attitude on the part of employers toward their employees as a contributing factor, as also the extension of Government activities in welfare work, educational fields, in the prevention and treatment of diseases, and in the adoption of numerous sanitary measures.

Unemployment.—Due to the great building activity, which this year has increased 100 per cent over any previous year, as well as to the activity of the insular government and municipalities in public works, there is relatively less unemployment now than ever before. Practically every business and commercial activity has increased the number of its employees. Nevertheless unemployment still exists. The island is densely populated and has comparatively few industrial enterprises, 90 per cent of the people depending upon agriculture for their support. Under these conditions the problem of finding work for all is most difficult. The establishment of new industries and either seasonal or permanent emigration are suggested as possible remedies for the situation. A public employment office was created by law during the year and has now begun operations, though in a small way.

Wages.—Workmen in the coffee industry usually receive, in addition to a house, a piece of land, and free bananas, 50 cents a day during the dull season and \$1 during the harvest season. In the tobacco fields the men receive \$1 a day, the women 75 cents, and the boys 50 cents a day. In the tobacco factories cigar makers are paid between \$2 and \$6 a day.

Labor laws.—A detailed list of the labor laws enacted since the establishment of civil government on the island is given in the report, among which are included legislation establishing minimum wages for women and for laborers on public works, regulating the work of women and children and protecting them against dangerous occupations, regulating the employment of minors and providing for the compulsory attendance of children at schools, providing for the

settlement of strikes and lockouts, and laws on labor contracts and workmen's compensation. The law, mentioned above, fixing a minimum wage for all workers employed on works for the insular government and municipalities, has affected considerably the general wage scale for common labor.

Strikes.—The report states that there were no serious strikes during the year. Although there were threatened strikes and instances in which the workers quit work, the differences were adjusted, generally in favor of the employees. The work of the mediation and conciliation commission was very effective in these settlements.

Workmen's Relief Commission.—The Workmen's Relief Commission which administered the workmen's compensation act, has settled 14,718 of the 19,630 claims filed. During the year under review \$412,530 was paid out on account of these claims. Of this amount \$267,135 was for indemnities, \$23,843 for medicine, \$79,499 for medical attendance, and \$42,053 for hospital service. There were 15,568 employers insured at the close of the year.

Mining Conditions in South Africa

THE report of the Union of South Africa Department of Mines and industries for the year ending December 31, 1924, shows that the number of workers employed in the mines, alluvial diggings, and quarries had risen from 291,298 in 1923 to 305,946 in 1924. The greater part of this increase was among the natives and other colored workers, the increase in the number of whites being only 1,276. Proportionately, diamond digging shows the most rapid growth in numbers, and the increase here is largely among those engaged in alluvial digging and prospecting. The alluvial diamond fields are free to all who can stake out a claim, and therefore present an attractive opportunity to the man thrown out of work by industrial fluctuations, as well as to the restless and adventurous element. The movement toward these fields has had several economic and social results of interest. It has threatened the control of the diamond market exercised by the large producers through the so-called interproducers' agreement, and on this ground the Government has been urged to exercise some form of control and limitation in regard to throwing open fresh areas. In support of this step it is maintained that the good of the community requires a curb upon the rush to the diamond fields.

It is argued also that the effect on the people is to demoralize them, that the gambling spirit now prevails in whole sections of the community, that the children are brought up amidst most undesirable surroundings and without control, and that the social and health conditions on the diggings are at the lowest ebb.

It is pointed out that this view of the situation is extreme and leaves out of consideration some redeeming features.

The older diggers, and many who are accustomed to go to the diggings for short spells, will tell you that the life is free, it is a life of hard work and of hope, but the diggings have taken thousands of men during the past three years who would otherwise have lost their self-respect on relief works, that these men have in many cases made good, have maintained themselves, and have retained their self-respect.

It is admitted, however, that there is much need for improvement of conditions in the diamond fields, especially in the matters of sanitation and provision for educational opportunities. The children of the diggers present a problem much like that which some of our own western States are facing in connection with the children of the "auto hoboes." The report admits the difficulty of providing the ordinary amenities of life in a constantly shifting population, but holds that "there can be no difference of opinion as to the absolute necessity of adequate accommodation for the education of the children and the housing of sufficient teachers."

In view of the increasing number of children in the diggings, this is a matter of first importance which should be tackled in a liberal spirit without delay. The solution of this difficulty appears to be the establishment of more portable schools and the appointment of many more teachers suitably provided with portable houses.

In other words, meet the problem of a migratory population by providing migratory teachers, who, with their portable schools and their portable houses, shall follow wherever their roving flocks may go.

The department tries to control sanitary conditions by the cooperation of sanitary inspectors and diggers' committees, and attention is called to the fact that in general the health of these communities has been good and outbreaks of serious disease have been rare.

Accidents

THE report gives the following figures for fatalities and injuries in mines, alluvial diamond diggings, quarries, and works, for 1923 and 1924, no injury being included unless in the opinion of a medical practitioner it may result in disablement for at least 14 days.

Whites:	1923	1924
Killed.....	62	45
Injured.....	385	374
Total.....	447	419
Colored:		
Killed.....	645	682
Injured.....	3,518	3,993
Total.....	4,163	4,675
Total killed.....	707	727
Total injured.....	3,903	4,367

It will be seen that among the white workers there was a reduction in 1924 in deaths and injuries, but that among the colored workers there was an increase in both respects. No explanation is offered for this fact. The same difference appears in the death rate per 1,000 workers employed, which in 1923 was 1.80 for the whites and 2.48 for the colored workers, while in 1924 the corresponding figures were 1.48 and 2.56. A much larger proportion of the colored than of the white workers are employed underground, which is the region of greatest danger, so that the greater hazard of the colored workers is easily understood, but this does not account for the difference in the trend of the rates.

The above figures cover quarries and the alluvial diamond diggings as well as mines. For the mines alone, the following figures show the distribution of fatalities among the different causes:

	1923	1924
Fall of ground.....	301	274
Trucks and tramways.....	79	75
Fall of material.....	42	55
Explosives.....	62	106
Machinery.....	22	21
Falling in shafts, excavations, etc.....	19	18
Traveling by cage, skip, etc.....	17	14
Struck by cage, skip, etc.....	16	22
Other causes.....	79	82
Total.....	637	667

It will be observed that of the definitely named causes only two—fall of materials, and explosives—show an increase in the number of fatalities due to them, and that both of these are causes which should be largely controllable. A discussion of the cause of accidents due to explosives in the Witwatersrand gold mines indicates that careless supervision may be accountable for much of the increase.

Drilling into misfires, the scraping out of explosives from misfires by natives, and explosions while charging up account mainly for the larger number of accidents. The general inference to be drawn seems to be that there is frequently inadequate supervision over natives and greater hurry over work than is necessary for reasonable safety. Where natives drill into misfires or scrape out explosives, this should have been prevented by the miner in charge. His not having done so is either a culpable dereliction of duty or is the result of his having too many duties to perform. The latter is difficult to substantiate, but, on the other hand, it seems unlikely that miners have grown more careless than they were some years ago. The conclusion is therefore almost unavoidable that miners sometimes have too much to do to enable them to supervise the work of their natives adequately and with a due regard to safety.

PRICES AND COST OF LIVING

Retail Prices of Food in the United States

THE following tables are compiled from monthly reports of actual selling prices¹ received by the Bureau of Labor Statistics from retail dealers.

Table 1 shows for the United States retail prices of food, November 15, 1924, and October 15 and November 15, 1925, as well as the percentage changes in the year and in the month. For example, the price per pound of bacon was 40.1 cents in November, 1924; 49.6 cents in October, 1925, and 49.2 cents in November, 1925. These figures show an increase of 23 per cent in the year and a decrease of 1 per cent in the month.

The cost of the various articles of food combined shows an increase of 11.4 per cent on November 15, 1925, as compared with November 15, 1924, and an increase of 3.4 per cent on November 15, 1925, as compared with October 15, 1925.

TABLE 1.—AVERAGE RETAIL PRICE OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE NOVEMBER 15, 1925, COMPARED WITH OCTOBER 15, 1925, AND NOVEMBER 15, 1924

[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, 1925, compared with—	
		Nov. 15, 1924	Oct. 15, 1925	Nov. 15, 1925	Nov. 15, 1924	Oct. 15, 1925
		<i>Cents</i>	<i>Cents</i>	<i>Cents</i>		
Sirloin steak.....	Pound.....	38.7	41.2	40.3	+4	-2
Round steak.....	do.....	32.9	35.4	34.4	+5	-3
Rib roast.....	do.....	28.2	30.0	29.5	+5	-2
Chuck roast.....	do.....	20.4	22.0	21.6	+6	-2
Plate beef.....	do.....	13.2	14.1	14.1	+7	0
Pork chops.....	do.....	31.6	39.1	37.5	+19	-4
Bacon.....	do.....	40.1	49.6	49.2	+23	-1
Ham.....	do.....	47.0	54.3	53.5	+14	-1
Lamb, leg of.....	do.....	35.4	38.4	38.4	+8	0
Hens.....	do.....	34.5	36.5	35.8	+4	-2
Salmon, canned, red.....	do.....	31.7	35.5	36.4	+15	+3
Milk, fresh.....	Quart.....	13.8	14.3	14.3	+4	0
Milk, evaporated.....	15-16 oz. can.....	11.0	11.5	11.6	+5	+1
Butter.....	Pound.....	48.9	59.4	59.7	+22	+1
Oleomargarine (all butter substitutes).....	do.....	30.2	30.9	31.2	+3	+1
Cheese.....	do.....	34.7	37.2	37.4	+8	+1
Lard.....	do.....	22.4	24.1	23.3	+4	-3
Vegetable lard substitute.....	do.....	25.5	25.9	25.8	+1	-0.4
Eggs, strictly fresh.....	Dozen.....	68.1	60.3	69.4	+2	+15
Eggs, storage.....	do.....	47.3	46.0	47.4	+0.2	+3

¹ In addition to monthly retail prices of food and coal, the bureau publishes in the MONTHLY LABOR REVIEW the prices of gas and electricity from each of 51 cities for the dates for which these data are secured.

TABLE 1.—AVERAGE RETAIL PRICE OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE NOVEMBER 15, 1925, COMPARED WITH OCTOBER 15, 1925, AND NOVEMBER 15, 1924—Continued

Article	Unit	Average retail price on—			Per cent of increase (+) or decrease (-) Nov. 15, 1925, compared with—	
		Nov. 15, 1924	Oct. 15, 1925	Nov. 15, 1925	Nov. 15, 1924	Oct. 15, 1925
		<i>Cents</i>	<i>Cents</i>	<i>Cents</i>		
Bread.....	Pound.....	8.9	9.4	9.4	+6	0
Flour.....	do.....	5.4	5.9	6.0	+11	+2
Corn meal.....	do.....	5.1	5.3	5.3	+4	0
Rolled oats.....	do.....	9.1	9.2	9.2	+1	0
Corn flakes.....	8-oz. pkg.....	10.7	11.0	11.0	+3	0
Wheat cereal.....	28-oz. pkg.....	24.4	25.1	25.2	+3	+0.4
Macaroni.....	Pound.....	19.6	20.5	20.5	+5	0
Rice.....	do.....	10.5	11.3	11.4	+9	+1
Beans, navy.....	do.....	10.1	10.0	9.9	-2	-1
Potatoes.....	do.....	2.2	3.7	5.2	+136	+41
Onions.....	do.....	5.1	5.8	5.7	+12	-2
Cabbage.....	do.....	3.7	4.2	4.2	+14	0
Beans, baked.....	No. 2 can.....	12.6	12.3	12.3	-2	0
Corn, canned.....	do.....	16.6	17.4	17.1	+3	-2
Peas, canned.....	do.....	18.3	18.2	18.1	-1	-1
Tomatoes, canned.....	do.....	13.6	13.1	12.9	-5	-2
Sugar, granulated.....	Pound.....	8.8	6.8	6.6	-25	-3
Tea.....	do.....	73.5	75.8	75.7	+3	-0.1
Coffee.....	do.....	49.0	51.1	51.2	+4	+0.2
Prunes.....	do.....	17.2	17.2	17.2	0	0
Raisins.....	do.....	14.8	14.3	14.2	-4	-1
Bananas.....	Dozen.....	37.3	35.1	34.7	-7	-1
Oranges.....	do.....	48.9	64.6	65.5	+34	+1
All articles combined.....	.....	.....	.....	.....	+11.4	+3.4

Table 2 shows for the United States average retail prices of specified food articles on November 15, 1913, and on November 15 of each year from 1919 to 1925, together with percentage changes in November of each of these specified years, compared with November 1913. For example, the price per pound of potatoes was 1.8 cents in November, 1913; 3.9 cents in November, 1919; 3.3 cents in November, 1920; 3.2 cents in November, 1921; 2.1 cents in November, 1922; 2.6 cents in November, 1923; 2.2 cents in November, 1924; and 5.2 cents in November, 1925.

As compared with the average price in November, 1913, these figures show the following percentage increases: 117 per cent in November, 1919; 83 per cent in November, 1920; 78 per cent in November, 1921; 17 per cent in November, 1922; 44 per cent in November, 1923; 22 per cent in November, 1924; and 189 per cent in November, 1925.

The cost of the various articles of food combined showed an increase of 59.3 per cent in November, 1925, as compared with November, 1913.

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

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

Article	Unit	Average retail price on Nov. 15—								Per cent of increase Nov. 15 of each specified year compared with Nov. 15, 1913							
		1913	1919	1920	1921	1922	1923	1924	1925	1919	1920	1921	1922	1923	1924	1925	
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.								
Sirloin steak.....	Pound	25.4	39.3	43.5	35.7	37.3	38.9	38.7	40.3	55	71	41	47	53	52	59	
Round steak.....	do	22.8	36.2	39.6	31.0	32.0	33.1	32.9	34.4	59	74	36	40	45	44	51	
Rib roast.....	do	19.8	30.2	32.6	26.8	27.5	28.3	28.2	29.5	53	65	35	39	43	42	49	
Chuck roast.....	do	16.3	24.2	25.3	19.2	19.6	20.4	20.4	21.6	48	55	18	20	25	25	33	
Plate beef.....	do	12.4	17.3	17.7	12.8	12.7	13.0	13.2	14.1	40	43	3	2	5	6	14	
Pork chops.....	do	21.5	42.1	44.1	32.0	33.0	28.9	31.6	37.5	96	105	49	53	34	47	74	
Bacon.....	do	27.2	51.0	53.0	39.7	40.9	38.5	40.1	49.2	88	95	46	50	42	47	81	
Ham.....	do	26.9	50.5	57.1	45.7	46.3	45.5	47.0	53.5	88	112	70	72	69	75	99	
Lamb, leg of.....	do	18.5	33.4	37.1	30.6	35.8	35.8	35.4	38.4	81	101	65	94	94	91	108	
Hens.....	do	20.6	39.2	42.9	35.8	33.9	33.7	34.5	35.8	90	108	74	65	64	67	74	
Salmon, canned, red	do		135.7	138.7	134.3	131.5	131.4	131.7	136.4								
Milk, fresh	Quart	9.1	16.4	17.3	14.3	13.4	14.3	13.8	14.3	80	90	67	47	57	52	57	
Milk, evaporated	(²)		16.8	15.1	13.3	11.7	12.2	11.0	11.6								
Butter	Pound	38.7	75.4	69.4	53.1	54.6	58.9	48.9	59.7	95	79	37	41	52	26	54	
Oleomargarine (all butter substitutes).	do		139.4	37.8	29.3	27.6	29.2	30.2	31.2								
Cheese.....	do	22.5	43.0	39.8	33.3	35.5	37.7	34.7	37.4	91	77	48	58	68	54	66	
Lard.....	do	15.9	36.5	28.9	16.6	17.6	18.9	22.4	23.3	130	82	4	11	19	41	47	
Vegetable lard substitute.	do		37.8	31.4	21.5	23.2	23.7	25.5	25.8								
Eggs, strictly fresh	Dozen	49.7	81.0	86.1	69.5	64.5	66.3	68.1	69.4	63	73	40	30	33	37	40	
Eggs, storage.....	do	34.3	61.8	66.2	46.4	39.8	42.3	47.3	47.4	80	93	35	16	23	38	38	
Bread.....	Pound	5.6	10.2	11.6	9.3	8.7	8.7	8.9	9.4	82	107	66	55	55	59	68	
Flour.....	do	3.3	7.4	7.3	5.1	4.8	4.6	5.4	6.0	124	121	55	45	39	64	82	
Corn meal.....	do	3.1	6.6	5.9	4.2	3.9	4.4	5.1	5.3	113	90	35	26	42	65	71	
Roll oats.....	do		9.2	11.5	9.7	8.8	8.8	9.1	9.2								
Corn flakes.....	(³)		14.1	14.3	11.9	9.7	9.7	10.7	22.0								
Wheat cereal.....	(⁴)		25.2	30.4	29.7	25.6	24.3	24.4	25.2								
Macaroni.....	Pound		19.6	22.0	20.4	19.9	19.7	19.6	20.5								
Rice.....	do	8.7	17.6	14.2	9.4	9.5	9.7	10.5	11.4	102	63	8	9	11	21	31	
Beans, navy.....	do		12.3	10.1	8.2	10.2	10.5	10.1	9.9								
Potatoes.....	do	1.8	3.9	3.3	3.2	2.1	2.6	2.2	5.2	117	83	78	17	44	22	189	
Onions.....	do		6.9	4.3	7.5	4.4	6.3	5.1	5.7								
Cabbage.....	do		4.5	3.5	4.6	3.4	3.9	3.7	4.2								
Beans, baked.....	(⁵)		17.0	16.5	13.9	13.2	12.9	12.6	12.3								
Corn, canned.....	(⁵)		18.9	18.3	16.1	15.2	15.6	16.6	17.1								
Peas, canned.....	(⁵)		19.1	19.0	17.8	17.4	17.7	18.3	18.1								
Tomatoes, canned.....	(⁵)		16.1	13.7	13.0	12.8	12.9	13.6	12.9								
Sugar, granulated.....	Pound	5.4	12.5	12.8	6.7	8.1	10.3	8.8	6.6	131	137	24	50	91	63	22	
Tea.....	do	54.5	71.3	73.6	69.0	68.5	70.4	73.5	75.7	31	35	27	26	29	35	39	
Coffee.....	do	29.8	48.9	41.3	35.6	36.5	37.8	49.0	51.2	64	39	19	22	27	64	72	
Prunes.....	do		30.2	27.1	18.9	20.2	18.0	17.2	17.2								
Raisins.....	do		22.7	32.3	26.1	19.8	16.4	14.8	14.2								
Bananas.....	Dozen		39.9	46.6	37.8	36.8	38.3	37.3	34.7								
Oranges.....	do		54.2	67.4	52.8	51.0	49.0	48.9	65.5								
All articles combined. ⁶										83.3	84.3	44.7	38.1	44.0	43.1	59.3	

¹ Both pink and red. ² 15-16 ounce can. ³ 8-ounce package. ⁴ 28-ounce package. ⁵ No. 2 can.

⁶ Beginning with January, 1921, index numbers showing the trend in the retail cost of food have been composed of the articles shown in Tables 1 and 2, weighted according to the consumption of the average family. From January, 1913, to December, 1920, the index numbers included the following articles: 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.

Table 3 shows the changes in the retail prices of each of 22 articles of food for which prices have been secured since 1913, as well as the changes in the amounts of these articles that could be purchased for \$1 in each year, 1913 to 1924, and in November, 1925.

TABLE 3.—AVERAGE RETAIL PRICES OF SPECIFIED ARTICLES OF FOOD AND AMOUNT PURCHASABLE FOR \$1 IN EACH YEAR, 1913 TO 1924, AND IN NOVEMBER, 1925

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
	<i>Per lb.</i>	<i>Lbs.</i>	<i>Per lb.</i>	<i>Lbs.</i>	<i>Per lb.</i>	<i>Lbs.</i>	<i>Per lb.</i>	<i>Lbs.</i>	<i>Per lb.</i>	<i>Lbs.</i>	<i>Per lb.</i>	<i>Lbs.</i>
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.....	.388	2.6	.344	2.9	.291	3.4	.212	4.7	.143	7.0	.349	2.9
1922.....	.374	2.7	.323	3.1	.276	3.6	.197	5.1	.128	7.8	.330	3.0
1923.....	.391	2.6	.335	3.0	.284	3.5	.202	5.0	.129	7.8	.304	3.3
1924.....	.396	2.5	.338	3.0	.288	3.5	.208	4.8	.132	7.6	.308	3.2
1925: November	.403	2.5	.344	2.9	.295	3.4	.216	4.6	.141	7.1	.375	2.7

Year	Bacon		Ham		Lard		Hens		Eggs		Butter	
	<i>Per lb.</i>	<i>Lbs.</i>	<i>Per lb.</i>	<i>Lbs.</i>	<i>Per lb.</i>	<i>Lbs.</i>	<i>Per lb.</i>	<i>Lbs.</i>	<i>Per doz.</i>	<i>Dozs.</i>	<i>Per lb.</i>	<i>Lbs.</i>
1913.....	\$0.270	3.7	\$0.269	3.7	\$0.158	6.3	\$0.213	4.7	\$0.342	2.9	\$0.383	2.6
1914.....	.275	3.7	.273	3.7	.156	6.4	.218	4.6	.335	2.8	.362	2.8
1915.....	.289	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	.304	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.....	.427	2.3	.488	2.0	.180	5.6	.397	2.5	.509	2.0	.517	1.9
1922.....	.398	2.5	.488	2.0	.170	5.9	.360	2.8	.444	2.3	.479	2.1
1923.....	.391	2.6	.455	2.2	.177	5.6	.350	2.9	.465	2.2	.554	1.8
1924.....	.377	2.7	.453	2.2	.190	5.3	.353	2.8	.478	2.1	.517	1.9
1925: November	.402	2.0	.535	1.9	.233	4.3	.358	2.8	.694	1.4	.597	1.7

Year	Cheese		Milk		Bread		Flour		Corn meal		Rice	
	<i>Per lb.</i>	<i>Lbs.</i>	<i>Per qt.</i>	<i>Qts.</i>	<i>Per lb.</i>	<i>Lbs.</i>	<i>Per lb.</i>	<i>Lbs.</i>	<i>Per lb.</i>	<i>Lbs.</i>	<i>Per lb.</i>	<i>Lbs.</i>
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.....	.233	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.....	.340	2.9	.146	6.8	.099	10.1	.058	17.2	.045	22.2	.095	10.5
1922.....	.329	3.0	.131	7.6	.087	11.5	.051	19.6	.039	25.6	.095	10.5
1923.....	.369	2.7	.138	7.2	.087	11.5	.047	21.3	.041	24.4	.095	10.5
1924.....	.353	2.8	.138	7.2	.088	11.4	.049	20.4	.047	21.3	.101	9.9
1925: November	.374	2.7	.143	7.0	.094	10.6	.060	16.7	.053	18.9	.114	8.8

Year	Potatoes		Sugar		Coffee		Tea	
	<i>Per lb.</i>	<i>Lbs.</i>	<i>Per lb.</i>	<i>Lbs.</i>	<i>Per lb.</i>	<i>Lbs.</i>	<i>Per lb.</i>	<i>Lbs.</i>
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.....	.043	37.0	.080	12.5	.299	3.3	.546	1.8
1917.....	.032	33.3	.093	10.8	.302	3.3	.582	1.7
1918.....	.038	31.3	.097	10.3	.305	3.3	.648	1.5
1919.....	.063	26.3	.113	8.8	.433	2.3	.701	1.4
1920.....	.031	32.3	.113	8.8	.470	2.1	.733	1.4
1921.....	.028	35.7	.073	13.7	.363	2.8	.697	1.4
1922.....	.027	34.5	.101	9.9	.361	2.8	.681	1.5
1923.....	.027	37.0	.092	10.9	.377	2.7	.695	1.4
1924.....	.027	37.0	.092	10.9	.433	2.3	.715	1.4
1925: November	.052	19.2	.066	15.2	.512	2.0	.757	1.3

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 specified food articles, by years, from 1907 to 1924, and by months for 1924, and for January through November, 1925. 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 1923 was 143.4, which means that the average money price for the year 1923 was 43.4 per cent higher than the average money price for the year 1913. The relative price of rib roast for the year 1922 was 139.4, which figures show an increase of 4 points but an increase of slightly less than 3 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.² 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 76 pictures more readily to the eye the changes in the cost of the food budget than do the index numbers given in the table. The chart has been drawn on the logarithmic scale, because the percentages of increase or decrease are more accurately shown than on the arithmetic scale.

² For index numbers of each month, January, 1913, to December, 1920, see MONTHLY LABOR REVIEW for February, 1921, pp. 19-21; for each month of 1921 and 1922 see MONTHLY LABOR REVIEW for February, 1923, p. 69; and for each month of 1923 and 1924 see MONTHLY LABOR REVIEW for February, 1925, p. 21.

TABLE 4.—INDEX NUMBERS SHOWING CHANGES IN THE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN THE UNITED STATES, BY YEARS, 1907 TO 1924, AND BY MONTHS FOR 1924 AND JANUARY TO NOVEMBER, 1925

[Average for year 1913=100]

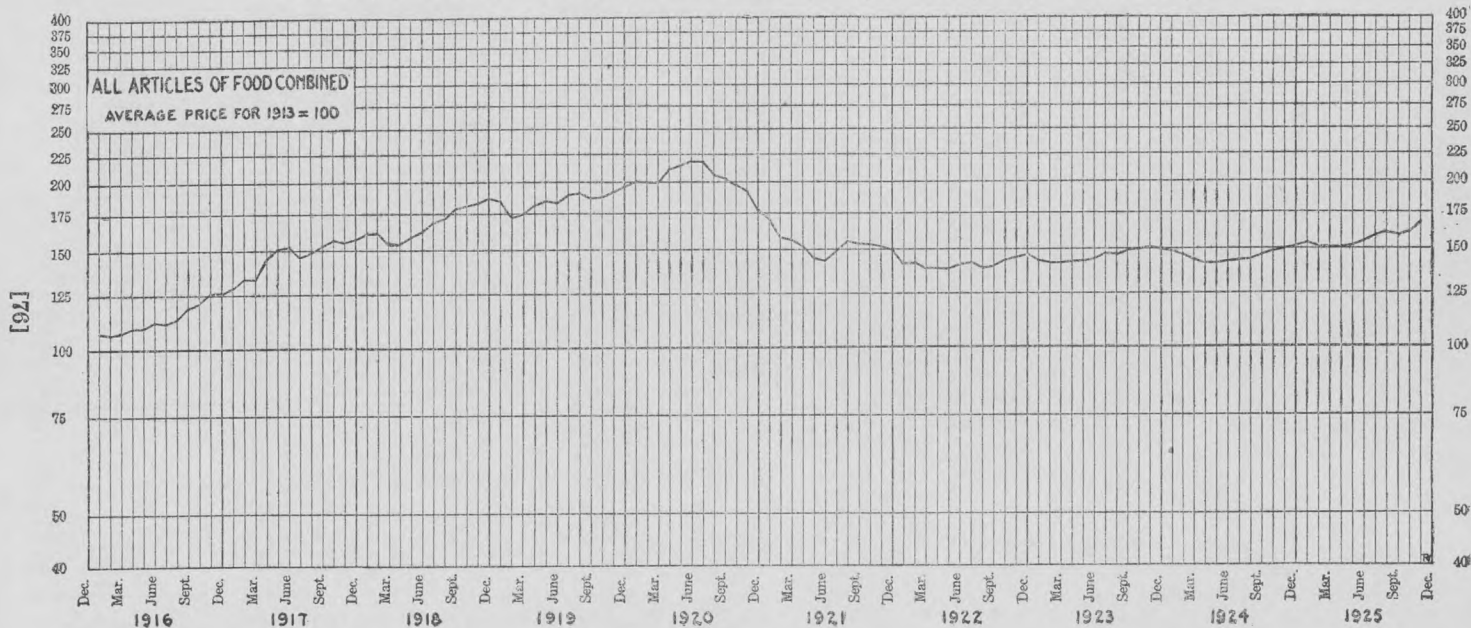
Year and month	Sirloin steak	Round steak	Rib roast	Chuck roast	Plate beef	Pork chops	Bacon	Ham	Lard	Hens	Eggs	Butter	Cheese	Milk	Bread	Flour	Corn meal	Rice	Pota-toes	Sugar	Cof-fee	Tea	All articles
1907	71.5	68.0	76.1	-----	-----	74.3	74.4	75.7	80.7	81.4	84.1	85.3	-----	87.2	-----	95.0	87.6	-----	105.3	105.3	-----	-----	82.0
1908	73.3	71.2	78.1	-----	-----	76.1	76.9	77.6	80.5	83.0	86.1	85.5	-----	89.6	-----	101.5	92.2	-----	111.2	107.7	-----	-----	84.3
1909	76.6	73.5	81.3	-----	-----	82.7	82.9	82.0	90.1	88.5	92.6	90.1	-----	91.3	-----	108.4	93.9	-----	112.3	106.6	-----	-----	88.7
1910	80.3	77.9	84.6	-----	-----	91.6	94.5	91.4	103.8	93.6	97.6	93.8	-----	94.6	-----	103.2	94.9	-----	101.0	109.3	-----	-----	93.0
1911	80.6	78.7	84.8	-----	-----	85.1	91.3	89.3	88.4	91.0	93.5	87.9	-----	95.5	-----	101.6	94.3	-----	130.5	111.4	-----	-----	92.0
1912	91.0	89.3	93.6	-----	-----	91.2	90.5	90.6	93.5	93.5	98.9	97.7	-----	-----	-----	105.2	101.6	-----	132.1	115.1	-----	-----	97.6
1913	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1914	102.0	105.8	103.0	104.4	104.1	104.6	101.8	101.7	98.6	102.2	102.3	94.4	103.6	100.5	112.5	103.9	105.1	101.2	108.3	108.2	99.7	101.4	102.4
1915	101.1	103.0	101.4	100.6	100.0	96.4	99.8	97.2	93.4	97.5	98.7	93.4	105.0	99.2	125.0	125.8	108.4	104.3	88.9	120.1	100.6	100.2	101.3
1916	107.5	109.7	107.4	106.9	106.0	108.3	106.4	109.2	111.0	110.7	108.8	103.0	116.7	102.2	130.4	134.6	112.6	104.6	158.8	146.4	100.5	100.4	113.7
1917	124.0	129.8	125.5	130.6	129.8	151.7	151.9	142.2	174.9	134.5	139.4	127.2	150.4	125.4	164.3	211.2	132.2	119.0	252.7	169.3	101.4	106.9	146.4
1918	153.2	165.5	155.1	166.3	170.2	185.7	195.9	178.1	210.8	177.0	164.9	150.7	162.4	156.2	175.0	203.0	226.7	148.3	188.2	176.4	102.4	119.1	168.3
1919	164.2	174.4	164.1	168.8	166.9	201.4	205.2	198.5	233.5	193.0	182.0	177.0	192.8	174.2	178.6	218.2	213.3	173.6	223.5	205.5	145.3	128.9	185.9
1920	172.1	177.1	167.7	163.8	151.2	201.4	193.7	206.3	186.7	209.9	197.4	183.0	188.2	187.6	205.4	245.5	216.7	200.0	370.6	352.7	157.7	134.7	203.4
1921	152.8	154.3	147.0	132.5	118.2	166.2	158.2	181.4	113.9	186.4	147.5	135.0	153.9	164.0	176.8	175.8	150.0	109.2	182.4	145.5	121.8	128.1	153.3
1922	147.2	144.8	139.4	123.1	105.8	157.1	147.4	181.4	107.6	169.0	128.7	125.1	148.9	147.2	155.4	154.5	130.0	109.2	164.7	132.7	121.1	125.2	141.6
1923	153.9	150.2	143.4	128.3	103.6	144.8	169.1	112.0	164.3	134.8	144.7	167.0	167.0	155.1	155.4	142.4	136.7	109.2	170.6	133.6	126.5	127.8	146.2
1924: Average for year	155.9	151.6	145.5	130.0	109.1	146.7	139.6	168.4	120.3	165.7	138.6	135.0	159.7	155.1	157.1	148.5	156.7	116.1	158.8	167.3	145.3	131.4	145.9
January	153.9	149.3	144.4	129.4	109.9	130.5	137.8	168.2	118.4	166.2	158.3	160.1	169.2	159.6	155.4	136.4	146.7	112.6	164.7	135.5	128.2	130.5	149.1
February	152.4	148.0	142.9	127.5	109.9	127.1	135.6	165.1	113.9	164.8	144.3	157.2	168.3	157.3	155.4	139.4	146.7	112.6	164.7	137.3	130.2	130.2	147.3
March	153.1	148.4	144.4	128.8	109.9	128.1	134.4	163.6	110.8	168.5	100.9	151.4	166.1	156.2	155.4	139.4	146.7	111.5	164.7	139.1	136.9	130.3	143.7
April	155.9	150.7	146.5	130.6	109.9	136.7	134.1	164.7	108.9	169.5	93.0	130.8	161.1	155.1	155.4	139.4	146.7	112.6	164.7	130.0	140.3	130.5	141.3
May	159.8	155.2	148.5	133.1	110.7	142.4	133.7	164.7	108.2	171.8	95.1	120.4	156.6	152.8	155.4	139.4	146.7	112.6	170.6	167.3	141.6	130.7	141.0
June	160.2	156.1	148.5	132.5	109.1	143.8	134.1	165.8	107.0	168.5	104.6	129.9	155.7	151.7	155.4	139.4	146.7	113.8	194.1	150.9	141.9	130.3	142.4
July	160.2	155.2	147.0	131.3	108.3	144.3	134.8	166.2	108.2	165.7	114.2	129.2	155.7	151.7	155.4	145.5	150.0	114.9	194.1	152.7	142.3	130.1	143.3
August	160.2	156.1	147.0	131.3	108.3	165.7	141.9	173.2	122.2	163.4	129.3	126.1	155.7	153.9	157.1	154.5	156.7	117.2	152.9	149.1	145.6	130.3	144.2
September	158.3	153.8	146.5	130.6	109.1	170.5	145.6	174.3	126.6	165.7	150.4	126.6	156.6	156.2	157.1	154.5	160.0	118.4	152.9	156.4	148.7	130.5	46.8
October	155.9	151.1	144.4	129.4	108.3	178.6	148.5	175.1	135.4	164.8	173.0	125.1	157.5	156.2	157.1	160.6	166.7	119.5	141.2	160.6	154.7	132.0	148.7
November	152.4	147.5	142.4	127.5	109.1	150.5	148.5	174.7	141.8	162.0	197.4	127.7	157.0	155.1	158.9	163.6	170.0	102.7	129.4	160.0	164.4	135.1	150.1
December	150.4	145.3	141.4	126.3	108.3	139.5	147.8	173.2	139.9	161.5	202.3	137.1	157.9	155.1	158.9	169.7	173.3	121.8	135.3	160.0	169.5	135.7	151.5
1925: January	152.4	147.1	143.9	128.1	109.9	146.2	149.3	177.0	144.3	168.1	204.4	136.6	162.4	156.2	164.3	181.8	180.0	123.0	147.1	147.3	173.2	136.4	184.3
February	151.6	146.6	143.4	127.5	109.1	144.3	150.4	178.8	144.3	169.5	154.8	132.1	164.7	156.2	169.6	193.9	183.3	124.1	152.9	140.0	174.8	138.5	181.4
March	155.9	150.7	147.0	131.3	111.6	178.1	164.4	190.3	146.2	173.2	113.3	144.9	165.2	155.1	167.9	193.9	183.3	125.3	147.1	140.0	175.5	137.1	151.1
April	159.1	155.2	150.0	135.0	114.1	175.2	172.6	198.9	146.8	177.9	110.4	139.2	165.2	155.1	167.9	184.8	183.3	126.4	141.2	136.4	174.8	138.8	150.8
May	160.6	150.0	150.5	138.1	115.7	171.4	171.9	197.0	143.0	177.9	113.9	135.5	164.3	153.9	167.9	184.8	180.0	126.4	158.3	139.9	175.2	139.0	151.6
June	161.4	157.8	150.5	136.3	114.0	172.4	174.1	197.0	144.9	173.2	122.6	137.6	165.2	153.9	167.9	184.8	180.0	126.4	205.9	130.9	170.5	139.3	155.0
July	166.1	163.7	153.5	140.0	115.7	186.7	180.4	202.2	148.7	171.8	133.9	138.9	165.6	155.1	167.9	184.8	180.0	128.7	258.8	129.1	170.5	139.3	159.9
August	165.4	162.3	153.0	138.1	114.9	190.5	182.6	204.1	153.8	170.0	141.7	141.3	166.5	156.2	167.9	184.8	180.0	129.9	258.8	127.3	170.8	139.5	160.4
September	163.8	159.6	152.0	137.5	114.9	192.4	183.0	204.1	151.9	171.8	150.4	145.1	167.4	159.6	167.9	184.8	180.0	129.9	211.8	127.3	171.4	139.3	159.0
October	162.2	158.7	151.5	137.5	116.5	186.2	183.7	201.9	152.5	171.4	174.8	155.1	168.3	160.7	167.9	178.8	176.7	129.9	217.6	123.6	171.5	139.3	161.6
November	158.7	154.3	149.0	135.0	116.5	178.6	182.2	198.9	147.5	168.1	201.2	155.9	169.2	160.7	167.9	181.8	176.7	131.0	305.9	120.0	171.8	139.2	167.1

RETAIL PRICES OF FOOD

74733°-261-6

[65]

TREND IN RETAIL PRICES OF FOOD IN THE UNITED STATES, JANUARY, 1916, TO NOVEMBER, 1925



Retail Prices of Food in

AVERAGE retail food prices are shown in Table 5 for 40 cities 15, 1925. For 11 other cities prices are shown for the same not scheduled by the bureau until after 1913.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL

[Owing to differences in trade practices in the cities included in this report, exact comparison of prices in 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, 1925	Nov. 15, 1925	Nov. 15—		Oct. 15, 1925	Nov. 15, 1925	Nov. 15—		Oct. 15, 1925	Nov. 15, 1925
		1913	1924			1913	1924			1913	1924		
Sirloin steak	Pound	Cts. 24.2	Cts. 35.3	Cts. 38.3	Cts. 38.0	Cts. 22.8	Cts. 37.3	Cts. 39.8	Cts. 38.9	Cts. 28.0	Cts. 37.1	Cts. 39.6	Cts. 39.7
Round steak	do.	21.3	32.3	34.7	34.3	21.3	33.4	35.6	34.9	23.0	32.9	34.8	34.9
Rib roast	do.	19.0	26.1	28.2	28.6	17.5	29.9	30.0	30.1	19.4	26.3	28.2	27.5
Chuck roast	do.	15.8	20.7	21.3	21.3	15.0	20.4	21.5	21.5	16.5	21.1	22.5	22.6
Plate beef	do.	9.9	12.1	12.5	12.5	12.2	13.6	14.6	15.1	10.0	13.9	13.9	13.9
Pork chops	do.	25.0	31.0	37.0	37.0	18.2	29.4	40.1	36.3	23.0	32.6	37.0	37.1
Bacon, sliced	do.	31.1	37.7	47.6	48.1	21.5	35.6	47.1	46.3	34.0	40.8	48.7	49.6
Ham, sliced	do.	30.8	46.7	55.7	54.7	27.5	50.5	56.9	57.3	32.0	48.0	54.2	53.1
Lamb, leg of	do.	20.2	36.1	36.4	37.1	18.0	36.7	39.6	40.4	21.9	36.4	37.3	37.8
Hens	do.	21.0	32.1	33.0	33.8	20.2	37.0	37.8	37.3	19.3	32.7	35.6	33.9
Salmon, canned, red	do.		31.7	34.9	35.4		27.2	34.8	35.6		30.8	35.9	37.5
Milk, fresh	Quart	10.6	17.5	19.3	19.3	8.7	13.0	13.0	13.0	10.0	19.0	19.0	19.0
Milk, evaporated	15-16 oz. can		12.8	13.6	13.6		10.9	11.3	11.4		12.2	12.6	12.6
Butter	Pound	39.8	50.1	60.3	59.6	38.4	53.4	63.1	63.6	41.7	52.7	61.6	62.2
Oleomargarine (all butter substitutes).	do.		29.4	32.0	32.3		28.3	29.8	30.1		34.9	36.2	36.4
Cheese	do.	25.0	33.2	35.2	35.6	23.3	34.6	36.4	36.4	23.0	34.9	37.6	37.7
Lard	do.	15.3	21.8	23.9	23.0	15.0	22.0	23.8	21.8	15.1	22.2	24.1	23.6
Vegetable lard substitute.	do.		24.8	24.7	24.7		24.9	24.9	24.7		21.5	22.2	22.0
Eggs, strictly fresh	Dozen	40.0	60.0	48.8	60.0	45.9	69.1	56.5	68.1	39.0	61.4	52.7	61.8
Eggs, storage	do.		49.9		47.5		46.3	43.1	45.3		32.5	48.8	49.0
Bread	Pound	5.6	9.3	10.4	10.4	5.5	8.9	9.4	9.4	5.4	9.4	10.2	10.2
Flour	do.	3.5	6.1	6.9	6.9	3.1	5.1	5.5	5.6	3.6	6.3	7.0	7.1
Corn meal	do.	2.6	4.6	4.5	4.2	2.6	4.4	4.3	4.2	2.5	4.3	4.5	4.3
Rolled oats	do.		9.5	9.7	9.5		8.7	8.7	8.7		9.5	9.7	10.1
Corn flakes	8-oz. pkg.		11.4	11.5	11.4		10.2	10.2	10.3		11.8	12.0	11.9
Wheat cereal	28-oz. pkg.		26.1	25.6	25.6		22.3	23.7	24.1		25.7	25.6	25.7
Macaroni	Pound		21.3	21.8	21.8		19.0	19.6	19.6		19.1	19.1	19.3
Rice	do.	8.6	10.3	11.1	10.9	9.0	10.3	10.8	10.6	8.2	10.9	11.9	12.0
Beans, navy	do.		12.9	11.8	11.7		9.4	8.8	8.7		11.9	11.7	11.7
Potatoes	do.	2.3	3.1	4.8	6.5	1.8	2.2	3.5	5.1	2.2	3.6	5.0	6.1
Onions	do.		7.3	8.4	7.8		5.4	6.0	6.0		6.4	7.6	7.9
Cabbage	do.		4.7	5.9	5.0		3.8	3.9	4.3		5.1	5.7	5.4
Beans, baked	No. 2 can		12.4	12.3	12.3		11.5	11.3	11.2		13.3	12.6	13.2
Corn, canned	do.		16.2	17.8	17.8		16.1	15.9	16.0		17.1	18.6	18.6
Peas, canned	do.		19.1	18.6	18.5		16.8	16.0	16.0		21.7	22.6	22.6
Tomatoes, canned	do.		13.9	13.0	13.1		12.7	10.6	10.7		12.8	12.6	12.3
Sugar, granulated	Pound	5.7	9.5	7.1	7.0	4.8	8.0	6.1	6.0	5.4	9.2	7.1	7.1
Tea	do.	60.0	93.3	101.1	100.8	56.0	70.9	75.1	75.8	61.3	90.6	92.9	92.9
Coffee	do.	32.0	47.4	51.4	51.1	24.4	46.6	48.6	48.3	28.8	49.6	53.9	54.0
Prunes	do.		17.1	18.2	17.5		16.4	15.3	15.2		20.0	20.3	19.8
Raisins	do.		16.1	15.6	15.5		13.4	13.1	13.1		16.2	15.2	15.0
Bananas	Dozen		29.6	28.2	28.1		27.4	25.3	25.3		37.0	37.6	36.9
Oranges	do.		36.3	37.1	34.0		45.8	66.1	59.1		43.8	61.8	54.9

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

51 Cities on Specified Dates

for November 15, 1913 and 1924, and for October 15 and November dates, with the exception of November, 1913, as these cities were

ARTICLES OF FOOD IN 51 CITIES ON SPECIFIED DATES

one city with those in another can not be made for some articles, particularly meats and vegetables. Also and since 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.	Nov.	Nov.	Oct.	Nov.	Nov. 15—		Oct.	Nov.	Nov.	Oct.	Nov.	Nov. 15—		Oct.	Nov.		
1913	1924	1925	15, 1925	15, 1924	15, 1925	15, 1925	1913	1924	1925	15, 1924	15, 1925	1924	1925	1913	1924	1925	1925		
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.		
134.0	62.4	68.7	66.8	46.9	50.7	48.3	22.2	36.9	40.1	38.8	27.3	30.1	28.2	21.4	32.2	32.7	31.8		
35.0	48.5	55.9	51.8	40.0	43.2	41.7	19.4	31.0	34.0	33.3	23.2	26.3	25.8	20.8	30.0	30.5	29.5		
23.9	38.1	42.7	40.9	34.8	38.5	37.0	16.4	28.2	30.2	29.1	22.8	25.1	25.0	20.0	26.7	27.3	26.8		
16.2	24.8	29.6	28.5	25.4	29.1	28.4	15.2	21.5	23.1	22.1	16.4	17.6	17.2	15.0	19.2	19.5	19.7		
-----	16.7	20.1	19.2	10.6	12.1	11.9	11.7	12.3	13.9	14.2	10.5	10.5	11.5	11.9	12.0	14.4	14.1		
-----	22.4	33.9	42.7	42.9	33.7	41.5	40.3	19.8	33.4	41.7	40.0	26.9	37.5	32.2	25.0	30.0	37.3		
-----	24.6	39.8	48.8	48.4	43.4	53.2	52.3	21.2	34.3	46.2	45.1	47.9	57.1	56.3	26.6	35.9	45.4		
-----	31.0	51.9	60.0	59.0	53.9	57.3	26.3	46.6	52.6	51.2	52.1	58.2	57.5	27.5	44.7	51.2	49.4		
-----	20.5	37.0	39.7	40.7	37.4	39.9	39.1	15.6	29.0	34.7	34.1	33.1	37.4	37.3	22.5	41.4	42.5		
-----	24.3	38.9	41.6	39.7	38.8	39.9	40.3	20.0	34.5	37.1	36.2	28.7	32.7	31.8	21.5	35.9	36.2		
-----	-----	30.0	35.4	36.9	30.1	33.1	33.4	-----	28.4	37.3	38.1	36.9	30.7	30.6	-----	29.7	35.6		
-----	8.9	14.9	14.8	14.8	15.0	16.0	16.0	8.0	14.0	13.4	13.4	14.3	14.3	14.3	12.0	18.5	18.0		
-----	11.3	11.9	12.2	11.3	11.5	11.4	-----	10.4	11.4	11.4	10.3	11.0	11.0	-----	10.8	11.8			
-----	38.2	48.4	59.3	59.6	49.9	58.5	58.5	38.1	49.2	59.5	60.1	46.7	58.3	60.9	37.8	46.6	56.3		
-----	30.0	29.8	29.3	29.6	29.4	29.5	-----	29.0	29.5	29.8	32.5	32.5	32.5	-----	31.6	30.7			
-----	23.4	36.9	39.3	39.5	37.9	38.6	39.4	21.5	35.1	38.4	38.3	36.0	37.4	37.4	21.0	30.3	34.5		
-----	15.8	23.2	24.7	23.8	22.9	22.0	22.9	14.2	21.9	23.1	22.1	23.6	26.9	25.7	15.0	23.8	24.0		
-----	-----	23.3	26.1	25.9	25.5	25.4	25.6	-----	25.5	26.4	26.4	29.5	28.2	28.4	-----	25.5	24.1		
-----	60.6	94.6	85.7	91.7	86.0	79.9	92.7	48.5	74.3	65.2	74.7	73.4	63.8	79.9	40.0	59.6	53.3		
-----	35.2	53.8	51.6	52.8	51.2	48.3	49.2	30.6	46.2	45.1	45.8	42.5	42.0	48.2	33.5	45.4	42.8		
-----	6.0	8.5	9.1	9.1	8.5	9.0	9.0	5.6	8.5	9.0	9.0	9.6	9.7	9.7	6.4	10.7	10.8		
-----	3.6	6.0	6.5	6.6	5.4	5.8	5.9	3.0	5.2	5.4	5.4	5.6	5.9	5.8	3.7	6.4	7.3		
-----	3.5	6.1	6.8	6.7	7.5	7.6	7.6	2.6	5.0	5.7	5.4	5.8	6.2	6.1	2.6	4.1	4.1		
-----	9.4	9.4	9.3	8.3	8.7	8.6	-----	8.2	8.9	8.8	7.2	7.2	7.6	7.6	-----	9.3	9.3		
-----	10.8	11.1	11.1	10.5	10.6	10.6	-----	9.9	10.4	10.4	11.8	12.4	12.4	-----	11.5	11.7			
-----	24.0	24.9	25.0	23.5	24.9	24.7	-----	24.1	24.1	24.1	26.8	27.5	27.3	-----	25.0	26.0			
-----	22.8	23.4	23.2	23.3	22.9	22.7	-----	20.8	22.0	21.8	20.1	19.7	19.7	-----	19.1	18.8			
-----	9.4	11.2	12.3	12.5	11.1	11.1	11.2	9.3	10.1	11.0	11.5	10.7	11.9	12.3	5.6	8.0			
-----	10.8	11.0	10.9	10.5	10.9	10.6	-----	9.9	9.8	9.9	10.5	11.2	10.8	-----	10.3	10.8			
-----	1.7	1.9	3.8	5.2	2.0	3.7	4.9	1.8	1.5	3.5	4.9	1.8	2.4	4.0	2.2	2.5			
-----	5.0	6.0	5.9	5.1	6.1	6.0	-----	5.2	6.8	6.6	4.5	4.7	4.7	-----	5.8	6.1			
-----	4.4	5.0	5.1	4.2	5.2	4.9	-----	2.4	3.4	3.2	4.0	3.5	3.5	-----	4.4	4.2			
-----	14.4	13.9	13.5	12.2	11.9	12.0	-----	10.5	10.2	10.6	14.8	15.1	14.9	-----	10.5	10.2			
-----	19.5	20.0	19.5	19.5	19.6	19.5	-----	16.0	16.9	16.5	16.7	16.3	15.6	-----	16.4	17.0			
-----	21.7	21.6	21.3	21.4	21.2	20.8	-----	16.3	16.9	16.4	16.8	16.6	16.0	-----	18.8	18.5			
-----	13.0	13.2	12.7	14.5	13.6	13.3	-----	14.1	14.4	14.2	14.8	14.0	14.8	-----	11.8	10.9			
-----	5.4	8.7	6.8	6.6	6.4	6.4	5.3	8.4	6.5	6.2	10.2	8.2	7.7	5.0	8.5	6.3			
-----	58.6	70.7	75.5	75.8	61.2	61.1	45.0	65.2	69.3	68.2	81.9	81.8	82.5	50.0	70.3	74.9			
-----	33.0	55.5	56.0	56.0	46.6	48.4	48.4	29.3	46.8	48.6	49.1	54.6	56.4	56.4	26.8	41.8			
-----	17.0	17.0	16.8	17.8	17.7	16.9	-----	16.7	16.4	16.2	16.6	17.5	17.5	-----	15.8	16.5			
-----	14.2	13.9	13.9	15.3	14.1	13.9	-----	14.3	13.6	13.3	16.3	15.0	14.8	-----	14.4	14.1			
-----	46.5	41.7	41.4	36.7	34.1	34.0	-----	46.9	41.4	42.1	15.8	12.3	13.2	-----	41.4	40.0			
-----	61.9	72.9	77.5	52.7	69.2	69.9	-----	55.9	72.6	76.1	43.6	61.5	65.8	-----	30.2	57.5			

² Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

Article	Unit	Chicago, Ill.				Cincinnati, Ohio				Cleveland, Ohio			
		Nov. 15—		Oct. 15, 1925	Nov. 15, 1925	Nov. 15—		Oct. 15, 1925	Nov. 15, 1925	Nov. 15—		Oct. 15, 1925	Nov. 15, 1925
		1913	1924			1913	1924			1913	1924		
Sirloin steak	Pound	Cts. 24.7	Cts. 41.8	Cts. 45.6	Cts. 44.8	Cts. 22.7	Cts. 34.4	Cts. 35.9	Cts. 55.4	Cts. 25.0	Cts. 36.4	Cts. 37.7	Cts. 36.2
Round steak	do	21.4	32.5	36.1	35.3	20.7	30.7	32.8	31.7	22.4	30.2	31.8	30.1
Rib roast	do	19.5	31.7	34.9	34.3	19.2	27.7	28.4	28.2	18.6	25.8	26.2	26.1
Chuck roast	do	15.9	21.6	24.8	24.3	16.1	18.3	19.8	19.6	17.0	20.2	21.1	21.3
Plate beef	do	12.0	12.8	14.3	14.4	11.5	14.0	15.1	15.2	12.6	12.0	13.1	13.1
Pork chops	do	19.3	27.9	35.9	35.5	19.8	26.8	35.1	33.2	21.6	31.8	40.2	36.9
Bacon, sliced	do	32.4	43.9	52.7	52.8	24.6	35.9	43.7	43.3	28.1	41.4	50.7	50.4
Ham, sliced	do	32.3	47.6	53.9	53.6	28.5	47.2	54.7	53.6	35.7	49.3	56.3	54.2
Lamb, leg of	do	19.3	34.8	38.5	38.6	17.5	31.4	35.2	35.9	18.1	32.8	37.2	36.1
Hens	do	17.4	33.1	30.0	34.5	20.2	34.0	34.1	32.2	19.9	35.2	37.2	36.3
Salmon, canned, red	do	32.7	36.8	37.9	37.9	20.3	34.6	36.0	36.0	29.7	35.6	35.6	35.6
Milk, fresh	Quart	8.0	14.0	14.0	14.0	8.0	10.0	12.0	12.0	8.0	14.0	13.8	13.8
Milk, evaporated	15-16 oz. can	10.5	10.9	10.9	10.9	10.1	10.9	10.8	10.8	10.4	11.2	11.3	11.3
Butter	Pound	36.5	46.6	57.5	57.6	38.2	40.9	58.0	57.5	40.7	50.4	61.5	61.7
Oleomargarine (all butter substitutes)	do	27.7	29.5	29.4	29.4	31.2	32.4	32.3	32.3	31.5	32.5	33.2	33.2
Cheese	do	25.3	39.5	41.9	42.2	21.0	34.1	36.4	36.1	24.0	33.4	37.9	37.8
Lard	do	15.0	22.3	23.9	23.1	14.2	21.4	22.8	21.6	16.3	23.7	25.1	24.1
Vegetable lard substitute	do	26.3	26.5	26.6	26.6	25.5	25.7	25.6	25.6	26.8	27.3	27.2	27.2
Eggs, strictly fresh	Dozen	39.8	66.1	56.8	67.9	44.3	70.7	51.7	69.1	50.0	76.0	65.7	79.6
Eggs, storage	do	30.3	47.4	45.8	45.5	33.6	42.8	38.6	45.8	35.7	50.0	48.8	50.7
Bread	Pound	6.1	9.9	9.8	9.8	4.8	8.5	9.2	9.2	5.6	8.0	8.1	8.0
Flour	do	2.9	4.9	5.4	5.4	3.3	5.2	5.9	5.9	3.2	5.5	5.9	5.9
Corn meal	do	2.9	6.2	6.6	6.6	2.8	4.3	4.5	4.3	3.0	5.0	5.4	5.5
Rolled oats	do	8.4	8.5	8.5	8.5	8.4	8.7	8.7	8.7	8.7	8.7	9.4	9.5
Corn flakes	8-oz. pkg.	10.0	10.1	10.1	10.1	10.2	10.2	10.2	10.2	11.0	11.3	11.2	11.2
Wheat cereal	28-oz. pkg.	23.7	24.4	24.6	24.6	23.4	24.0	24.3	24.3	24.8	24.9	25.0	25.0
Macaroni	Pound	18.0	20.0	20.0	20.0	16.0	20.1	20.2	20.2	19.8	21.4	21.5	21.5
Rice	do	9.0	11.0	11.4	11.4	8.8	10.5	11.1	11.1	9.0	10.6	11.6	11.7
Beans, navy	do	9.9	9.6	9.7	9.7	8.4	8.2	8.3	8.3	9.3	8.9	8.8	8.8
Potatoes	do	1.7	2.0	3.5	5.0	1.9	2.2	3.9	5.4	2.0	1.9	3.3	4.3
Onions	do	5.1	6.0	5.7	5.7	4.4	6.0	5.4	5.4	4.8	5.2	5.1	5.1
Cabbage	do	3.8	3.8	4.3	4.3	3.3	4.1	4.2	4.2	3.7	3.9	4.1	4.1
Beans, baked	No. 2 can	12.8	12.8	12.8	12.8	11.1	11.3	11.3	11.3	12.3	13.2	13.0	13.0
Corn, canned	do	16.9	17.4	16.8	16.8	14.9	15.7	15.7	15.7	17.1	18.1	18.2	18.2
Peas, canned	do	17.6	17.6	17.6	17.6	17.3	18.0	17.9	17.9	17.7	17.9	17.8	17.8
Tomatoes, canned	do	14.6	14.5	14.4	14.4	13.6	13.2	13.1	13.1	14.6	14.3	14.2	14.2
Sugar, granulated	Pound	5.1	8.4	6.5	6.3	5.3	8.5	6.9	6.8	5.4	8.9	7.0	6.8
Tea	do	55.0	73.4	74.3	74.1	60.0	74.1	76.7	76.7	50.0	66.6	79.2	79.0
Coffee	do	30.7	49.2	51.3	51.8	25.6	44.0	45.6	45.7	26.5	51.0	53.8	53.6
Prunes	do	19.1	18.3	18.4	18.4	17.3	17.5	17.7	17.7	17.4	17.4	17.4	17.4
Raisins	do	16.5	15.2	15.2	15.2	14.6	14.2	14.2	14.2	14.7	14.2	14.0	14.0
Bananas	Dozen	41.8	40.8	41.3	41.3	42.5	37.5	37.5	37.5	49.8	50.0	47.5	47.5
Oranges	do	57.4	69.6	74.0	74.0	42.7	62.2	67.8	67.8	51.8	70.5	74.4	74.4

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

CLES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued

Columbus, Ohio			Dallas, Tex.				Denver, Colo.				Detroit, Mich.				Fall River, Mass.				
Nov. 15, 1924	Oct. 15, 1925	Nov. 15, 1925	Nov. 15—		Nov. 15, 1925	Nov. 15, 1925	Nov. 15—		Nov. 15, 1925	Nov. 15, 1925	Nov. 15—		Nov. 15, 1925	Nov. 15, 1925	Nov. 15—		Nov. 15, 1925	Nov. 15, 1925	
			1913	1924			1913	1924			1913	1924			1913	1924			
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
37.5	38.7	37.3	23.6	33.4	33.6	33.3	22.9	28.4	30.9	30.0	25.6	38.4	40.8	39.5	134.3	158.4	161.9	160.9	
42.3	49.9	49.6	37.5	41.8	49.2	46.5	28.0	42.7	50.8	50.2	22.3	40.2	51.8	50.6	25.7	34.5	46.6	46.4	
29.0	29.5	29.1	20.1	27.5	27.7	27.5	16.7	21.1	22.0	21.7	20.0	26.3	29.9	29.5	23.3	27.4	31.3	31.3	
22.1	23.5	22.5	16.4	21.3	21.6	21.4	15.3	16.7	17.2	17.1	15.2	20.1	22.5	22.2	18.3	21.1	22.9	22.6	
15.0	15.8	15.3	15.0	16.0	15.4	15.4	9.9	9.5	9.9	10.6	11.4	12.3	13.5	13.5	-----	13.0	13.1	13.2	
30.2	36.7	34.1	21.8	31.7	38.7	35.2	20.4	31.2	36.6	36.1	19.4	29.7	41.0	38.5	23.3	30.9	39.4	39.3	
42.3	49.9	49.6	37.5	41.8	49.2	46.5	28.0	42.7	50.8	50.2	22.3	40.2	51.8	50.6	25.7	34.5	46.6	46.4	
46.4	53.9	52.7	31.6	49.4	55.8	56.3	29.2	50.4	56.1	55.7	27.0	51.4	58.0	56.8	30.4	46.8	52.2	50.5	
39.4	40.8	42.2	22.5	39.1	44.9	43.9	15.2	32.8	35.8	35.3	15.1	34.7	41.4	40.0	19.3	39.6	41.3	42.1	
33.2	36.0	36.4	18.4	28.5	30.5	29.3	18.5	27.6	28.7	28.1	19.2	34.7	38.1	36.8	24.6	41.3	42.3	42.9	
32.6	38.3	39.3	-----	31.4	38.2	40.3	-----	33.1	38.2	38.6	-----	30.5	37.7	38.7	-----	31.2	35.1	35.9	
12.0	11.0	11.0	10.8	15.0	15.0	15.0	8.4	11.8	12.0	12.0	9.0	14.0	14.0	14.0	9.0	14.0	14.0	14.0	
10.5	11.3	11.4	-----	13.1	13.2	13.3	-----	10.4	11.2	11.2	-----	10.1	11.0	11.1	-----	12.1	12.5	12.5	
46.7	58.1	58.4	40.0	49.1	57.6	58.1	35.0	41.5	56.1	57.6	37.1	47.7	58.8	59.0	36.0	47.6	56.9	56.6	
29.8	31.0	31.2	-----	33.1	33.3	33.8	-----	29.6	29.7	30.1	-----	29.6	30.5	30.5	-----	32.2	31.6	31.6	
34.3	37.5	37.7	20.0	33.2	37.5	37.0	26.1	37.0	39.3	39.1	22.3	34.6	37.9	37.2	23.6	37.0	39.5	39.2	
21.8	22.6	21.4	16.8	24.9	25.9	25.9	16.0	23.1	24.7	24.1	16.4	22.6	24.7	23.9	15.3	21.7	23.8	22.7	
25.1	25.9	25.9	-----	22.4	24.6	24.0	-----	25.5	25.0	24.7	-----	27.5	27.1	27.0	-----	26.0	27.6	27.9	
64.8	51.3	63.3	40.0	54.8	52.6	55.9	45.0	61.8	55.0	64.0	41.0	66.4	60.7	68.1	58.8	93.6	84.3	94.2	
64.0	48.0	46.0	35.0	-----	-----	45.5	33.0	43.3	43.1	44.8	32.2	44.8	43.2	46.7	34.6	49.9	49.4	51.2	
7.8	8.1	8.1	5.3	8.8	8.5	8.6	5.5	7.9	8.4	8.4	5.6	8.8	8.7	8.7	6.2	8.8	9.1	9.2	
5.1	6.1	6.1	3.3	5.2	5.8	5.8	2.5	4.4	5.1	5.1	3.1	5.2	5.9	5.8	3.3	5.7	6.2	6.1	
4.4	4.3	4.0	3.6	4.9	4.8	5.0	2.6	4.2	4.4	4.4	2.9	5.2	5.9	5.6	3.6	7.5	7.5	7.7	
9.5	9.4	9.5	-----	10.2	10.7	10.4	-----	9.1	8.6	8.8	-----	8.8	9.7	9.6	-----	9.6	9.7	9.9	
10.5	10.8	10.8	-----	11.2	11.2	11.3	-----	11.8	11.9	12.0	-----	10.1	10.7	10.6	-----	11.2	11.7	11.7	
24.3	24.4	24.3	-----	25.8	27.0	26.4	-----	24.5	25.2	25.0	-----	23.9	25.1	25.5	-----	25.9	26.5	26.2	
18.3	22.8	23.7	-----	21.4	21.3	21.5	-----	20.7	18.8	19.2	-----	19.5	21.7	21.7	-----	23.4	24.6	24.6	
10.9	12.4	12.6	9.3	11.8	12.5	12.4	8.6	10.4	11.7	11.4	8.4	10.2	11.9	11.9	10.0	10.6	11.3	11.3	
9.4	9.0	8.8	-----	11.7	12.2	11.8	-----	11.1	11.1	10.7	-----	8.8	8.9	8.9	-----	10.2	10.6	10.4	
2.0	3.5	5.1	2.3	4.0	5.2	6.1	1.6	2.0	3.2	4.7	1.7	1.5	2.7	4.4	1.8	1.9	3.6	5.3	
5.3	6.9	5.9	-----	7.2	7.4	7.2	-----	4.2	5.1	4.9	-----	4.3	5.3	5.4	-----	5.7	6.2	6.0	
4.6	4.5	4.3	-----	5.9	5.8	5.4	-----	2.8	3.2	3.2	-----	2.9	3.4	3.5	-----	4.5	4.6	4.9	
13.5	13.1	13.1	-----	15.0	14.5	14.5	-----	14.1	14.1	13.7	-----	12.1	11.8	11.8	-----	12.2	12.4	12.3	
14.4	17.0	15.6	-----	18.0	19.1	18.3	-----	15.6	16.7	16.3	-----	16.3	17.0	16.9	-----	16.8	17.5	17.3	
16.3	16.3	16.2	-----	21.8	21.8	21.1	-----	17.0	16.8	16.8	-----	17.7	17.2	17.3	-----	19.0	19.1	18.9	
14.4	14.5	14.0	-----	14.7	14.0	13.3	-----	14.3	14.1	14.2	-----	13.4	13.8	13.5	-----	14.1	13.1	12.7	
9.0	7.4	7.0	5.6	9.7	7.9	7.1	5.1	9.6	7.2	6.3	5.2	8.4	6.9	6.8	5.3	8.9	6.7	6.7	
80.3	85.2	84.8	66.7	100.0	103.5	102.7	82.8	68.6	67.6	67.6	43.3	62.1	72.7	73.1	44.2	60.1	63.1	62.8	
49.3	52.2	51.6	36.7	54.9	59.6	59.3	29.4	48.6	51.6	52.4	29.3	49.1	51.4	51.9	33.0	50.6	53.3	53.5	
18.6	17.5	17.4	-----	20.2	20.6	22.1	-----	18.3	19.1	19.1	-----	19.2	18.7	18.5	-----	15.3	15.8	15.5	
14.8	14.6	14.6	-----	16.3	16.2	16.0	-----	14.6	14.5	14.7	-----	15.1	14.6	14.5	-----	14.9	14.3	14.5	
39.4	37.5	38.0	-----	32.0	32.0	33.8	-----	14.7	11.7	11.3	-----	36.1	33.8	33.8	-----	10.3	9.7	9.9	
45.0	64.9	63.9	-----	51.2	65.2	68.5	-----	51.1	63.3	63.6	-----	55.5	73.2	79.6	-----	45.6	57.2	54.0	

² Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

Article	Unit	Houston, Tex.			Indianapolis, Ind.				Jacksonville, Fla.			
		Nov. 15, 1924	Oct. 15, 1925	Nov. 15, 1925	Nov. 15—		Nov. 15, 1925	Nov. 15, 1925	Nov. 15—		Oct. 15, 1925	Nov. 15, 1925
					1913	1924			1913	1924		
Sirloin steak	Pound	<i>Cts.</i> 27.3	<i>Cts.</i> 30.8	<i>Cts.</i> 30.4	<i>Cts.</i> 26.0	<i>Cts.</i> 34.7	<i>Cts.</i> 37.9	<i>Cts.</i> 36.8	<i>Cts.</i> 25.6	<i>Cts.</i> 35.0	<i>Cts.</i> 36.4	<i>Cts.</i> 35.9
Round steak	do.	26.5	29.6	29.6	24.7	32.9	36.3	34.8	21.2	28.8	30.0	30.5
Rib roast	do.	22.5	23.7	23.5	17.8	25.1	28.3	28.1	21.6	27.0	26.5	26.6
Chuck roast	do.	17.5	19.2	19.0	16.3	20.9	23.7	23.7	14.4	18.3	19.4	20.2
Plate beef	do.	14.6	15.9	15.8	12.9	13.8	14.7	14.7	11.2	10.7	12.2	12.4
Pork chops	do.	31.5	39.3	37.1	21.5	29.6	38.2	35.7	24.0	31.3	35.7	35.5
Bacon, sliced	do.	41.6	50.1	49.7	29.2	36.9	46.8	45.7	30.9	36.4	47.1	47.4
Ham, sliced	do.	45.8	52.3	51.7	30.3	47.4	55.9	54.2	30.2	44.4	53.6	53.6
Lamb, leg of	do.	31.0	36.0	36.0	19.0	36.7	40.0	40.8	21.6	36.0	36.7	39.5
Hens	do.	32.3	35.7	35.3	19.8	32.1	35.8	34.7	24.6	35.1	38.5	38.8
Salmon, canned, red	do.	31.2	32.9	34.8	---	33.8	32.1	31.4	---	31.0	32.5	37.3
Milk, fresh	Quart	15.8	17.3	17.3	8.0	12.0	11.8	11.8	12.3	19.3	22.0	22.0
Milk, evaporated	15-16 oz. can	11.5	11.7	11.6	---	10.0	10.6	10.6	---	11.6	12.0	12.3
Butter	Pound	49.2	58.4	58.1	37.5	46.7	58.4	57.1	39.0	49.9	58.7	59.8
Oleomargarine (all butter substitutes)	do.	31.6	31.0	31.4	---	31.4	32.2	32.4	---	29.8	31.2	31.7
Cheese	do.	32.0	34.7	34.5	21.3	34.1	37.4	37.0	22.5	31.5	34.9	35.1
Lard	do.	23.9	24.2	24.2	15.0	20.8	23.0	21.4	15.7	21.4	24.1	24.3
Vegetable lard substitute	do.	19.0	17.8	17.5	---	25.5	26.9	26.9	---	24.4	24.6	24.5
Eggs, strictly fresh	Dozen	54.4	47.1	54.7	43.5	60.1	50.2	64.5	45.0	66.2	69.3	72.1
Eggs, storage	do.	43.9	40.0	41.3	35.8	46.3	45.0	45.7	40.0	47.4	48.0	49.3
Bread	Pound	8.0	8.9	8.9	5.1	8.5	8.1	8.1	6.2	10.3	11.0	11.0
Flour	do.	5.4	6.0	6.0	3.2	5.4	5.8	5.8	3.7	5.8	6.8	6.6
Corn meal	do.	5.0	4.9	4.9	2.6	4.5	4.6	4.4	2.9	4.3	4.2	4.3
Rollod oats	do.	9.2	9.2	9.2	---	7.6	8.2	8.1	---	9.2	9.5	9.9
Corn flakes	8-oz. pkg.	11.0	12.0	11.8	---	10.0	10.2	10.1	---	10.9	11.6	11.6
Wheat cereal	28-oz. pkg.	24.4	25.4	25.5	---	24.9	24.8	24.8	---	25.1	24.8	25.0
Maccaroni	Pound	19.3	19.2	19.2	---	19.1	20.6	20.6	---	20.2	20.6	20.9
Rice	do.	9.5	9.7	9.8	9.2	10.7	11.5	11.6	6.8	9.6	10.8	10.6
Beans, navy	do.	11.1	11.1	10.7	---	9.3	8.9	8.8	---	10.6	10.9	11.0
Potatoes	do.	4.0	5.2	6.2	1.7	1.7	3.2	4.9	2.5	3.1	4.5	6.7
Onions	do.	6.3	6.0	6.3	---	4.7	6.2	6.1	---	6.9	8.0	8.0
Cabbage	do.	5.3	5.3	5.2	---	3.5	4.2	4.1	---	4.7	6.6	6.3
Beans, baked	No. 2 can	13.4	12.5	12.5	---	12.8	11.8	11.8	---	11.1	11.3	11.3
Corn, canned	do.	17.1	17.5	17.0	---	16.2	16.7	15.7	---	18.8	19.4	19.2
Peas, canned	do.	17.5	17.3	17.5	---	16.5	16.7	16.7	---	19.0	19.7	19.7
Tomatoes, canned	do.	13.5	12.0	11.4	---	14.4	14.4	14.2	---	12.0	11.3	11.2
Sugar, granulated	Pound	8.7	6.6	6.6	5.7	9.0	6.9	6.7	5.9	8.9	7.0	7.1
Tea	do.	73.2	74.2	74.2	60.0	79.5	78.8	79.2	60.0	93.9	95.3	94.7
Coffee	do.	45.9	43.4	45.6	30.0	49.1	51.2	51.4	34.5	49.1	51.8	50.8
Prunes	do.	18.3	16.7	16.8	---	19.3	19.1	19.8	---	17.7	18.4	17.9
Raisins	do.	15.4	14.9	14.3	---	15.6	15.5	15.0	---	16.1	15.3	15.8
Bananas	Dozen	31.0	31.1	29.4	---	30.8	29.6	30.0	---	32.0	28.6	28.6
Oranges	do.	43.2	50.7	56.1	---	42.7	59.1	58.8	---	30.6	49.3	53.9

CLES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued

Kansas City, Mo.			Little Rock, Ark.				Los Angeles, Calif.				Louisville, Ky.				Manchester, N. H.					
Nov. 15—		Oct. 15, 1925	Nov. 15, 1925	Nov. 15—		Oct. 15, 1925	Nov. 15, 1925	Nov. 15—		Oct. 15, 1925	Nov. 15, 1925	Nov. 15—		Oct. 15, 1925	Nov. 15, 1925	Nov. 15—		Oct. 15, 1925	Nov. 15, 1925	
1913	1924		1913	1924		1913	1924	1913	1924	1925	1925	1913	1924	1925	1925	1913	1924	1925	1925	
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
24.6	37.3	39.1	38.1	25.0	33.1	33.3	32.5	23.9	35.1	38.1	35.5	23.0	31.1	32.5	32.5	34.8	34.6	158.4	157.4	157.4
22.3	31.1	32.0	31.4	20.0	30.0	29.5	29.5	21.4	28.4	30.2	29.3	20.0	27.3	28.8	28.3	29.5	43.5	46.3	45.9	45.9
18.1	25.7	26.3	26.0	20.0	25.2	26.4	26.1	18.9	28.3	29.1	28.4	18.1	23.9	24.1	24.4	20.8	26.5	28.4	28.4	28.4
15.6	18.8	19.6	19.4	16.3	18.2	21.0	19.2	16.0	18.5	19.3	19.1	15.5	17.1	18.5	18.8	18.0	21.4	22.9	22.3	22.3
12.2	11.2	12.6	12.6	13.0	14.4	14.8	15.6	13.4	13.7	13.8	13.7	13.1	13.1	14.8	14.8	-----	15.3	15.9	15.7	15.7
20.8	27.4	37.2	35.4	21.0	30.7	35.0	34.0	26.0	39.5	47.3	43.7	19.6	27.8	33.5	33.6	22.0	30.4	38.5	39.5	39.5
36.9	42.0	52.0	51.3	36.7	40.3	50.6	48.8	33.5	48.4	58.2	58.2	28.6	35.4	48.8	47.1	24.0	34.9	43.5	43.6	43.6
28.8	46.6	55.0	55.7	27.5	48.0	51.3	50.7	35.0	59.0	68.3	67.3	29.0	41.8	47.7	46.3	28.3	40.7	47.7	46.4	46.4
18.3	33.5	33.7	33.6	18.8	38.1	41.7	40.0	18.6	32.4	37.8	37.8	18.2	35.6	36.3	38.8	20.0	35.6	37.7	38.0	38.0
15.8	30.0	31.5	30.9	18.8	29.8	32.4	30.8	26.3	40.8	42.2	42.4	23.0	35.2	36.8	37.1	23.7	41.8	42.0	42.2	42.2
-----	34.2	37.4	37.6	-----	31.4	38.5	38.1	-----	33.0	35.1	35.1	-----	29.9	31.9	32.9	-----	30.7	37.2	38.2	38.2
9.1	13.0	13.0	13.0	10.5	15.7	15.3	15.3	10.0	14.2	15.0	15.0	8.6	13.0	14.0	14.0	8.0	14.0	14.0	14.0	14.0
-----	11.5	11.9	11.8	-----	11.6	12.4	12.4	-----	9.5	10.2	10.2	-----	11.4	12.0	11.9	-----	12.8	13.1	13.0	13.0
39.1	46.9	58.1	56.8	45.6	48.3	58.9	58.8	39.7	49.3	65.2	65.2	40.0	49.3	59.9	58.8	41.8	48.0	58.4	60.1	60.1
-----	27.9	27.3	27.6	-----	30.1	29.1	29.4	-----	30.9	32.6	33.7	-----	30.6	32.1	33.0	-----	27.0	27.5	28.0	28.0
22.0	33.7	36.7	36.9	23.3	33.2	37.6	37.6	19.5	37.4	39.2	39.7	22.5	32.4	36.5	37.5	22.0	35.4	37.8	37.4	37.4
16.4	23.0	24.2	23.3	16.5	23.1	24.3	24.4	18.1	22.2	25.4	24.0	15.8	21.8	23.2	22.6	15.8	21.9	23.3	22.7	22.7
-----	26.8	27.8	27.5	-----	23.0	23.9	23.3	-----	25.6	25.6	25.6	-----	26.7	28.2	28.2	-----	24.4	26.3	26.3	26.3
35.5	59.3	47.8	60.9	37.5	52.4	51.0	55.7	58.8	66.5	65.5	63.9	41.3	58.7	40.7	71.1	60.0	82.3	73.1	82.0	82.0
32.5	48.7	41.0	42.3	-----	50.0	43.3	51.3	37.0	46.8	50.7	50.4	35.0	-----	44.0	47.0	40.0	51.0	50.6	50.3	50.3
6.0	8.4	9.7	9.8	6.0	8.1	8.8	8.8	6.0	9.1	9.3	9.3	5.7	8.9	9.3	9.3	5.9	8.3	8.7	8.6	8.6
3.6	5.2	5.9	5.9	3.6	5.8	6.6	6.6	3.5	5.2	5.5	5.6	3.5	5.8	6.6	6.5	3.4	5.7	6.1	6.1	6.1
2.9	5.5	5.4	5.5	2.8	4.2	4.2	4.3	3.4	5.3	5.6	5.4	2.4	4.3	4.2	4.1	3.4	5.0	5.4	5.5	5.5
-----	9.0	9.2	9.2	-----	9.6	10.4	10.2	-----	9.9	9.9	9.9	-----	8.4	8.6	8.4	-----	9.0	8.7	8.8	8.8
-----	10.8	12.4	12.4	-----	11.7	12.3	12.3	-----	10.5	10.1	10.1	-----	10.4	10.7	10.7	-----	10.9	11.5	11.4	11.4
-----	25.2	26.1	26.5	-----	24.8	24.6	24.6	-----	22.8	24.5	24.7	-----	24.6	24.2	24.2	-----	24.5	25.0	25.0	25.0
-----	21.4	21.1	21.1	-----	19.8	20.9	20.8	-----	17.5	17.4	17.5	-----	17.4	18.4	18.4	-----	24.0	24.2	24.5	24.5
8.7	9.9	10.5	10.4	8.3	9.8	10.7	9.9	7.7	10.9	11.2	11.1	8.7	10.1	11.5	11.6	8.8	10.1	10.9	11.2	11.2
-----	9.8	9.8	9.8	-----	9.9	9.8	9.8	-----	9.9	10.3	9.7	-----	8.6	8.3	8.3	-----	9.5	9.5	9.3	9.3
2.0	2.0	3.7	5.1	2.4	2.6	4.3	5.8	1.9	3.0	4.1	5.5	2.1	1.9	4.0	5.5	1.6	1.7	3.2	4.8	4.8
-----	6.2	6.8	6.9	-----	6.4	7.2	7.0	-----	5.6	5.8	5.8	-----	4.7	6.8	5.5	-----	4.7	4.8	4.9	4.9
-----	3.8	4.4	4.4	-----	4.3	4.7	4.8	-----	5.0	4.3	5.0	-----	4.0	5.2	5.5	-----	3.5	3.3	3.3	3.3
-----	13.9	13.6	13.6	-----	12.5	11.9	11.9	-----	12.4	11.6	11.6	-----	11.5	11.1	11.1	-----	14.3	14.3	14.2	14.2
-----	15.2	16.2	16.3	-----	16.1	17.4	17.4	-----	17.6	17.3	17.0	-----	15.7	18.2	18.0	-----	18.6	18.5	18.5	18.5
-----	15.9	16.6	16.4	-----	19.1	19.2	18.9	-----	18.5	18.5	18.4	-----	15.8	17.5	17.5	-----	21.5	20.0	20.2	20.2
-----	14.1	13.5	13.0	-----	13.2	12.7	12.9	-----	² 15.6	² 15.9	² 15.8	-----	12.3	12.5	12.1	-----	-----	13.9	13.8	13.8
5.7	9.1	7.2	6.8	5.3	9.5	7.2	7.4	5.3	8.9	6.5	6.3	5.3	9.1	7.1	6.9	5.3	8.9	6.7	6.8	6.8
54.0	78.2	79.0	79.3	50.0	91.2	102.2	100.8	54.5	74.6	76.5	76.5	65.0	73.6	76.3	76.3	47.5	59.8	62.1	62.2	62.2
27.8	51.2	52.5	53.3	30.8	52.3	56.1	56.1	36.3	53.7	53.3	53.9	27.5	49.8	51.0	51.8	32.0	50.6	52.5	52.5	52.5
-----	17.1	17.5	18.0	-----	17.9	18.1	17.7	-----	15.7	16.1	16.1	-----	14.9	18.3	18.9	-----	15.8	15.6	16.1	16.1
-----	15.8	15.5	15.4	-----	16.0	16.1	16.1	-----	12.2	12.0	12.2	-----	14.1	14.9	14.5	-----	14.3	14.3	14.3	14.3
-----	13.4	10.7	10.5	-----	³ 10.9	³ 8.9	³ 9.4	-----	³ 12.6	³ 9.7	³ 9.4	-----	37.0	37.0	37.0	-----	³ 10.6	³ 8.3	³ 8.5	³ 8.5
-----	53.9	60.0	69.0	-----	42.3	59.3	60.7	-----	45.4	61.5	56.3	-----	41.3	62.1	60.9	-----	50.6	60.9	63.6	63.6

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

² No. 2½ can.

³ Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

Article	Unit	Memphis, Tenn.				Milwaukee, Wis.				Minneapolis, Minn.			
		Nov. 15—		Oct. 15, 1925	Nov. 15, 1925	Nov. 15—		Oct. 15, 1925	Nov. 15, 1925	Nov. 15—		Oct. 15, 1925	Nov. 15, 1925
		1913	1924			1913	1924			1913	1924		
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Sirloin steak	Pound	24.0	32.5	35.0	34.4	23.6	36.7	38.2	36.9	20.0	28.3	31.5	30.5
Round steak	do	20.0	28.6	32.3	31.7	21.6	31.7	33.9	31.0	18.7	25.0	28.4	27.4
Rib roast	do	21.0	24.3	25.8	25.4	18.4	27.3	28.1	26.4	17.7	22.2	24.7	24.1
Chuck roast	do	15.0	17.7	18.9	19.0	16.2	22.3	23.5	23.0	15.3	17.2	18.6	18.7
Plate beef	do	12.5	13.5	14.3	14.8	12.1	12.8	14.2	13.8	10.1	9.9	10.9	11.1
Pork chops	do	20.5	26.2	34.0	33.8	19.6	27.4	37.5	34.0	18.0	27.6	35.7	33.7
Bacon, sliced	do	30.9	37.3	44.7	45.4	27.8	39.4	48.0	47.3	27.7	42.5	50.3	50.0
Ham, sliced	do	29.0	45.4	51.3	51.3	28.2	45.9	50.3	49.3	30.0	47.2	52.3	51.3
Lamb, leg of	do	20.6	36.8	37.5	37.3	19.0	34.0	37.9	37.7	14.6	31.4	34.4	34.0
Hens	do	19.5	30.5	34.0	31.8	17.2	29.5	31.2	30.2	16.4	30.1	30.8	30.3
Salmon, canned, red	do	38.9	32.4	32.3	32.3	34.7	31.3	31.6	31.6	36.6	35.2	36.3	36.3
Milk, fresh	Quart	10.0	15.0	15.3	15.3	7.0	10.0	10.0	10.0	8.0	11.0	12.0	12.0
Milk, evaporated	15-16 oz. can	11.2	11.4	11.6	11.6	10.8	11.4	11.3	11.3	11.2	12.0	12.1	12.1
Butter	Pound	38.8	45.5	56.0	56.5	36.6	45.8	56.7	56.9	36.3	44.1	55.6	55.7
Oleomargarine (all but- ter substitutes).	do	24.9	26.1	26.0	26.0	29.1	30.0	30.6	30.6	27.6	28.4	28.8	28.8
Cheese	do	22.0	29.8	33.9	34.2	22.3	31.8	34.8	35.0	21.3	31.7	36.4	36.5
Lard	do	15.6	20.1	21.8	20.8	16.0	22.5	24.4	23.6	15.6	22.1	23.1	22.8
Vegetable lard substitute	do	24.3	24.2	24.2	24.2	26.1	26.9	26.8	26.8	27.4	27.4	27.4	27.4
Eggs, strictly fresh	Dozen	38.0	53.0	46.7	53.7	45.0	61.1	52.2	62.6	41.6	55.1	48.5	52.9
Eggs, storage	do	30.0	45.0	41.0	43.3	33.0	43.6	41.8	43.4	31.6	44.8	42.0	44.6
Bread	Pound	6.0	9.1	9.7	9.7	5.7	9.2	9.0	9.0	5.6	8.9	10.0	9.0
Flour	do	3.5	5.8	6.8	6.8	3.1	4.9	5.3	5.3	2.8	4.2	5.4	5.5
Corn meal	do	2.5	4.3	3.9	3.9	3.3	5.2	5.5	5.5	2.5	4.8	5.5	5.3
Rollod oats	do	0.2	0.2	0.5	0.5	0.2	8.3	8.7	8.6	0.2	8.3	8.4	8.3
Corn flakes	8-oz. pkg	10.8	11.2	11.1	11.1	9.8	10.5	10.5	10.5	10.8	10.9	10.8	10.8
Wheat cereal	28-oz. pkg	23.7	25.5	26.0	26.0	23.9	24.2	24.3	24.3	23.9	25.7	25.8	25.8
Macaroni	Pound	17.3	19.6	19.6	19.6	17.5	18.6	18.7	18.7	17.4	18.6	18.9	18.9
Rice	do	8.1	9.5	10.3	10.3	9.0	10.8	11.5	11.6	8.6	10.7	11.6	11.6
Beans, navy	do	9.8	9.5	9.5	9.5	9.3	9.1	9.2	9.2	9.5	9.5	9.3	9.3
Potatoes	do	2.0	2.9	4.0	5.6	1.7	1.7	2.4	4.1	1.6	1.3	2.7	4.3
Onions	do	4.7	5.3	5.3	5.3	4.5	4.8	4.7	4.7	4.9	5.1	5.1	5.1
Cabbage	do	3.4	3.8	3.9	3.9	3.0	2.9	3.9	3.9	2.2	3.9	4.0	4.0
Beans, baked	No. 2 can	12.4	12.0	12.1	12.1	11.7	11.4	11.4	11.4	13.6	13.1	13.1	13.1
Corn, canned	do	15.9	16.8	16.6	16.6	16.6	16.9	16.9	16.9	15.3	16.5	16.4	16.4
Peas, canned	do	18.8	18.4	18.4	18.4	17.0	16.9	16.8	16.8	16.7	16.1	16.0	16.0
Tomatoes, canned	do	12.6	12.1	12.0	12.0	14.3	14.7	14.4	14.4	14.7	14.5	14.6	14.6
Sugar, granulated	Pound	5.1	8.8	7.0	6.8	5.3	8.4	6.4	6.1	5.1	9.1	6.8	6.4
Tea	do	63.8	85.5	97.2	96.4	50.0	70.0	71.8	71.9	45.0	63.9	62.1	62.1
Coffee	do	27.5	49.2	51.1	50.4	27.5	44.7	47.4	47.4	30.8	50.5	54.2	54.1
Prunes	do	16.9	17.1	17.3	17.3	18.5	17.3	17.3	17.3	17.3	17.2	17.0	17.0
Raisins	do	15.2	14.6	14.6	14.6	14.7	14.5	14.4	14.4	15.4	14.3	14.2	14.2
Bananas	Dozen	33.3	33.0	30.0	30.0	31.2	30.2	30.2	30.2	31.3	30.9	30.5	30.5
Oranges	do	42.4	65.5	61.2	61.2	54.3	66.0	70.2	70.2	57.6	62.2	71.4	71.4

1 Whole.

2 No. 3 can.

3 Per pound.

RETAIL PRICES OF FOOD

CLES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued

Mobile, Ala.			Newark, N. J.					New Haven, Conn.					New Orleans, La.					New York, N. Y.			
Nov. 15, 1924	Oct. 15, 1925	Nov. 15, 1925	Nov. 15—		Oct. 15, 1925	Nov. 15, 1925	Nov. 15—		Oct. 15, 1925	Nov. 15, 1925	Nov. 15—		Oct. 15, 1925	Nov. 15, 1925	Nov. 15—		Oct. 15, 1925	Nov. 15, 1925			
			1913	1924			1913	1924			1913	1924			1913	1924					
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.		
30.3	32.5	32.9	27.4	45.1	47.2	45.8	32.2	51.1	55.1	54.6	21.5	32.0	34.3	33.0	25.9	42.9	47.6	45.5	45.0		
29.3	31.3	31.7	27.3	42.5	44.8	42.1	29.6	42.7	44.6	44.5	19.0	28.4	29.9	29.1	25.4	41.0	44.8	43.0	43.0		
24.7	26.3	25.4	21.3	35.2	36.8	35.9	23.8	34.5	36.1	35.9	18.0	28.1	29.1	29.0	21.3	36.6	40.8	39.2	39.2		
19.5	20.8	20.4	17.8	24.2	25.7	25.0	19.6	25.3	27.6	26.7	14.9	19.2	20.5	19.7	16.0	22.8	26.2	25.2	25.2		
15.6	16.1	16.0	12.4	12.7	13.8	13.8	-----	14.4	14.7	16.0	11.9	16.7	16.8	17.5	14.5	18.5	21.0	20.6	20.6		
36.5	39.2	40.4	23.7	32.0	39.5	37.2	23.0	30.3	40.6	39.4	24.5	30.7	37.9	36.6	22.6	33.9	42.6	40.7	40.7		
38.6	44.0	44.8	25.3	39.7	45.1	45.2	28.8	39.6	50.5	50.4	30.5	38.7	47.1	46.5	25.6	39.0	50.0	49.5	49.5		
43.8	50.7	50.7	19.8	27.3	54.7	53.2	32.4	52.5	58.1	57.5	26.0	44.9	50.4	49.6	27.8	52.1	59.5	59.4	59.4		
36.9	38.8	39.4	19.7	36.2	38.5	38.2	19.8	36.8	39.7	39.5	20.5	35.9	40.2	38.7	15.1	34.8	37.0	36.9	36.9		
34.3	36.4	36.4	22.0	37.8	37.6	37.7	23.8	39.5	42.2	42.2	20.5	34.2	36.3	35.0	21.1	37.9	39.3	38.0	38.0		
29.0	35.3	36.9	-----	26.8	34.3	35.1	-----	30.5	32.4	33.9	-----	*38.4	37.3	37.7	-----	29.2	34.3	34.9	34.9		
20.0	17.8	17.8	9.0	16.0	15.0	15.0	9.0	16.0	16.0	16.0	9.8	14.0	14.0	14.0	9.0	15.0	15.0	15.0	15.0		
11.2	12.1	12.1	-----	10.5	11.2	11.2	-----	11.6	12.1	12.2	-----	10.4	11.1	11.0	-----	10.3	11.2	11.2	11.2		
49.0	60.3	60.6	42.7	51.6	60.8	61.1	36.3	47.6	53.2	53.8	38.1	45.3	57.9	58.8	39.9	50.1	60.5	60.9	60.9		
30.6	30.5	30.8	-----	31.3	31.3	31.3	-----	32.0	33.3	33.2	-----	31.2	31.9	32.0	-----	29.9	30.1	30.3	30.3		
33.8	35.7	37.2	24.8	38.1	39.7	39.8	23.5	36.7	38.6	38.9	21.9	32.9	35.7	35.8	20.2	36.4	37.7	37.8	37.8		
22.5	23.8	23.2	16.3	22.0	21.4	23.4	15.7	22.2	24.6	23.8	15.0	21.8	23.0	22.6	16.2	23.3	24.7	24.1	24.1		
21.2	21.5	21.1	-----	25.1	26.3	26.3	-----	24.8	25.8	25.8	-----	22.2	22.8	22.5	-----	25.9	25.8	25.8	25.8		
56.3	50.0	53.2	67.0	82.0	74.8	81.6	59.7	80.4	79.4	92.2	41.3	53.9	50.0	54.9	56.1	80.1	72.8	82.5	82.5		
49.8	43.3	47.9	36.8	51.4	46.8	47.6	33.0	51.3	47.0	49.6	30.0	43.5	38.3	43.3	37.3	49.1	48.5	48.5	48.5		
9.2	9.6	9.6	5.6	8.7	9.1	9.2	6.0	8.3	8.9	8.9	4.8	8.3	8.9	8.9	6.0	9.5	9.6	9.6	9.6		
5.8	6.7	6.6	3.6	5.4	5.8	5.9	3.2	5.4	5.9	5.8	3.7	6.2	7.4	7.4	3.2	5.5	6.1	6.0	6.0		
4.6	4.2	4.0	3.6	6.7	6.5	6.6	3.2	6.3	6.9	6.7	2.8	4.5	4.5	4.4	3.5	6.2	6.5	6.6	6.6		
8.5	8.9	8.8	-----	8.2	8.4	8.3	-----	9.1	9.1	9.2	-----	9.2	9.0	9.1	-----	8.7	8.7	8.6	8.6		
11.1	11.3	11.3	-----	9.4	10.1	10.1	-----	10.4	10.9	10.9	-----	10.5	10.5	10.5	-----	10.0	10.0	10.0	10.0		
23.7	24.3	24.8	-----	23.2	24.0	24.0	-----	23.6	24.6	24.9	-----	23.7	24.6	24.4	-----	22.7	23.8	23.8	23.8		
20.1	20.6	20.8	-----	20.9	21.1	21.1	-----	22.6	22.9	23.0	-----	8.9	9.6	9.6	-----	20.6	21.3	21.2	21.2		
9.7	10.4	10.6	9.0	9.9	10.8	10.7	9.3	10.9	11.8	12.1	7.5	9.3	9.8	9.9	8.0	10.0	10.5	10.6	10.6		
10.6	10.0	9.5	-----	10.1	10.1	10.0	-----	9.6	9.9	10.1	-----	9.8	9.2	9.0	-----	10.6	11.3	11.1	11.1		
3.0	4.3	5.5	2.7	2.3	4.1	5.4	1.8	2.1	3.7	5.3	2.2	2.9	4.1	5.9	2.3	2.7	4.1	5.7	5.7		
4.9	5.7	5.5	-----	5.0	5.4	5.4	-----	5.4	6.1	6.2	-----	4.9	5.2	5.2	-----	4.6	5.8	5.6	5.6		
4.5	4.8	4.8	-----	4.0	4.5	4.8	-----	3.9	4.9	4.8	-----	3.6	4.4	4.7	-----	3.3	4.2	4.3	4.3		
11.6	11.1	11.0	-----	11.3	11.5	11.5	-----	12.1	11.6	11.9	-----	12.2	11.4	11.4	-----	11.6	11.5	11.5	11.5		
16.9	18.2	17.6	-----	15.5	16.8	17.2	-----	17.8	19.2	18.9	-----	16.2	15.6	15.6	-----	16.5	16.3	16.2	16.2		
16.8	16.7	16.2	-----	18.7	17.8	17.2	-----	20.1	20.7	20.1	-----	17.1	17.6	16.5	-----	17.7	16.7	16.3	16.3		
12.5	12.0	11.6	-----	12.1	11.6	11.4	-----	22.2	23.0	22.7	-----	12.8	12.1	11.8	-----	13.1	11.4	11.4	11.4		
8.9	6.6	6.6	5.2	8.4	6.3	6.0	5.2	8.9	6.6	6.5	5.1	8.1	5.9	6.0	4.9	8.2	5.9	5.8	5.8		
80.2	79.7	79.7	53.8	57.6	62.2	61.8	55.0	59.7	58.5	58.5	62.1	81.2	82.2	82.2	43.3	62.4	64.1	64.2	64.2		
48.1	51.6	51.3	29.3	46.2	49.2	49.4	33.8	50.6	53.0	52.8	25.7	43.8	37.5	37.7	27.2	45.8	47.5	47.8	47.8		
17.0	17.6	17.6	-----	16.1	16.2	16.0	-----	16.8	17.5	17.2	-----	18.5	18.4	18.8	-----	16.1	16.1	16.0	16.0		
16.4	14.3	14.7	-----	14.0	13.6	13.7	-----	14.3	14.0	13.9	-----	14.8	13.9	13.6	-----	14.9	14.3	14.3	14.3		
27.5	22.1	21.4	-----	36.3	38.4	37.2	-----	33.9	33.8	33.5	-----	20.0	17.9	18.0	-----	39.0	37.8	39.2	39.2		
35.7	50.0	55.0	-----	52.8	70.3	77.0	-----	50.5	66.1	74.5	-----	41.5	58.8	55.0	-----	56.9	82.3	91.3	91.3		

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

Article	Unit	Norfolk, Va.			Omaha, Nebr.				Peoria, Ill.		
		Nov. 15, 1924	Oct. 15, 1925	Nov. 15, 1925	Nov. 15—		Oct. 15, 1925	Nov. 15, 1925	Nov. 15, 1924	Oct. 15, 1925	Nov. 15, 1925
					1913	1924					
Sirloin steak	Pound	Cts. 39.2	Cts. 40.7	Cts. 40.3	Cts. 25.9	Cts. 36.1	Cts. 38.4	Cts. 36.8	Cts. 33.7	Cts. 34.3	Cts. 32.5
Round steak	do	33.3	34.6	33.7	23.1	31.9	34.3	33.1	31.2	33.4	31.6
Rib roast	do	31.6	32.6	31.6	20.0	25.1	27.2	26.4	22.5	23.8	23.0
Chuck roast	do	21.4	22.3	22.6	17.0	20.4	21.4	21.2	19.7	20.4	19.5
Plate beef	do	14.9	16.2	15.7	11.1	10.8	11.7	12.2	12.6	13.4	13.3
Pork chops	do	29.6	36.1	35.8	21.1	31.7	38.6	36.8	28.4	35.2	32.6
Bacon, sliced	do	34.8	48.2	48.1	28.8	42.4	52.5	52.2	41.8	51.0	50.0
Ham, sliced	do	40.6	45.4	44.6	31.3	47.8	56.6	55.5	46.2	52.9	51.4
Lamb, leg of	do	36.4	40.2	41.4	16.7	36.6	38.5	37.7	36.3	37.5	36.8
Hens	do	33.8	36.8	35.7	16.3	28.9	30.8	29.1	31.5	31.5	31.1
Salmon, canned, red	do	31.0	33.1	34.6		32.9	37.5	37.8	32.0	37.3	37.6
Milk, fresh	Quart	17.0	17.0	17.0	8.7	12.1	12.1	12.1	12.0	12.0	12.0
Milk, evaporated	15-16 oz. can.	10.6	11.5	11.4		11.1	11.7	11.8	11.3	11.7	11.6
Butter	Pound	50.4	59.7	59.9	37.0	44.5	54.6	55.1	46.5	55.3	55.7
Oleomargarine (all butter substitute)	do	28.7	27.6	27.5		29.9	30.2	31.3	31.1	31.5	31.2
Cheese	do	31.8	34.4	34.8	23.3	32.8	36.8	36.9	33.8	35.5	35.8
Lard	do	21.1	23.1	22.8	17.7	24.4	26.2	25.7	22.6	24.1	23.7
Vegetable lard substitute	do	22.0	22.5	22.2		27.4	28.2	28.0	27.2	27.3	27.4
Eggs, strictly fresh	Dozen	66.0	55.4	63.9	43.3	50.1	43.8	48.7	56.8	47.7	60.1
Eggs, storage	do	47.7	44.8	46.1	30.0	43.9	41.0	43.8	42.6	42.8	45.8
Bread	Pound	8.1	9.5	9.5	5.2	9.4	9.8	9.8	8.6	10.0	10.0
Flour	do	5.4	6.1	6.0	2.7	4.6	5.3	5.2	5.3	5.8	5.8
Corn meal	do	4.6	4.7	4.8	2.7	4.9	5.0	5.0	4.9	5.1	5.0
Rolled oats	do	7.9	8.6	8.6		10.3	10.4	10.7	8.8	9.3	9.2
Corn flakes	8-oz. pkg.	10.3	10.4	10.4		12.1	12.5	12.5	11.4	12.1	12.0
Wheat cereal	28-oz. pkg.	24.3	23.9	23.9		24.8	26.7	27.8	25.4	25.3	25.3
Macaroni	Pound	19.7	19.3	19.5		21.0	21.6	21.6	19.4	21.1	20.8
Rice	do	11.0	11.5	11.4	8.5	10.1	10.6	10.8	10.6	11.8	11.6
Beans, navy	do	9.8	9.5	9.1		10.1	10.1	9.9	9.6	8.9	8.9
Potatoes	do	2.5	4.0	5.8	1.8	1.7	3.7	5.5	1.8	3.5	4.9
Onions	do	5.0	6.4	6.4		5.1	5.9	5.7	5.8	6.4	6.2
Cabbage	do	3.4	4.2	4.1		3.4	4.2	4.1	3.5	3.6	4.6
Beans, baked	No. 2 can	9.9	10.1	10.1		14.8	14.6	14.6	12.4	11.7	11.8
Corn, canned	do	15.3	16.7	16.1		16.4	17.0	16.7	14.5	16.5	16.6
Peas, canned	do	19.2	21.3	21.3		17.0	17.1	16.9	18.6	18.8	18.8
Tomatoes, canned	do	12.6	10.6	10.6		14.8	15.3	15.2	15.6	15.2	14.4
Sugar, granulated	Pound	8.3	6.2	6.0	5.7	9.1	7.2	6.7	9.5	7.5	7.4
Tea	do	83.7	92.0	91.4	56.0	77.4	76.8	77.1	61.8	62.9	64.2
Coffee	do	47.4	49.8	49.3	30.0	52.1	57.5	57.5	49.3	52.1	52.1
Prunes	do	15.9	16.2	16.5		17.5	18.0	17.9	19.4	19.6	19.6
Raisins	do	13.7	14.0	14.0		16.5	16.2	16.0	15.4	14.9	14.3
Bananas	Dozen	34.3	35.0	33.8		13.5	10.3	9.9	13.1	9.1	9.4
Oranges	do	45.0	63.6	60.5		46.0	54.1	56.6	48.1	62.7	65.4

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

RETAIL PRICES OF FOOD

CLES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued

Philadelphia, Pa.			Pittsburgh, Pa.			Portland, Me.			Portland, Oreg.			Providence, R. I.			
Nov. 15—		Nov. 15, 1925	Nov. 15—		Nov. 15, 1925	Nov. 15—		Nov. 15, 1925	Nov. 15—		Nov. 15, 1925	Nov. 15—		Nov. 15, 1925	Nov. 15, 1925
1913	1924		1913	1924		1913	1924		1913	1924		1913	1924	1925	1925
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
30.5	50.0	55.6	54.8	27.3	44.3	46.6	45.9	57.4	61.6	59.6	22.9	27.9	28.6	23.0	39.8
25.7	37.8	42.0	39.6	24.0	36.4	39.0	37.5	43.3	46.8	45.1	21.0	24.6	25.7	25.2	31.0
21.5	33.3	37.3	36.5	21.7	32.9	33.1	33.1	28.3	30.6	30.0	19.1	23.1	24.5	24.4	24.2
18.0	21.5	23.8	23.2	17.3	22.9	24.3	24.1	19.6	21.4	20.7	16.7	15.7	16.7	16.6	18.8
12.0	11.0	11.7	11.7	12.8	11.4	12.4	12.3	14.9	16.6	16.2	13.5	11.1	12.1	12.1	18.7
22.5	34.5	42.7	39.9	22.5	33.0	41.0	37.6	32.3	42.1	40.3	21.4	31.0	38.8	36.8	22.0
23.9	37.0	48.5	47.3	30.4	42.8	52.0	57.3	37.9	45.9	46.0	30.3	44.5	53.9	52.1	22.8
30.4	52.6	59.9	58.4	29.8	53.6	59.3	59.0	47.5	55.1	54.3	30.0	48.8	53.6	52.5	32.7
18.8	37.3	40.2	40.2	20.3	37.8	40.3	39.5	34.5	37.3	39.1	17.5	32.2	34.7	34.9	18.7
23.1	37.7	40.5	40.3	23.8	39.7	42.0	41.3	38.5	40.8	39.8	20.3	30.1	31.7	32.1	25.0
---	28.5	36.2	37.6	---	28.6	35.7	36.7	28.8	37.8	38.3	---	37.5	33.5	32.3	---
8.0	12.3	12.0	12.0	9.2	14.0	14.5	14.5	14.0	13.5	13.5	9.7	11.7	12.7	12.7	9.0
---	11.3	11.4	11.5	---	10.6	11.7	11.8	12.1	12.4	12.5	---	10.4	10.4	10.4	---
44.3	63.6	62.9	63.4	40.4	51.6	60.4	60.7	51.3	60.0	59.9	40.4	46.8	60.9	62.9	38.4
---	31.5	32.1	32.7	---	30.4	32.8	32.6	29.3	29.1	29.5	---	29.8	30.4	31.5	---
25.0	37.2	39.2	40.3	24.5	37.4	38.9	38.7	35.8	37.9	38.1	20.8	36.2	38.4	39.4	22.0
15.5	21.7	24.2	23.4	15.7	21.5	23.9	23.1	21.8	24.2	22.8	17.8	23.2	25.6	24.8	15.8
---	25.3	25.6	25.7	---	25.7	26.2	26.3	23.7	25.5	25.3	---	28.9	29.5	29.2	---
50.8	71.6	66.7	77.0	46.3	68.2	60.0	71.9	84.4	75.8	85.7	55.0	63.0	55.7	60.5	63.0
34.7	46.6	46.7	48.6	33.4	47.5	44.7	47.9	50.9	51.2	51.9	37.5	46.7	48.0	49.0	36.8
4.8	8.6	9.3	9.3	5.4	8.5	9.3	9.3	9.3	10.0	10.0	5.5	9.6	9.6	9.6	6.1
3.2	5.3	5.8	5.7	3.2	5.3	5.8	5.8	5.5	5.9	5.9	2.9	5.1	5.2	5.3	2.9
2.9	5.0	5.2	5.1	3.0	5.5	5.8	5.5	5.1	6.4	5.2	3.5	5.1	5.7	5.7	3.1
---	8.2	8.7	8.7	---	9.1	9.3	9.4	7.8	7.5	7.5	---	10.2	10.3	10.3	---
---	9.9	10.0	10.1	---	10.2	10.5	10.6	11.3	11.6	11.6	---	11.4	11.2	11.3	---
---	23.4	24.4	24.6	---	24.2	25.3	25.3	24.6	25.7	25.6	---	26.1	26.4	26.6	---
---	20.4	21.5	21.5	---	22.4	23.3	23.4	24.6	25.0	24.5	---	17.4	18.0	18.0	---
9.8	12.1	12.0	12.0	9.2	10.9	11.9	12.0	11.1	12.4	12.3	8.6	10.8	11.4	11.2	9.3
---	10.1	9.6	9.3	---	9.6	9.3	9.2	10.4	10.2	10.2	---	10.2	11.0	10.2	---
2.3	2.6	4.0	5.9	2.0	2.2	3.4	4.7	1.7	3.4	5.1	1.2	2.2	2.9	3.8	1.7
---	4.2	5.5	5.6	---	5.4	5.9	6.0	4.9	5.1	5.4	---	4.4	4.0	4.4	---
---	3.4	5.3	4.7	---	3.7	5.0	4.6	2.3	3.6	3.5	---	3.2	2.8	2.8	---
---	11.0	10.9	10.9	---	12.5	12.8	12.8	15.1	15.2	14.9	---	14.6	14.6	14.6	---
---	15.3	15.8	15.3	---	16.7	17.4	17.5	17.4	17.6	16.5	---	19.7	20.5	19.7	---
---	16.4	15.6	15.4	---	18.3	18.1	18.0	20.4	19.5	19.5	---	19.9	19.6	19.6	---
---	12.5	12.1	11.8	---	13.9	13.5	13.3	23.4	13.6	11.9	3	16.8	17.1	17.1	---
5.0	8.0	6.2	6.1	5.7	9.0	6.9	6.9	8.7	6.6	6.5	6.1	9.5	6.8	6.9	5.0
54.0	61.7	70.2	70.7	58.0	78.6	82.0	82.1	60.2	61.1	61.1	55.0	75.4	75.2	75.2	48.3
24.5	41.6	45.3	45.6	30.0	48.0	51.1	51.8	53.6	54.5	54.5	35.0	51.8	52.4	52.6	30.0
---	15.9	14.9	14.4	---	19.1	18.5	18.2	16.0	15.7	15.8	---	10.5	12.8	14.5	---
---	13.9	13.3	13.5	---	14.3	14.2	14.1	13.6	12.9	13.1	---	13.4	13.5	13.1	---
---	31.9	32.2	31.6	---	41.8	38.7	37.3	40.9	49.8	40.0	---	16.6	13.1	12.8	---
---	47.3	68.8	71.3	---	50.2	62.7	66.2	54.0	72.4	66.1	---	49.6	59.2	58.1	---

² No. 3 can.

³ No. 2½ can.

⁴ Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

Articles	Unit	Richmond, Va				Rochester, N. Y.				St. Louis, Mo.			
		Nov. 15—		Oct.	Nov.	Nov.	Oct.	Nov.	Nov. 15—		Oct.	Nov.	
		1913	1924	1925	1925	1924	1925	1925	1913	1924	1925	1925	
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	
Sirloin steak	Pound	22.2	39.1	39.9	40.3	39.4	42.4	39.4	26.6	35.4	38.3	36.6	
Round steak	do	20.0	34.3	34.7	35.1	32.8	35.6	33.6	23.6	33.0	35.5	34.3	
Rib roast	do	18.9	30.3	31.4	32.4	29.4	30.7	29.7	20.1	28.6	30.2	29.9	
Chuck roast	do	15.9	21.5	22.7	23.8	23.2	25.6	23.9	16.0	19.2	21.8	20.9	
Plate beef	do	13.2	15.0	15.8	15.8	12.2	13.9	13.3	12.4	13.2	14.2	14.2	
Pork chops	do	21.2	32.6	40.5	38.2	36.0	44.1	39.5	17.8	28.2	34.3	32.5	
Bacon, sliced	do	27.2	35.1	46.7	46.4	36.5	45.0	43.5	25.8	38.9	46.8	45.8	
Ham, sliced	do	25.0	39.4	44.5	44.6	46.2	52.9	51.9	27.3	44.6	51.5	50.3	
Lamb, leg of	do	19.3	43.3	45.7	45.6	35.5	38.3	38.1	18.3	34.7	37.7	38.0	
Hens	do	19.5	32.9	35.4	35.0	38.8	41.0	39.3	16.5	30.8	32.6	31.7	
Salmon, canned, red	do		32.8	34.8	35.8	30.1	36.9	37.6		33.3	38.0	37.9	
Milk, fresh	Quart	10.0	14.0	14.0	14.0	13.5	12.5	12.5	8.8	13.0	13.0	13.0	
Milk, evaporated	15-16 oz. can		12.6	12.7	12.7	11.6	11.5	11.6		9.8	10.6	10.7	
Butter	Pound	41.2	53.2	62.3	62.7	48.5	59.1	59.1	38.1	49.1	60.2	61.0	
Oleomargarine (all butter substitutes)	do		31.1	31.0	31.7	30.4	32.0	31.8		27.5	27.6	28.3	
Cheese	do	22.8	35.6	36.9	36.5	35.5	38.4	38.2	20.3	32.3	35.8	26.0	
Lard	do	15.4	22.1	23.2	23.2	22.8	23.2	22.5	12.9	15.5	20.6	18.6	
Vegetable lard substitute	do		25.5	26.1	26.2	24.4	24.8	23.8		25.7	26.6	26.5	
Eggs, strictly fresh	Dozen	40.0	60.2	51.4	61.8	75.9	61.6	72.7	38.9	59.1	48.6	61.0	
Eggs, storage	do	33.0	47.8	44.3	46.9	48.9	45.9	47.0	32.5	41.1	39.8	43.9	
Bread	Pound	5.3	8.7	9.4	9.4	8.3	8.9	8.9	5.6	9.1	9.9	9.9	
Flour	do	3.2	5.5	6.0	6.0	5.5	5.9	5.9	2.9	5.0	5.7	5.8	
Corn meal	do	2.3	5.0	5.0	5.0	5.7	6.6	6.5	2.5	4.6	4.6	4.6	
Rollod oats	do		9.4	9.3	9.4	8.3	9.4	9.4		8.4	8.9	8.8	
Corn flakes	8-oz. pkg		10.4	11.3	11.3	10.5	10.4	10.3		10.1	10.2	10.1	
Wheat cereal	28-oz. pkg		25.3	25.7	25.4	24.0	25.0	25.1		23.7	24.2	24.7	
Macaroni	Pound		20.8	21.1	21.1	19.6	21.8	21.8		21.1	21.5	21.5	
Rice	do	10.0	12.4	12.7	12.8	10.6	11.4	11.1	8.1	9.9	10.5	10.7	
Beans, navy	do		11.2	10.2	10.0	9.6	10.1	10.0		9.0	8.5	8.4	
Potatoes	do	2.0	3.0	4.5	6.1	1.4	3.1	4.8	1.8	2.1	3.0	5.2	
Onions	do		6.3	7.0	6.7	4.5	5.4	5.0		4.9	6.0	5.7	
Cabbage	do		4.4	4.8	4.9	2.2	2.8	3.2		3.0	3.4	4.0	
Beans, baked	No. 2 can		11.1	10.8	10.8	11.2	10.9	10.9		11.2	11.2	11.2	
Corn, canned	do		15.2	16.2	16.2	17.2	17.3	16.9		16.3	16.4	16.2	
Peas, canned	do		19.9	20.5	20.3	20.1	18.9	18.9		17.5	16.8	16.8	
Tomatoes, canned	do		12.5	12.1	11.7	14.0	14.0	13.8		13.5	12.9	12.6	
Sugar, granulated	Pound		5.4	8.6	6.7	6.6	8.3	6.0	5.1	8.8	6.8	6.5	
Tea	do		56.0	86.9	89.1	88.5	64.7	66.6	55.0	71.2	70.5	71.0	
Coffee	do		27.4	47.5	49.9	49.9	45.4	49.5	24.4	47.9	48.9	49.0	
Prunes	do		19.2	18.6	19.1	19.0	18.7	18.3		19.3	19.5	19.0	
Raisins	do		14.8	14.4	14.4	14.4	13.9	14.0		15.2	14.4	14.7	
Bananas	Dozen		39.2	36.5	36.2	42.1	37.7	36.8		34.7	33.1	32.7	
Oranges	do		46.8	66.9	66.8	54.3	55.8	72.5		47.8	59.6	59.2	

1 No. 2½ can.

2 Per pound.

RETAIL PRICES OF FOOD

CLES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued

St. Paul, Minn.				Salt Lake City, Utah				San Francisco, Calif.				Savannah, Ga.			Scranton, Pa.			
Nov. 15—		Oct. 15, 1925	Nov. 15, 1925	Nov. 15—		Oct. 15, 1925	Nov. 15, 1925	Nov. 15—		Oct. 15, 1925	Nov. 15, 1925	Nov. 15, 1925	Oct. 15, 1925	Nov. 15, 1925	Nov. 15—		Oct. 15, 1925	Nov. 15, 1925
1913	1924			1913	1924			1913	1924						1913	1924		
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
25.0	33.6	35.1	33.4	22.4	27.7	28.5	27.8	21.0	30.3	31.9	31.4	28.7	31.3	31.3	26.0	48.9	52.6	52.1
20.8	27.8	29.3	27.9	20.0	24.1	25.8	25.1	19.7	27.6	28.7	28.6	23.3	25.8	25.8	21.5	39.7	44.7	43.1
20.0	26.1	28.0	27.5	19.0	21.0	21.9	20.9	21.3	29.0	30.3	29.9	21.7	25.0	25.0	23.0	35.9	37.6	37.6
16.0	20.9	22.5	21.3	14.5	15.9	17.0	16.4	15.5	18.3	19.3	19.3	14.4	15.7	15.7	17.6	26.3	29.5	28.9
10.8	11.5	12.1	12.1	12.5	11.1	11.6	11.9	14.3	14.3	15.1	15.1	10.9	13.8	13.8	11.9	10.8	13.0	12.7
18.8	28.7	34.8	33.8	23.4	32.5	39.1	36.9	24.2	39.5	45.6	45.1	28.9	34.8	34.8	21.8	35.4	44.5	43.1
25.3	40.4	48.2	48.9	30.0	39.1	48.5	47.3	34.4	52.2	62.2	62.2	34.2	45.2	44.6	27.5	42.6	50.6	50.4
28.3	42.8	50.4	48.8	30.0	45.3	52.0	51.2	32.0	54.8	63.8	64.2	36.1	45.0	45.0	29.3	59.7	59.2	53.8
16.1	30.1	33.0	31.6	18.0	31.1	34.6	33.6	17.0	35.2	39.6	40.0	38.0	44.0	43.0	18.7	44.4	45.3	44.9
16.4	27.7	30.3	29.0	22.6	28.4	29.8	30.9	24.8	41.8	41.7	42.4	33.6	35.9	34.5	21.0	42.0	44.1	43.9
---	35.6	35.7	37.1	---	35.9	35.4	35.8	---	28.3	33.1	35.2	33.0	33.6	36.6	---	34.3	34.3	35.1
7.8	11.0	12.0	12.0	8.7	11.5	11.5	11.5	10.0	14.0	14.0	14.0	17.3	17.5	17.5	8.8	12.0	12.0	12.0
---	11.9	11.9	12.0	---	10.0	10.6	10.6	---	9.8	10.3	10.3	10.3	11.2	11.3	---	11.1	11.9	12.0
35.0	43.2	53.5	53.3	39.2	47.8	59.4	58.8	40.4	50.2	67.4	68.1	50.7	61.6	61.6	37.1	47.4	57.5	58.9
---	28.8	28.5	28.8	---	30.2	29.7	30.9	---	29.2	31.3	32.2	33.0	36.0	36.3	---	30.0	32.0	33.0
21.0	34.1	35.0	35.5	24.2	27.4	31.3	32.0	21.0	37.4	38.9	40.1	32.1	35.4	35.8	18.3	34.4	36.0	36.1
14.8	23.0	23.4	22.6	20.0	24.6	25.5	24.9	17.7	23.2	26.1	25.8	21.0	21.8	22.1	16.5	22.5	24.8	24.6
---	26.1	28.1	28.2	---	29.5	29.6	29.6	---	28.0	27.8	28.1	19.5	19.2	19.1	---	26.1	27.3	27.1
39.6	54.3	46.3	52.1	46.7	58.4	53.9	56.5	65.0	64.5	63.8	66.6	65.1	62.4	67.4	51.3	74.4	63.4	71.0
31.2	44.5	40.5	41.6	35.0	45.4	50.0	45.0	40.7	45.5	50.2	50.3	46.1	45.4	47.6	32.5	49.8	48.1	50.0
6.0	9.3	10.2	10.2	5.9	9.9	10.8	10.5	5.9	9.2	9.9	9.9	8.6	10.2	10.2	5.6	9.0	10.3	10.3
2.9	5.3	5.7	5.7	2.4	4.5	4.8	4.7	3.4	5.6	6.0	6.0	6.0	7.0	7.0	3.6	5.7	6.2	6.2
2.5	4.9	5.6	5.8	3.3	4.9	5.4	5.2	3.5	5.3	5.9	5.9	3.9	3.9	3.8	---	6.0	7.4	7.7
---	9.3	10.1	10.0	---	8.9	8.8	8.9	---	9.4	9.7	9.7	9.0	9.0	9.0	---	9.7	10.1	9.9
---	11.2	12.2	12.2	---	11.7	12.3	12.3	---	10.8	10.6	10.6	9.8	10.6	10.5	---	10.3	11.1	11.1
---	25.0	25.6	25.9	---	24.4	25.3	25.4	---	23.7	25.0	25.1	23.6	24.9	24.5	---	25.4	26.2	26.2
---	18.6	19.0	19.0	---	19.6	19.6	19.4	---	13.0	14.5	14.9	17.8	18.1	18.1	---	22.8	23.6	23.7
10.0	10.3	11.1	11.4	8.2	10.3	11.9	11.5	8.5	10.1	11.4	11.4	9.1	9.9	10.1	8.5	10.4	11.0	11.6
---	9.5	9.6	9.9	---	10.9	10.6	10.7	---	10.1	10.5	10.1	10.4	11.3	11.3	---	11.8	12.3	12.7
1.4	1.2	2.7	4.2	1.3	1.8	2.7	3.6	1.9	2.9	3.9	5.2	2.7	4.2	6.2	1.8	2.0	3.3	4.8
---	4.6	5.5	5.6	---	3.6	3.5	2.9	---	3.9	4.2	4.2	5.4	6.9	6.4	---	5.1	5.7	5.9
---	1.7	3.5	4.0	---	4.1	3.0	3.1	---	4.5	5.2	5.1	---	5.1	---	---	3.2	3.2	3.1
---	14.0	14.0	14.1	---	15.2	14.5	14.5	---	13.5	14.1	14.0	12.4	11.9	11.9	---	12.1	11.4	11.4
---	15.6	15.4	15.3	---	15.6	16.9	16.0	---	13.9	18.8	18.8	16.5	17.0	16.9	---	17.2	17.5	17.5
---	17.0	16.4	16.4	---	16.8	16.4	16.4	---	19.0	19.0	18.8	17.8	16.8	16.7	---	18.4	19.3	18.6
---	14.7	14.6	14.7	---	15.0	16.1	15.9	---	15.7	16.0	15.9	11.5	11.1	10.9	---	13.5	13.2	13.5
5.1	9.2	7.2	6.9	5.7	9.5	7.5	7.3	5.4	8.8	6.4	6.3	8.3	6.5	6.5	5.6	8.6	6.8	6.7
45.0	71.3	72.9	71.9	65.7	86.9	85.6	84.7	50.0	66.4	68.0	68.3	67.2	80.1	78.3	52.5	62.6	66.7	66.7
30.0	52.0	52.3	52.0	35.8	55.7	56.8	56.9	32.0	50.1	52.0	52.2	45.0	48.8	48.2	31.3	47.5	53.1	52.9
---	18.1	17.2	17.0	---	16.3	15.8	15.9	---	15.9	14.5	14.1	14.9	15.9	15.8	---	16.4	18.3	18.3
---	16.3	14.9	14.8	---	13.4	13.3	13.5	---	13.3	12.6	13.0	13.6	13.8	13.6	---	14.2	14.2	14.2
---	13.3	11.1	10.3	---	16.8	14.4	14.2	---	37.0	35.0	34.4	35.5	33.2	31.8	---	34.3	34.3	33.8
---	55.4	65.0	78.1	---	39.1	53.8	54.4	---	46.8	55.1	60.5	41.2	72.1	54.5	---	56.4	72.7	68.7

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued

Article	Unit	Seattle, Wash.				Springfield, Ill.			Washington, D. C.			
		Nov. 15—		Oct. 15, 1925	Nov. 15, 1925	Nov. 15, 1924	Oct. 15, 1925	Nov. 15, 1925	Nov. 15—		Oct. 15, 1925	Nov. 15, 1925
		1913	1924						1913	1924		
		<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	
Sirloin steak	Pound	23.6	30.5	32.8	32.4	33.2	33.8	33.1	26.5	43.5	46.4	43.8
Round steak	do	20.6	25.9	28.8	28.3	31.9	33.4	32.3	22.5	36.7	39.7	37.1
Rib roast	do	20.0	24.8	25.9	25.8	22.2	22.3	22.9	21.0	33.6	33.7	32.8
Chuck roast	do	15.6	16.9	17.9	18.1	19.6	19.7	19.1	17.6	24.5	24.3	23.3
Plate beef	do	12.8	12.9	13.9	13.9	12.3	13.1	13.0	12.8	13.0	13.5	13.1
Pork chops	do	24.0	33.0	40.3	38.5	28.1	35.2	33.8	21.4	35.2	43.9	40.3
Bacon, sliced	do	32.0	49.0	57.3	56.9	40.0	48.1	47.2	26.4	37.6	51.4	48.4
Ham, sliced	do	30.0	51.5	58.8	57.9	46.4	53.3	52.0	31.3	54.3	59.6	59.0
Lamb, leg of	do	18.4	31.6	35.1	35.7	39.0	36.4	37.2	19.1	39.0	40.2	41.1
Hens	do	24.2	31.1	33.2	34.5	29.9	33.3	31.1	21.3	38.2	39.2	38.8
Salmon, canned, red	do		31.4	35.4	36.0	34.0	36.1	37.6		29.1	36.2	37.3
Milk, fresh	Quart	10.0	9.3	13.0	13.0	12.5	12.5	9.0	14.0	15.0	15.0	15.0
Milk, evaporated	15-16 oz. can		10.3	10.8	10.8	11.8	11.9	12.0		11.8	12.0	11.9
Butter	Pound	40.8	47.8	60.7	61.7	47.9	58.8	59.5	40.3	50.4	62.0	62.0
Oleomargarine (all butter substitutes)	do		29.9	30.6	31.8	31.1	32.5	32.5		29.7	30.9	31.0
Cheese	do	22.8	34.5	36.3	36.4	37.3	36.4	37.2	23.5	37.2	39.0	39.5
Lard	do	16.9	23.6	24.8	24.9	22.9	24.2	23.4	15.0 ¹	23.2	23.8	22.8
Vegetable lard substitute	do		28.6	28.6	28.2	28.5	28.3			25.2	25.2	25.1
Eggs, strictly fresh	Dozen	59.2	66.0	61.5	62.5	66.0	56.8	63.9	47.9	73.6	63.8	76.0
Eggs, storage	do	37.5	50.5	47.2	49.6	43.1	42.5	47.2	35.0	51.0	46.5	49.0
Bread	Pound	5.6	9.7	10.0	9.7	10.2	10.3	10.1	5.7	8.8	8.0	8.0
Flour	do	2.9	5.2	5.0	5.2	5.4	6.1	6.0	3.8	5.8	6.3	6.4
Corn meal	do	3.2	5.1	5.5	5.4	5.5	5.3	5.3	2.6	5.0	5.4	5.5
Roiled oats	do		9.2	9.0	9.0	10.6	10.2	10.1		9.1	9.4	9.3
Corn flakes	8-oz. pkg.		11.7	11.8	11.9	12.3	11.8	11.9		10.4	10.7	10.6
Wheat cereal	28-oz. pkg		25.8	26.0	26.5	25.4	27.1	27.1		24.1	24.6	24.5
Macaroni	Pound		18.1	18.4	18.3	19.5	20.4	19.8		21.8	23.6	23.4
Rice	do		7.7	12.2	12.9	12.7	11.4	11.0		9.4	11.2	12.3
Beans, navy	do		10.4	11.3	10.7	9.5	9.1	9.3		9.5	9.2	9.3
Potatoes	do	1.4	2.2	2.9	4.5	1.9	3.6	5.6	1.8	2.5	3.9	3.5
Onions	do		4.6	4.4	4.4	5.3	5.2	5.5		5.2	6.5	6.4
Cabbage	do		4.0	3.1	3.1	3.5	3.8	4.8		3.7	4.8	4.6
Beans, baked	No. 2 can		14.3	14.2	14.2	11.9	11.7	11.5		11.3	10.6	10.8
Corn, canned	do		18.9	19.6	19.0	15.9	18.0	16.8		16.5	16.8	16.4
Peas, canned	do		20.5	20.5	20.6	18.1	17.9	17.4		16.7	17.8	17.4
Tomatoes, canned	do	17.1	18.6	18.1	15.5	15.0	14.7			11.9	11.7	11.6
Sugar, granulated	Pound	6.1	9.4	7.0	6.9	9.8	7.4	7.0	5.1	8.3	6.6	6.5
Tea	do	50.0	77.9	80.0	79.8	76.4	77.0	77.0	57.5	80.9	87.7	87.7
Coffee	do	28.6	51.1	51.4	52.0	46.1	53.3	53.3	28.8	46.1	48.5	48.2
Prunes	do		14.5	14.9	14.9	17.7	16.8	17.7		19.0	18.4	17.9
Raisins	do		15.2	13.4	14.0	16.0	14.7	14.7		14.7	14.1	14.0
Bananas	Dozen	15.5	12.7	12.9	13.0	10.1	9.9			37.7	34.7	34.7
Oranges	do		51.0	62.9	61.2	56.0	60.2	63.3		32.0	71.8	61.0

¹No. 2½ can.²Per 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 food³ in November, 1925, compared with the average cost in the year 1913, in November, 1924, and in October, 1925. 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.⁴

³ For list of articles see note 6, p. 72.⁴ The consumption figures 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.

Effort has been made by the bureau each month to have perfect reporting cities. For the month of November 99 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 42 cities who is cooperating with the bureau sent in his report in time for his prices to be included in the city averages: Atlanta, Boston, Bridgeport, Buffalo, Butte, Chicago, Cincinnati, Cleveland, Columbus, Dallas, Denver, Detroit, Fall River, Houston, Indianapolis, Kansas City, Los Angeles, Louisville, Manchester, Memphis, Milwaukee, Mobile, Newark, New Haven, New Orleans, New York, Norfolk, Omaha, Peoria, Philadelphia, Pittsburgh, Portland, Me., Portland, Oreg., Providence, Richmond, Rochester, St. Louis, St. Paul, Salt Lake City, Scranton, Seattle, Washington, D. C.

The following summary shows the promptness with which the merchants responded in November, 1925:

RETAIL PRICE REPORTS RECEIVED DURING NOVEMBER, 1925

Item	United States	Geographical division				
		North Atlantic	South Atlantic	North Central	South Central	Western
Percentage of reports received.....	99	100	98	99	98	99
Number of cities in each section from which every report was received.....	42	14	4	12	6	6

TABLE 6.—PERCENTAGE CHANGE IN THE RETAIL COST OF FOOD IN NOVEMBER, 1925, COMPARED WITH THE COST IN OCTOBER, 1925, NOVEMBER, 1924, AND WITH THE AVERAGE COST IN THE YEAR 1913, BY CITIES

City	Percentage increase, November, 1925, compared with—			City	Percentage increase, November, 1925, compared with—		
	1913	November, 1924	October, 1925		1913	November, 1924	October, 1925
Atlanta.....	67.8	12.7	3.1	Minneapolis.....	63.7	13.8	3.4
Baltimore.....	72.9	9.8	3.2	Mobile.....	.....	9.4	4.1
Birmingham.....	71.4	9.2	2.4	Newark.....	59.9	10.0	2.7
Boston.....	70.7	10.7	2.3	New Haven.....	69.3	12.5	4.3
Bridgeport.....	.....	11.1	4.0	New Orleans.....	61.8	8.9	2.6
Buffalo.....	73.2	11.6	3.3	New York.....	72.1	10.4	3.5
Butte.....	.....	10.1	5.2	Norfolk.....	.....	11.5	3.0
Charleston, S. C.....	65.6	8.5	2.0	Omaha.....	64.0	13.2	3.5
Chicago.....	76.2	11.5	4.0	Peoria.....	.....	12.6	3.8
Cincinnati.....	66.3	14.8	4.5	Philadelphia.....	71.1	13.1	4.1
Cleveland.....	63.5	9.6	2.7	Pittsburgh.....	68.0	10.9	3.7
Columbus.....	.....	10.5	3.8	Portland, Me.....	.....	10.5	3.6
Dallas.....	59.4	6.2	0.9	Portland, Oreg.....	49.5	8.1	2.7
Denver.....	52.4	12.1	4.1	Providence.....	70.2	9.7	3.2
Detroit.....	73.2	12.7	3.6	Richmond.....	75.6	10.5	3.6
Fall River.....	66.6	10.4	3.9	Rochester.....	.....	9.6	3.6
Houston.....	.....	8.8	2.0	St. Louis.....	69.2	12.4	3.1
Indianapolis.....	60.9	11.8	4.3	St. Paul.....	.....	12.4	3.4
Jacksonville.....	65.5	14.5	3.5	Salt Lake City.....	43.3	7.3	0.9
Kansas City.....	64.0	13.0	4.1	San Francisco.....	65.8	11.4	2.8
Little Rock.....	55.9	10.3	2.0	Savannah.....	.....	15.5	2.9
Los Angeles.....	57.0	9.4	1.4	Scranton.....	70.9	11.9	3.5
Louisville.....	65.5	14.2	4.6	Seattle.....	57.2	12.0	2.8
Manchester.....	64.5	10.2	4.2	Springfield, Ill.....	.....	10.9	5.1
Memphis.....	56.2	10.5	2.5	Washington, D. C.....	73.5	8.8	2.4
Milwaukee.....	64.4	9.1	4.2				

Retail Prices of Coal in the United States ^a

THE following table shows the average retail prices of coal on January 15 and July 15, 1913, November 15, 1924, and October 15 and November 15, 1925, for the United States and for each of the cities from which retail food prices have been obtained. 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.

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 sold for household use.

AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JANUARY 15 AND JULY 15, 1913, NOVEMBER 15, 1924, AND OCTOBER 15 AND NOVEMBER 15, 1925

City, and kind of coal	1913		1924	1925	
	Jan. 15	July 15	Nov. 15	Oct. 15	Nov. 15
United States:					
Pennsylvania anthracite—					
Stove	\$7.99	\$7.46	\$15.46	\$15.87	(1)
Chestnut	8.15	7.68	15.36	15.72	(1)
Bituminous	5.48	5.39	9.30	9.24	\$9.71
Atlanta, Ga.:					
Bituminous.....	5.88	4.83	7.35	7.45	7.93
Baltimore, Md.:					
Pennsylvania anthracite—					
Stove	¹ 7.70	² 7.24	² 16.25	² 16.21	(1)
Chestnut	² 7.93	² 7.49	² 15.75	² 15.71	(1)
Bituminous			7.56	7.65	7.89
Birmingham, Ala.:					
Bituminous.....	4.22	4.01	7.99	7.34	7.59
Boston, Mass.:					
Pennsylvania anthracite—					
Stove	8.25	7.50	16.00	16.25	17.09
Chestnut	8.25	7.75	16.00	16.00	17.09
Bridgeport, Conn.:					
Pennsylvania anthracite—					
Stove			15.50	16.00	16.09
Chestnut			15.50	16.00	16.09
Buffalo, N. Y.:					
Pennsylvania anthracite—					
Stove	6.75	6.54	13.60	13.88	(1)
Chestnut	6.99	6.80	13.48	13.54	(1)
Bituminous					
Butte, Mont.:					
Bituminous.....			11.03	11.05	11.03
Charleston, S. C.:					
Pennsylvania anthracite—					
Stove	² 8.38	² 7.75	² 17.00	² 17.00	² 17.00
Chestnut	² 8.50	² 8.00	² 17.10	² 17.10	² 17.10
Bituminous	² 6.75	² 6.75	11.00	11.00	11.00
Chicago, Ill.:					
Pennsylvania anthracite—					
Stove	8.00	7.80	16.75	17.19	18.13
Chestnut	8.25	8.05	16.75	17.19	18.08
Bituminous	4.97	4.65	8.13	8.99	9.65
Cincinnati, Ohio:					
Bituminous.....	3.50	3.38	7.31	7.00	7.77
Cleveland, Ohio:					
Pennsylvania anthracite—					
Stove	7.50	7.25	14.75	15.43	15.83
Chestnut	7.75	7.50	14.75	15.39	15.83
Bituminous	4.14	4.14	8.10	9.42	9.93
Columbus, Ohio:					
Bituminous.....			6.66	6.95	7.72

¹ Insufficient data.

² Per ton of 2,240 pounds.

^a 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.

RETAIL PRICES OF COAL

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AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JANUARY 15 AND JULY 15, 1913, NOVEMBER 15, 1924, AND OCTOBER 15 AND NOVEMBER 15, 1925—Continued

City, and kind of coal	1913		1924	1925	
	Jan. 15	July 15	Nov. 15	Oct. 15	Nov. 15
Dallas, Tex.:					
Arkansas anthracite—					
Egg.....			\$17.33	\$18.25	\$16.83
Bituminous.....	\$8.25	\$7.21	14.18	13.22	13.72
Denver, Colo.:					
Colorado anthracite—					
Furnace, 1 and 2 mixed.....	8.88	9.00	16.25	16.00	16.00
Stove, 3 and 5 mixed.....	8.50	8.50	16.33	16.25	16.25
Bituminous.....	5.25	4.88	9.47	10.18	10.64
Detroit, Mich.:					
Pennsylvania anthracite—					
Stove.....	8.00	7.45	15.63	16.42	(1)
Chestnut.....	8.25	7.65	15.50	16.26	(1)
Bituminous.....	5.20	5.20	9.25	9.86	10.59
Fall River, Mass.:					
Pennsylvania anthracite—					
Stove.....	8.25	7.43	15.83	16.21	17.21
Chestnut.....	8.25	7.61	15.83	16.13	17.13
Houston, Tex.:					
Bituminous.....			12.17	11.67	11.67
Indianapolis, Ind.:					
Pennsylvania anthracite—					
Stove.....	8.95	8.00	16.50	16.50	16.75
Chestnut.....	9.15	8.25	16.50	16.50	16.75
Bituminous.....	3.81	3.70	7.24	7.27	7.54
Jacksonville, Fla.:					
Bituminous.....	7.50	7.00	12.00	14.00	14.00
Kansas City, Mo.:					
Arkansas anthracite—					
Furnace.....			15.00	14.30	14.20
Stove, No. 4.....			16.38	15.50	15.83
Bituminous.....	4.39	3.94	8.13	7.79	7.98
Little Rock, Ark.:					
Arkansas anthracite—					
Egg.....			14.00	14.00	14.00
Bituminous.....	6.00	5.33	10.83	10.77	11.14
Los Angeles, Calif.:					
Bituminous.....	13.52	12.50	15.79	15.75	15.94
Louisville, Ky.:					
Bituminous.....	4.20	4.00	7.58	6.68	7.36
Manchester, N. H.:					
Pennsylvania anthracite—					
Stove.....	10.00	8.50	17.75	17.50	17.75
Chestnut.....	10.00	8.50	17.00	17.00	17.25
Memphis, Tenn.:					
Bituminous.....	4.34	4.22	7.93	7.34	7.51
Milwaukee, Wis.:					
Pennsylvania anthracite—					
Stove.....	8.00	7.85	16.80	16.80	16.80
Chestnut.....	8.25	8.10	16.65	16.65	16.66
Bituminous.....	6.25	5.71	9.28	10.13	11.27
Minneapolis, Minn.:					
Pennsylvania anthracite—					
Stove.....	9.25	9.05	18.10	18.10	18.10
Chestnut.....	9.50	9.30	17.95	17.95	18.07
Bituminous.....	5.89	5.79	10.91	11.28	11.47
Mobile, Ala.:					
Bituminous.....			9.96	9.73	9.69
Newark, N. J.:					
Pennsylvania anthracite—					
Stove.....	6.50	6.25	13.51	14.00	14.75
Chestnut.....	6.75	6.50	13.43	13.55	14.59
New Haven, Conn.:					
Pennsylvania anthracite—					
Stove.....	7.50	6.25	15.25	15.80	16.25
Chestnut.....	7.50	6.25	15.25	15.80	16.25
New Orleans, La.:					
Bituminous.....	4.06	4.06	10.72	10.11	10.61
New York, N. Y.:					
Pennsylvania anthracite—					
Stove.....	7.07	6.66	14.13	17.04	20.50
Chestnut.....	7.14	6.80	14.08	17.04	19.63
Norfolk, Va.:					
Pennsylvania anthracite—					
Stove.....			15.00	16.00	17.00
Chestnut.....			15.00	16.00	17.00
Bituminous.....			9.00	9.05	10.43

¹ Insufficient data.

² Per 10-barrel lots (1,800 pounds).

AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JANUARY 15 AND JULY 15, 1913, NOVEMBER 15, 1924, AND OCTOBER 15 AND NOVEMBER 15, 1925—Continued

City, and kind of coal	1913		1924	1925	
	Jan. 15	July 15	Nov. 15	Oct. 15	Nov. 15
Omaha, Nebr.:					
Bituminous.....	\$6.63	\$6.13	\$10.00	\$10.02	\$10.08
Peoria, Ill.:					
Bituminous.....			6.34	6.76	7.04
Philadelphia, Pa.:					
Pennsylvania anthracite—					
Stove.....	² 7.16	² 6.89	² 15.36	² 16.14	² 16.00
Chestnut.....	² 7.38	² 7.14	² 15.11	² 16.07	² 16.20
Pittsburgh, Pa.:					
Pennsylvania anthracite—					
Stove.....	² 7.94	² 7.38	² 16.50	15.50	(¹)
Chestnut.....	² 8.00	² 7.44	² 16.50	15.50	(¹)
Bituminous.....	⁴ 3.16	⁴ 3.18	7.00	6.22	6.13
Portland, Me.:					
Pennsylvania anthracite—					
Stove.....			16.56	16.56	16.56
Chestnut.....			16.56	16.56	16.56
Portland, Oreg.:					
Bituminous.....	9.79	9.66	13.69	13.20	13.24
Providence, R. I.:					
Pennsylvania anthracite—					
Stove.....	² 8.25	² 7.50	² 16.00	² 16.25	² 16.67
Chestnut.....	² 8.25	² 7.75	² 16.00	² 16.00	² 16.67
Richmond, Va.:					
Pennsylvania anthracite—					
Stove.....	8.00	7.25	15.50	16.00	(¹)
Chestnut.....	8.00	7.25	15.50	16.00	(¹)
Bituminous.....	5.50	4.94	8.94	10.04	11.39
Rochester, N. Y.:					
Pennsylvania anthracite—					
Stove.....			14.25	14.50	14.50
Chestnut.....			14.15	14.15	14.15
St. Louis, Mo.:					
Pennsylvania anthracite—					
Stove.....	8.44	7.74	16.56	16.90	17.20
Chestnut.....	8.68	7.99	16.81	16.65	16.95
Bituminous.....	3.36	3.04	6.56	6.30	6.53
St. Paul, Minn.:					
Pennsylvania anthracite—					
Stove.....	9.20	9.05	18.10	18.10	18.10
Chestnut.....	9.45	9.30	17.95	17.95	18.04
Bituminous.....	6.07	6.04	11.42	11.72	11.88
Salt Lake City, Utah:					
Colorado anthracite—					
Furnace, 1 and 2 mixed.....	11.00	11.50	18.25	18.25	18.00
Stove, 3 and 5 mixed.....	11.00	11.50	18.25	18.25	18.00
Bituminous.....	5.64	5.46	8.38	8.41	8.41
San Francisco, Calif.:					
New Mexico anthracite—					
Cerrolos egg.....	17.00	17.00	26.50	25.50	25.50
Colorado anthracite—					
Egg.....	17.00	17.00	25.00	25.00	25.00
Bituminous.....	12.00	12.00	16.89	16.67	16.61
Savannah, Ga.:					
Pennsylvania anthracite—					
Stove.....			⁶ 17.00	⁶ 17.00	⁶ 17.00
Chestnut.....			⁶ 17.00	⁶ 17.00	⁶ 17.00
Bituminous.....			⁶ 10.83	⁶ 11.00	⁶ 11.75
Scranton, Pa.:					
Pennsylvania anthracite—					
Stove.....	4.25	4.31	10.62	11.22	(¹)
Chestnut.....	4.50	4.56	10.62	11.13	(¹)
Seattle, Wash.:					
Bituminous.....	7.63	7.70	10.21	9.83	9.84
Springfield, Ill.:					
Bituminous.....			4.45	4.38	4.38
Washington, D. C.:					
Pennsylvania anthracite—					
Stove.....	² 7.50	² 7.38	² 15.79	² 15.85	² 15.92
Chestnut.....	² 7.65	² 7.53	² 15.38	² 15.54	² 15.75
Bituminous—					
Prepared sizes, low volatile.....			² 11.42	² 12.04	² 14.33
Prepared sizes, high volatile.....			² 8.75	² 9.00	² 9.88
Run of mine, mixed.....			² 7.38	² 7.69	² 8.00

¹ Insufficient data. ² Per ton of 2,240 pounds. ⁴ Per 25-bushel lot (1,900 pounds).

⁵ Fifty cents per ton additional is charged for "binning." Most customers require binning or basketing the coal into the cellar.

⁶ All coal sold in Savannah is weighed by the city. A charge of 10 cents per ton or half ton is made. The additional charge has been included in the above prices.

Index Numbers of Wholesale Prices in November, 1925

PRACTICALLY no change in the general level of wholesale prices from October to November is shown by information gathered in leading markets by the Bureau of Labor Statistics of the United States Department of Labor. The bureau's weighted index number, which includes 404 commodities or price series, registered 157.7 for November as compared with 157.6 for the month before. When compared with November, 1924, with an index of 152.7, an increase of $3\frac{1}{4}$ per cent is shown.

Farm products declined 1 per cent from the October level, due to falling prices of cattle, hogs, cotton and cottonseed, hay, and hides. Lower prices were reported also for clothing materials and house-furnishing goods, including furniture. In all other groups prices averaged higher than in October, ranging from less than 1 per cent in the case of building materials and chemicals and drugs to 3 per cent in the case of articles classed as miscellaneous.

Of the 404 commodities or price series for which comparable information for October and November was collected, increases were shown in 138 instances and decreases in 113 instances. In 153 instances no change in price was reported.

INDEX NUMBERS OF WHOLESALE PRICES, BY GROUPS OF COMMODITIES

[1913=100.0]

Commodity group	1924, November	1925	
		October	November
Farm products.....	149.5	155.3	153.9
Foods.....	153.8	157.6	160.2
Cloths and clothing.....	190.4	189.5	187.9
Fuel and lighting.....	162.8	171.7	174.8
Metals and metal products.....	128.7	127.9	129.8
Building materials.....	171.6	173.9	175.6
Chemicals and drugs.....	134.0	134.9	135.4
House-furnishing goods.....	172.0	167.9	165.9
Miscellaneous.....	122.9	138.0	142.0
All commodities.....	152.7	157.6	157.7

Comparing prices in November with those of a year ago as measured by change in the index numbers it is seen that the largest increase is shown for the group of miscellaneous commodities, which, due largely to increases in rubber and jute, averaged over 15 per cent higher than in November, 1924. Fuels were 7 per cent higher and foods were 4 per cent higher than in the corresponding month of last year. Farm products, metals, building materials, and chemicals and drugs were somewhat higher than a year ago, while clothing materials and house-furnishing goods were cheaper.

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

THE principal index numbers of retail prices published by foreign countries have been brought together with those of this bureau in the subjoined table after having been reduced in most cases to a common base, namely, 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 numerous instances satisfactory information for 1913 was not available. A part of the countries shown in the table now publish index numbers of retail prices on the July, 1914, base. In such cases, therefore, the index numbers are reproduced as published. For other countries the index numbers here shown 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 in the original sources. As stated 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 with one another. In certain instances, also, the figures are not absolutely comparable from month to month over the entire period, owing to slight changes in the list of commodities and the localities included at successive dates.

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

Country...	United States	Canada	Austria (Vienna)	Belgium	Czechoslovakia	Denmark	Finland	France (except Paris)	France (Paris)
Number of localities	51	60	1	59	22	100	21	320	1
Commodities included	43 foods	29 foods	16 foods	56 (foods, etc.)	23 (17 foods)	Foods	36 foods	13 (11 foods)	13 (11 foods)
Computing agency	Bureau of Labor Statistics	Department of Labor	Parity Commission	Ministry of Industry and Labor	Office of Statistics	Government Statistical Department	Central Bureau of Statistics	Ministry of Labor	Ministry of Labor
Base=100	July, 1914	July, 1914	July, 1914=1	April, 1914	July, 1914	July, 1914	January-June, 1914	August, 1914	July, 1914
<i>Month</i>									
1922									
Jan.....	139	149	748	387	1467	197	1151	-----	310
Feb.....	139	143	871	380	1461	-----	1145	323	307
Mar.....	136	142	904	371	1414	-----	1124	-----	294
Apr.....	136	138	1043	367	1415	-----	1127	-----	304
May.....	136	138	1374	365	1444	-----	1132	315	317
June.....	138	137	2421	366	1475	-----	1139	-----	307
July.....	139	138	3282	366	1430	184	1144	-----	297
Aug.....	136	141	7224	366	1290	-----	1165	312	289
Sept.....	137	139	13531	371	1105	-----	1166	-----	291
Oct.....	140	138	11822	376	1016	-----	1157	-----	290
Nov.....	142	139	11145	384	984	-----	1140	314	297
Dec.....	144	140	10519	384	961	-----	1122	-----	305

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

Country	United States	Canada	Austria (Vienna)	Belgium	Czechoslovakia	Denmark	Finland	France (except Paris)	France (Paris)
Number of localities	51	60	1	59	22	100	21	320	1
Commodities included	43 foods	29 foods	16 foods	56 (foods, etc.)	23 (17 foods)	Foods	36 foods	13 (11 foods)	13 (11 foods)
Computing agency	Bureau of Labor Statistics	Department of Labor	Parity Commission	Ministry of Industry and Labor	Office of Statistics	Government Statistical Department	Central Bureau of Statistics	Ministry of Labor	Ministry of Labor
Base=100	July, 1914	July, 1914	July, 1914=1	April, 1914	July, 1914	July, 1914	January-June, 1914	August, 1914	July, 1914
<i>Month</i>									
1923									
Jan	141	142	10717	383	941	180	1108		309
Feb	139	142	10784	397	934		1103	331	316
Mar	139	145	11637	408	926		1096		321
Apr	140	143	12935	409	927		1047		320
May	140	140	13910	413	928		1016	337	325
June	141	138	14132	419	933		1004		331
July	144	137	12911	429	921	188	1003		321
Aug	143	142	12335	439	892		1087	349	328
Sept	146	141	12509	453	903		1103		339
Oct	147	144	12636	458	901		1140		340
Nov	148	144	12647	463	898		1133	373	355
Dec	147	145	12860	470	909		1112		365
1924									
Jan	146	145	13527	480	917	194	1089		376
Feb	144	145	13821	495	917		1070	400	384
Mar	141	143	13930	510	908		1067		392
Apr	138	137	13838	498	907		1035		380
May	138	133	14169	485	916		1037	393	378
June	139	133	14457	492	923		1040		379
July	140	134	14362	493	909	200	1052		360
Aug	141	137	15652	498	897		1125	400	366
Sept	144	139	15623	503	908		1125		374
Oct	145	139	15845	513	916		1156		383
Nov	147	141	16198	520	922		1160	426	395
Dec	148	143	16248	521	928		1160		404
1925									
Jan	151	145	16446	521	1 899	215	1130		408
Feb	148	147	16618	517	1 911		1120	440	410
Mar	148	145	16225	511	1 904		1152		415
Apr	148	142	15830	506	1 901		1137		409
May	148	141		502	1 894		1097	434	418
June	152	141		505	1 914		1101		422
July	156	141		509	1 916	210	1145		421
Aug	157	146		517	1 894		1222	451	423
Sept	156	146		525	1 884		1187		431

1 Revised index (29 foods) since January, 1925.

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

Country...	Italy	Netherlands	Norway	Sweden	Switzerland	United Kingdom	South Africa	India (Bombay)	Australia	New Zealand
Number of localities	47	6	31	49	33	600	9	1	30	25
Commodities included	21 foods	29 (27 foods)	Foods	40 (foods, etc.)	Foods	21 foods	18 foods	17 foods	46 foods	59 foods
Computing agency	Ministry of National Economy	Central Bureau of Statistics	Central Bureau of Statistics	Social Board	Labor Office	Ministry of Labor	Office of Census and Statistics	Labor Office	Bureau of Census and Statistics	Census and Statistics Office
Base=100..	1913	January-June, 1914	July, 1914	July, 1914	June, 1914	July, 1914	1914	July, 1914	July, 1914	July, 1914
<i>Month</i>										
1922										
Jan.....	577	165	257	190	185	185	121	169	142	147
Feb.....	560	164	245	189	173	179	119	160	140	145
Mar.....	546	164	238	185	162	177	119	161	141	141
Apr.....	524	163	234	182	159	173	121	157	143	144
May.....	531	159	230	178	152	172	120	158	146	145
June.....	530	158	227	179	153	170	118	158	146	143
July.....	527	157	233	179	157	180	116	160	148	144
Aug.....	531	155	232	181	152	175	116	159	149	141
Sept.....	537	154	228	180	153	172	117	161	149	139
Oct.....	555	149	220	178	153	172	119	158	146	139
Nov.....	562	146	216	170	155	176	120	155	145	139
Dec.....	557	147	215	168	155	178	118	157	146	138
1923										
Jan.....	542	148	214	166	155	175	117	151	145	139
Feb.....	527	149	214	165	154	173	117	150	144	140
Mar.....	524	149	214	166	156	171	117	149	145	141
Apr.....	530	149	212	163	158	168	117	150	152	142
May.....	535	147	214	161	161	162	118	148	156	143
June.....	532	145	213	161	165	160	118	146	162	142
July.....	518	145	218	160	164	162	116	148	164	142
Aug.....	512	143	220	161	162	165	115	149	165	143
Sept.....	514	142	218	165	163	168	115	149	161	145
Oct.....	517	145	217	165	162	172	117	147	157	146
Nov.....	526	149	221	164	166	173	120	147	157	147
Dec.....	528	149	226	164	167	176	118	152	156	147
1924										
Jan.....	527	150	230	163	168	175	120	154	155	150
Feb.....	529	151	234	162	167	177	122	151	153	149
Mar.....	523	152	241	162	167	176	122	147	152	150
Apr.....	527	152	240	159	165	167	122	143	150	150
May.....	530	151	241	159	165	163	122	143	151	150
June.....	543	151	240	158	168	160	120	147	149	150
July.....	538	150	248	159	168	162	117	151	148	148
Aug.....	534	150	257	163	166	164	117	156	147	146
Sept.....	538	152	261	165	166	166	117	156	146	145
Oct.....	556	154	264	172	169	172	120	156	146	145
Nov.....	583	156	269	172	170	179	122	157	147	148
Dec.....	601	157	274	172	170	180	121	156	148	150
1925										
Jan.....	609	156	277	170	168	178	120	152	148	147
Feb.....	609	157	283	170	168	176	120	152	149	146
Mar.....	610	157	284	171	168	176	121	155	151	149
Apr.....	606	155	276	170	166	170	124	153	152	149
May.....	600	154	265	169	165	167	123	151	154	150
June.....	602	152	261	169	167	166	122	149	155	149
July.....	605	152	260	169	167	167	120	152	156	151
Aug.....	619	152	254	170	165	168	119	147	156	152
Sept.....	-----	152	241	168	165	170	118	156	156	-----

Use of Cost-of-Living Figures in Wage Adjustments

ESPECIALLY during the war, when the cost of living was steadily rising and increases of wages became necessary in order to enable workers to meet the increased expenditure, data on the cost of living were rather widely used in determining just what the wage increases should be. The numerous requests for such data sent in to the Bureau of Labor Statistics led the bureau to attempt to ascertain how the figures were being used, what other data besides its own were utilized, and just how valuable these figures actually were. The results of this study are embodied in its Bulletin No. 369, just issued.

It was found (1) that the cost of living had entered into practically every award made by Government arbitration boards, (2) that it had also been considered by State and municipal agencies, and by State arbitration boards, and had been the controlling factor in the fixing of wages by minimum wage boards in 13 States and the District of Columbia, and (3) that in the past 10 years it has entered into practically every industrial case voluntarily arbitrated. Many individual firms, also, were found to take account of the cost of living when revising wages, as is shown, for those who reported to the Bureau, in the table below:

NUMBER OF PRIVATE EMPLOYERS USING COST-OF-LIVING FIGURES IN ADJUSTMENT OF WAGES AND NUMBER OF EMPLOYEES AFFECTED

Group	Number of employers	Number of employees
Employers using own cost-of-living figures	41	106, 676
Employers using existing cost-of-living figures—		
Regularly, in definite way	25	60, 306
In definite way on specific occasions	41	205, 830
In general way, considerable influence	623	605, 198
In general way, little influence	640	531, 330
Total	1, 370	1, 509, 340
Employers making no use of cost-of-living figures	491	114, 621

The report states:

It is impossible to estimate the number of employees affected by adjustments based on changes in the cost of living. The awards of Federal arbitration boards involved directly about 747,000 employees in the coal industry; 100,000 employees in the packing industry; 500,000 employees in the shipping industry; and 2,000,000 employees on railroads. In addition the awards of the United States National War Labor Board affected 711,500 employees in various industries.

Since 1922, all commissioned officers, below certain ranks in the Army, Navy, Marine Corps, Coast Guard, Coast and Geodetic Survey, and Public Health Services, have their subsistence and rent allowances determined by changes in the cost-of-living figures of the United States Bureau of Labor Statistics. This affects directly about 16,000 men.

No attempt is made to estimate the number of employees whose wages have been affected by the use of cost-of-living figures by municipal agencies, State arbitration boards, or minimum wage boards, because the records are not sufficiently complete. Neither are data available upon which to base an estimate of those affected by the voluntary industrial arbitration awards referred to. In the book and job printing industry of New York City alone, the wages of approximately 22,000 employees were involved. In Chicago, in the same industry, the

number of employees affected was between 9,000 and 10,000. The awards of the Council on Industrial Relations for the Electrical Construction Industry affect about 150,000 men. It has been shown that private employers engaged in various businesses have also utilized extensively cost-of-living figures.

Altogether, the number of employees affected directly by specific wage adjustments is very great; those industries alone, where the approximate number is known, employ over five and one-half million workers. It should also be borne in mind that in many instances an even greater number of employees is affected indirectly, for often other employers engaged in the same character of work voluntarily make changes in wages to conform to those fixed by an adjustment agency or granted by other employers. Therefore practically all labor has been affected either directly or indirectly by adjustments which were based in some measure upon the cost of living.

The report contains a detailed discussion of the way in which cost-of-living figures have been used by various Federal and State agencies and by 111 individual firms, together with copious quotations from the reports and decisions in each case. The different uses of cost-of-living figures shown and the opinions of various agencies set forth in this report should be of value, to students of the question, in determining the relative importance which should be given to the cost-of-living factor.

Cost of Living in Foreign Countries¹

Index Numbers

UP TO December, 1922, the MONTHLY LABOR REVIEW kept its readers informed on changes in the cost of living in foreign countries by giving currently the most important data in short articles dealing with each country separately and also figures showing the trend of food prices in foreign countries. In order to show the international aspect of cost of living in general rather more clearly, it was decided in December, 1922, to publish semiannually a general survey and tables showing the international movement. Tables of index numbers for different countries since 1914 have been compiled and were published for the first time in the December, 1922, issue of the MONTHLY LABOR REVIEW. They are now published in the January and July numbers. In the following pages these tables have been brought up to the latest period for which data are available. Since food indexes are published in a preceding article in this issue, they are not included here. The number of countries given in the different tables varies according to the information available. Several countries publish an index number for food only, while others omit clothing and sometimes even rent.

The very fact that the form of presentation suggests that the index numbers are completely comparable internationally makes caution in making such comparisons all the more necessary. Not only are there differences in the base periods and in the number and kind of articles included and the number of markets from which prices are taken, but there are also many differences of method, especially in the systems of weighting used.

¹ Compiled from official and unofficial foreign publications named as sources in the December, 1922, issue of the MONTHLY LABOR REVIEW, pp. 81-85.

The trend of the cost of living in the various countries during the period 1914 to October, 1925 is illustrated by the index numbers shown in the following four tables. General cost-of-living index numbers are given in Table 1, and index numbers for the cost of heat and light, clothing, and rent, in Tables 2, 3, and 4, respectively.

TABLE 1.—INDEX NUMBERS OF COST OF LIVING

[A=Food; B=Heat and light; C=Clothing;

Year and month	Bulgaria (12 localities) A, B, C	Australia (30 localities) A, B, D	New Zealand (25 localities) A, B, D	Canada (60 localities) A, B, C, D, E	Hungary A, B, C, D, E	United States (32 cities) A, B, C, D, E	Egypt (Cairo) A, C, D, E	Germany (72 localities) A, B, C, D, E	Belgium (59-61 localities) A, B, C, E	Switzerland (33 localities) A, B, C	France (Paris) A, B, C, E	Italy (Milan) A, B, C, D, E
	Average 1901-1910=100	1911=100	Average 1909-1913=100	1913=100			Jan., 1913, to July, 1914=100	Average 1913-1914=100	Apr., 1914=100	June, 1914=100	First half of 1914=100	
1914	132	111		1 169		1 103	100					
1915	161	126		1 104		1 105	102					
1916		130		1 119		1 118	121					
1917		129		1 143		1 142	154					
1918		134		1 161		1 174	189					
1919	1631	148	2 137	1 179		1 199	202					
1920	2456	175	2 155	1 192		1 200	237	453			6 238	2 280
1921	2524	167	2 163	1 161		1 174	196	379	213		6 341	2 441
1922	3495	156	149	1 149		1 170	176		374	165	8 307	2 501
1923	3258	168	151	9 150		1 173	162		428	165	9 334	494
1924:												
Jan			156	9 151			159	10 110	480			510
Feb		167	157	9 151			158	10 104	495	170	365	517
Mar			158	9 150		170	156	10 107	510			521
Apr				9 147			157	10 112	408			522
May		166	12 158	9 144			157	10 115	485	168	366	518
June				9 144		169	157	10 112	492			518
July				9 145			158	10 116	493			512
Aug		165	12 158	9 147			164	10 114	498	170	367	512
Sept				9 147		171	163	10 116	503			516
Oct				9 147			168	10 122	513	170		546
Nov		165	12 159	9 148			170	10 123	520	172	377	563
Dec	4178			9 149		173	167	10 123	521	171		573
1925:												
Jan				9 150			165	10 124	521	170		580
Feb		168	12 161	9 151			171	136	517	170	11 386	592
Mar				9 150			166	136	511	170		602
Apr				9 149			164	137	506	168		600
May				9 148			162	136	502	167	390	591
June			12 161	9 147	112	174	161	138	505	169		596
July				9 148	112		163	143	509	169		598
Aug				9 150	106		164	145	517	167	11 401	610
Sept				9 150		105		145	525	167		624
Oct				9 151				144		165		

1 December.

2 July.

3 June-July.

4 May-July.

5 September.

6 First quarter.

7 June.

8 Second quarter.

9 Not including clothing or miscellaneous articles.

10 Based on a budget presuming a lower standard of living and not including miscellaneous articles.

11 From International Labor Review.

12 Includes food and rent only.

13 Quoted from a report of the American consulate at Athens, dated Oct. 12, 1925.

COST OF LIVING IN FOREIGN COUNTRIES

IN VARIOUS COUNTRIES, 1914 TO OCTOBER, 1925

D=Rent; E=Certain miscellaneous articles]

Greece (101 localities) A, B, E	Spain (Ma- drid) A, B, E	South Africa (9 locali- ties) A, B, D		Austria (Vi- enna) A, B, C, D	Den- mark (100+ locali- ties) A, B, C, D, E	Fin- land (21 lo- cali- ties) A, B, C, D, E	Uni- ted King- dom (620 locali- ties) A, B, C, D, E	India (Bom- bay) A, B, C, D	Ire- land A, B, C, E	Nor- way (31 lo- cali- ties) A, B, C, D, E	Swe- den (40 lo- cali- ties) A, B, C, D, E	Netherlands		
		1914=100	1910 = 100									1914 = 100	July, 1914=100	
100	2 100	109			2 100		2 100							
119	2 108	113			2 116		2 125			2 117				
159	2 115	116			2 136		2 148			2 147	1 139			
264	2 121	125			2 155		2 180			4 190	2 166			
360	2 146	129			2 182		2 203	154		2 253	2 219			
324	2 168	138			2 211		2 208	175		7 275	2 257			
346	2 188	170	155		2 262	2 911	2 252	183		7 302	2 370			102
412	2 182	149	137	9800	2 237	2 1139	2 219	173		7 302	2 236		95	97
602	181	132	121	461500	2 199	2 1118	181	164	2 185	253	198	85	85	86
1216	177	131	120	1072675	2 204	1127	174	154	184	237	178	81	81	82
	178	133	122	1174000	209	1138	179	158	188		176			
	190	135	123	1194000		1126	178	156						
11 1359	180	135	124	1199600		1123	173	153		249		85		84
	195	135	124	1197300		1100	171	150	178		173			
	180	135	124	1220900		1199	169	150						
11 1240	186	134	122	1244200		1125	170	153		251		84		81
	182	132	120	1239100	214	1132	171	156	2 183		171			
	180	132	121	1314200		1176	172	160						
11 1330	189	132	121	1316200		1177	176	160		260		84		83
	189	134	123	1330700		1197	180	160	193		174			
11 1429	175	136	124	1357400		1202	181	161						
11 1437	190	135	124	1365000		1153	180	160		267		84		85
13 1405	188	134	123	1376200	221	1181	179	157	195		178			
13 1456	190	134	123	1389500		1173	179	157						
13 1472	192	135	123	1366000		1191	175	159		273		83		84
13 1436	189	136	125	1343200		1178	173	158	188		177			
13 1429	188	136	125			1153	172	156						
13 1460	190	136	124			1168	173	154		261		86		84
13 1453	190	134	123		219	1194	173	157	188		176			
13 1455	190	134	122			1242	174	152						
		133	122			1219	176	151		249		83		84
							176		188		175			

TABLE 2.—INDEX NUMBERS OF COST OF HEAT AND LIGHT IN VARIOUS COUNTRIES, 1914 TO OCTOBER, 1925

Year and month	New Zealand (4 localities)	Canada (60 localities)	Hungary	United States (32 cities)	Germany (72 localities)	France (Paris)	Italy (Milan)	Switzerland (33 localities)
	Average 1909-1913 = 100	1913 = 100			Average 1913-1914 = 100	First half of 1914 = 100	June, 1914 = 100	
1914.....		1 99		2 101				
1915.....		1 96		2 101				
1916.....		1 96		2 108				
1917.....		1 125		2 124				
1918.....		1 147		2 148			1 229	
1919.....	3 151	1 154		2 157		4 164	1 220	
1920.....	3 185	1 191		2 195		3 296	3 611	
1921.....	3 208	1 194		2 181		3 308	1 899	1 210
1922.....	191	192		2 186		296	524	181
1923.....	183	186		183		329	529	177
1924:								
January.....		183			163		525	176
February.....	180	182			155	356	515	175
March.....		181		182	151		515	175
April.....		180			148		515	173
May.....	182	177			147	350	515	171
June.....		176		177	146		526	179
July.....		176			143		526	169
August.....	182	176			141	300	526	169
September.....		176		179	140		526	169
October.....		175			136		515	168
November.....	179	175			135	368	515	168
December.....		175		181	135		515	168
1925:								
January.....		176			136		515	165
February.....	180	175			138	370	515	164
March.....		175			138		515	164
April.....		174			138		515	163
May.....	182	173			138	345	515	161
June.....		172	126	177	139		518	161
July.....		172	126		139		518	169
August.....		172	123		140		518	169
September.....		173	122		142		518	159
October.....		173			142			159

1 July.

2 December.

3 Second quarter.

4 First quarter.

5 From International Labor Review.

TABLE 2.—INDEX NUMBERS OF COST OF HEAT AND LIGHT IN VARIOUS COUNTRIES, 1914 TO OCTOBER, 1925—Continued

Year and month	Austria (Vienna)	Den- mark (100+ local- ities)	Finland (21 local- ities)	United King- dom (26- 30 local- ities)	India (Bor- nab- ay)	Ireland	Norway (31 local- ities)	Sweden (40 local- ities)	Spain (Mad- rid) ¹
	July, 1914=100								
1914		1 100							1 110
1915		1 130							1 118
1916		1 175							² 168
1917		1 220							⁶ 240
1918		1 275					471		1 286
1919		1 292					316		1 326
1920		1 563	1 1232	1 230			7 518 8 220	1 372	1 185
1921		1 401	1 1278	1 260	1 176		7 518 8 220	1 264	190
1922	717275	1 301	1 1276	202	168	⁸ 211	9 301 10 212	194	189
1923	1482792	1 282	1493	183	163	1 210	9 282 10 188	186	186
1924:									
January	1539500	288	1522	188	161	204	9 306 10 204	181	173
February	1544100		1515	188	161		9 313 10 211		186
March	1488900		1515	190	164		9 326 10 219		178
April	1482400		1512	190	164	203	9 322 10 226	183	185
May	1479600		1487	185	166		9 323 10 228		
June	1467300		1496	185	166		9 322 10 222		174
July	1469000	298	1479	183	167	205	9 318 10 220	182	174
August	1498600		1475	185	166		9 317 10 213		171
September	1476000		1476	185	166		9 313 10 208		160
October	1473500		1472	185	167	207	9 308 10 207	180	162
November	1480900		1466	185	167		9 308 10 206		
December	1492400		1527	185	167		9 307 10 207		179
1925:									
January	1492400	277	1446	185	165	204	9 306 10 208	181	178
February	1512500		1428	185	166		9 302 10 209		178
March	1500100		1408	185	165		9 296 10 210		178
April	149600		1402	185	165		9 292 10 213	179	178
May			1390	180	165		9 284 10 209		173
June			1395	180	165		9 277 10 202		174
July		252	1374	180	165		9 274 10 195	177	174
August			1381	180	165		9 268 10 192		174
September			1341	180	165		9 242 10 180		
October				180				172	

¹ July.² December.³ From International Labor Review.⁶ September.⁷ Coal, coke, wood, and petroleum.⁸ Gas and electricity.⁹ Coal, coke, and wood.¹⁰ Petroleum.

TABLE 3.—INDEX NUMBERS OF COST OF CLOTHING IN VARIOUS COUNTRIES, 1914 TO OCTOBER, 1925

Year and month	South Africa (9 localities)	Canada (60 localities)	Hungary	United States (32 cities)	Germany (71 localities)	France (Paris)	Italy (Milan)	Switzerland (33 localities)	Austria (Vienna)
	1910=100	1913=100			Average 1913- 1914=100	First half of 1914= 100		June, 1914= 100	July, 1914= 100
1914.....				¹ 101					
1915.....		¹ 125		¹ 105					
1916.....		¹ 143		¹ 120					
1917.....		¹ 167		¹ 149					
1918.....		¹ 198		¹ 205			² 284		
1919.....		¹ 234		¹ 269		³ 296	² 221		
1920.....		¹ 235		¹ 259		⁴ 485	² 651		
1921.....	¹ 188	¹ 173		¹ 184		⁴ 353	² 512	228	
1922.....	176			173		325	610	179	326066
1923.....	168			176		375	615	175	1598200
1924.....	168			173		428	611	178	2037300
1925:									
January.....					148	} ⁵ 440	} 667	179	2157800
February.....					172			} 445	} 667	179	2168500
March.....	167				172	} 445	} 667			180	2168500
April.....					174			} 445	} 667	180	2165600
May.....					173	} 445	} 667			180
June.....	166		156	171	173			} 445	} 665	180
July.....			156		174	} 445	} 667			180
August.....			145		173			} 445	} 667	180
September.....	166		142		174	} 445	} 667			177
October.....					174			} 445	} 667	177

Year and month	Czechoslovakia	Denmark (100+ localities)	Finland (21 localities)	United Kingdom (97 localities)	India (Bombay)	Ireland	Norway (31 localities)	Sweden (40 localities)	Netherlands (The Hague)
	July, 1914=100								December, 1920 =100
1914.....		² 100							
1915.....		² 110		⁶ 125					
1916.....		² 160		⁶ 155				¹ 160	
1917.....		² 190		⁶ 200				² 210	
1918.....		² 260		⁶ 310				² 285	
1919.....		² 310		⁶ 360			312	² 310	
1920.....		² 355	² 1049	² 430			⁶ 388	⁶ 310	
1921.....	2402	² 248	² 1038	² 290	² 263		⁶ 336	² 390	
1922.....	1618	² 217	² 1093	239	247	⁶ 189	⁶ 292	² 270	⁶ 73
1923.....	1024	² 239	1065	222	214	² 173	247	220	62
1924.....	1057	² 267	1038	226	226	179	230	198	⁶ 54
1925:							246	192	55
January.....		277	1044	230	209	190		192	
February.....			1043	230	210				
March.....			1043	230	207		259		
April.....			1043	230	207			192	
May.....			1043	230	207				
June.....			1040	230	198		257		
July.....		272	1040	228	192			191	
August.....			1042	228	191				
September.....			1043	228	188		244		
October.....				228				190	

¹ December.² July.³ First quarter.⁴ Second quarter.⁵ From International Labor Review.⁶ June.⁷ September.

TABLE 4.—INDEX NUMBERS OF COST OF RENT IN VARIOUS COUNTRIES, 1914 TO OCTOBER, 1925

Year and month	Australia (6 localities)	New Zealand (25 localities)	Canada (60 localities)	Hungary	United States (32 cities)	Germany (71 localities)	France (Paris)	Italy (Milan)		
	1911=100	1909-1913 =100	1913=100			Average 1913-14 =100	First half of 1914=100			
1914	114	105	¹ 102	-----	² 100	-----	-----	-----		
1915	108	102	¹ 86	-----	² 102	-----	-----	-----		
1916	108	100	¹ 85	-----	² 102	-----	-----	-----		
1917	110	³ 95	¹ 92	-----	² 100	-----	-----	-----		
1918	114	³ 98	¹ 101	-----	² 109	-----	-----	¹ 100		
1919	122	³ 100	¹ 111	-----	² 125	-----	-----	¹ 100		
1920	133	³ 110	¹ 134	-----	² 151	-----	⁴ 100	⁵ 108		
1921	140	³ 118	¹ 144	-----	² 161	-----	³ 110	¹ 139		
1922	148	132	146	-----	161	-----	164	202		
1923	155	144	147	-----	164	-----	200	234		
1924	161	157	146	-----	168	58	200	329		
1925:										
January	} 165	} 165	145	-----	-----	77	} 200	393		
February			145	-----	-----	72		393		
March			145	-----	-----	72		393		
April			145	-----	-----	79		393		
May			} 162	} 145	145	-----		79	200	392
June					145	39		167	80	393
July			-----	-----	145	39		82	-----	393
August			-----	-----	145	39		88	220	393
September			-----	-----	145	39		89	-----	393
October			-----	-----	145	-----		89	-----	-----

Year and month	Austria (Vienna)	Denmark (100+ localities)	Finland (21 localities)	United Kingdom (22-30 localities)	India (Bombay)	Ireland	Norway (31 localities)	Sweden (40 localities)	Netherlands (The Hague)
	July, 1914=100								
1914	-----	¹ 100	-----	-----	-----	-----	-----	-----	-----
1915	-----	¹ 100	-----	-----	-----	-----	-----	-----	-----
1916	-----	¹ 102	-----	-----	-----	-----	-----	² 108	-----
1917	-----	¹ 105	-----	-----	-----	-----	-----	⁶ 112	-----
1918	-----	¹ 108	-----	-----	-----	-----	-----	¹ 112	-----
1919	-----	¹ 113	-----	-----	-----	-----	-----	¹ 120	-----
1920	-----	¹ 130	-----	118	-----	-----	-----	⁷ 147	-----
1921	-----	¹ 141	¹ 335	145	¹ 105	-----	-----	⁷ 161	-----
1922	-----	¹ 155	¹ 707	153	165	127	-----	¹ 155	⁷ 109
1923	5850	¹ 160	901	148	165	¹ 127	171	163	119
1924	48017	¹ 160	901	148	165	¹ 127	173	167	125
1925:	95467	¹ 170	107	147	165	128	176	178	126
January	133000	170	1165	147	172	-----	-----	-----	-----
February	133000	-----	1165	147	172	128	-----	186	-----
March	133000	-----	1165	147	172	-----	-----	-----	-----
April	133300	-----	1165	147	172	-----	179	-----	122
May	-----	-----	1165	147	172	-----	-----	186	-----
June	-----	-----	1266	147	172	-----	179	-----	-----
July	-----	-----	1266	147	172	128	-----	-----	122
August	-----	178	1266	147	172	-----	-----	186	-----
September	-----	-----	1266	147	172	-----	179	-----	122
October	-----	-----	1266	148	172	-----	-----	186	-----

¹ July.

² December.

³ Second quarter.

⁴ First quarter.

⁵ From International Labor Review.

⁶ September.

⁷ June.

Method of Computing Index Numbers

IN THE December, 1922, issue of the MONTHLY LABOR REVIEW (pp. 81-85) a short account was given for each country of the scope of the index numbers and of the method of computation used. Changes that had taken place subsequently were noted in the July, 1924, issue and in that of August, 1925. The following changes have taken place recently:

Austria.—In the issue of May 25, 1925, of its monthly bulletin, *Statistische Nachrichten*, the Austrian Statistical Office announces the discontinuance of the cost-of-living index heretofore computed by an equipartisan commission specially appointed for this purpose. At the present time the Statistical Office publishes each month an index of the cost of food. Since this index also will be discontinued at the end of 1925 and a new cost-of-living index covering all the principal items of household expenditure will be computed by the office beginning with 1926, the index of the cost of food has been omitted in the tables preceding.

Hungary.—(Source: Magyar Statisztikai Szemle, Budapest.) Since an official cost-of-living index is now being published by the Hungarian Central Statistical Office the index computed by the Hungarian Statistical Society formerly shown in the preceding tables has been omitted, and from now on the official index will be shown. The new index is based on a theoretical household budget of a workman's family of 4 persons (husband, wife, and 2 children, one 12 and one 6 years of age). It covers the expenditures for food (12 articles), clothing (13 items), heat and light (4 items), and rent for one room and kitchen. The index is computed on the basis of prices ascertained at the end of each month in the public markets and stores. The Statistical Office began publication of this index in June, 1925. The index numbers are now based on gold kronen prices. Base: 1913=1.

Ireland.—In its quarterly reports on the cost of living, the Department of Industry and Commerce has ceased to show index numbers for the cost of heat and light, and clothing.

General Survey

DURING the six months ending October, 1925, the general trend of the cost of living was very uneven. Decreases in some countries were offset by heavy increases in others. Table 1 indicates that the cost of living has decreased in Egypt, Hungary, Switzerland, South Africa, Denmark, India, the Irish Free State, Norway, and Sweden, the decrease being most marked in Norway and India. Increases in the cost of living are reported by Australia, New Zealand, Canada, the United States, Belgium, France, Italy, Greece, Finland, and Great Britain. In France, Belgium, Italy, and Finland the rise was very marked. In Spain and the Netherlands the cost-of-living level underwent no change. In several countries the Government has taken measures toward lowering the cost of living. With few exceptions, however, these measures were unsuccessful. In France, Italy, and Belgium the rise of the cost of living is to be ascribed to the depreciation of the currency.

As shown in Table 2, the cost of heat and light has decreased or remained at its former level in all countries with the exception of New Zealand, Germany, and Italy.

The cost of clothing has shown a slight downward trend in most countries or remained stationary, the only exception being France where prices have moved upward slightly, as shown in Table 3.

Rents have decreased in only two countries, New Zealand and the United States, in the latter very slightly. In Canada, Italy, India, Ireland, Norway, Sweden, Hungary, and the Netherlands the cost of housing has remained stationary. Rents have continued to increase in Australia, Germany, France, Denmark, Finland, and Great Britain. All these facts are brought out in Table 4.

Chinese Living Conditions

AN ARTICLE on density of population and the standard of living in North China by C. G. Dittmer in Volume XIX of the Publications of the American Sociological Society, 1925 (pp. 196-199), and one on living conditions in China by Maude B. Warner in The Annals of the American Academy of Political and Social Science, November, 1925 (pp. 167-173), together give a picture of conditions of life in China at the present time.

Mr. Dittmer made a study of the effect of occupation pressure on the standard of living in China while teaching in the American Indemnity College in Peking during the years 1914 to 1917 and 1918 to 1921. This study was made more difficult because no standards-of-living studies had then been made, there were no vital statistics, and the official census figures were very inexact.

The area of China proper (the 18 Provinces) is approximately one-half the area of the United States, and estimates of the population vary from 350,000,000 to 450,000,000. The 1902 census placed the population at 410,000,000 and the crude density at 268 per square mile, with the densities in the different Provinces ranging from 66 to 683. Comparison of the density of population in China with American and European densities is, however, of little value, since China is still supported by medieval agricultural methods and receives little aid from supporting industries.

With the exception of a few large cities, the population of China is one of agricultural villages ranging in size from 25 to 500 families. The usual-size village is about 100 families. The villages average about one to the square mile in arable sections. The entire agricultural population lives in the village instead of upon the farm. The postfamine studies of Professor Tayler have shown that one-third of the farms are less than one acre, two-thirds are less than two acres, and only one-tenth of 1 per cent are as large as 160 acres, which is a very common size in the United States.

Statistics gathered by the investigator show densities ranging from 956 to 3,000 to the square mile, while Professor Tayler found 13 cases in which the densities ranged from 290 to 6,880. From these and other studies and estimates the writer concludes that in agricultural China—which is practically all China—there is an average density

of population varying with the fertility of the soil and other factors from 1,500 to 2,500 to the square mile.

Two studies of the standard of living which might be maintained under such density were made, one of 195 families in a rural district near Peking and the other of 434 families in six different Provinces of North China. As house and land are usually owned by the peasants the rent value was included as a part of the income, as was also the estimated value of fuel, such as twigs and stubble gathered from the fields.

The families were classified in \$25 (Mexican¹) income groups, and the incomes were found to range from \$20 to \$1,000 per year. The income of the modal group was \$82 per year. In the lowest income group 71 per cent of the income was spent for food, 1 per cent for clothing, 24.5 per cent for fuel, 2.5 per cent for house rent, nothing for land, and 1 per cent for miscellaneous purposes. These expenditures are on the basis of \$20 per year, and include a deficit of 50 cents. Such families live in one-room houses, have no land of their own, and gather the fuel they use from the fields. At the other end of the scale the families having an income of \$1,000 spend 46 per cent on food, 12 per cent on clothing, 5 per cent on light and fuel, 3 per cent on rent, 5 per cent on land, and have 29 per cent left for savings and for miscellaneous purposes. Such a family has a surplus at the end of the year of \$200, lives in a 10-room house, buys all the fuel used, and has 15 acres of land.

The modal family is composed of 4.4 individuals of whom 1.6 are children. The numerous other children of the family have either died or disappeared in early infancy. The annual income of \$82 leaves them with an average deficit of \$1.26. The house which has 4.8 rooms has a rental value of \$4.15, or 5.1 per cent of the income, and is a hovel built about one end and part of the side of a mud-walled courtyard. The entire support of such a family is gained from about two-thirds of an acre of land. Food costs \$55.13, or 67.2 per cent of the income. They live on two meals a day and eat meat but once a year. Meat and tea are the only luxuries they have ever tasted and they have never in their lives had what we would call a square meal. Clothing costs \$3.09, or about 3.8 per cent of the income, while the value of the fuel used is \$9.82, or 12 per cent, and \$3.89, or 4.7 per cent, is spent for miscellaneous purposes or everything above the barest necessities of life.²

Such a standard of living, which is one of bare subsistence, is the price paid for the overpopulation of the country and is maintained in the face of a tremendous birth rate only because the death rate is equally high. "There is no evidence," the writer says, "that the population of China is increasing at all, and there is every evidence that the standard of living has struck bottom; that a Malthusian balance has been at last attained."

Somewhat of a contrast to this gloomy picture of the living conditions of the vast majority of the population of China is given by Mrs. Warner, who spent several years as a missionary in North China. Mrs. Warner says that while first impressions of China leave "a

¹ The Mexican dollar is equal to approximately 50 cents United States currency.

² The remainder of the expenditure (\$7.18), not accounted for, probably covers rental paid for the two-thirds acre of land.

superficial glare of squalor, ignorance, and misery of the masses," second impressions show—

First, that anything that comes into your mind about how people in general live is bound to be true somewhere in China. Second, that no generalization dare be made of how the Chinese live without subjecting oneself to severest criticism and successful contradiction by intelligent Chinese. Third, we are dealing with a civilized people not unlike ourselves, having the same physical need of food and shelter, the same hunger for companionship, as shown in their strong desire for home and social life. Moreover, we are speaking of a race who were writing philosophies on how to live hundreds of years before the birth of Christ and whose predominant psychology from 400 B. C. down to the present is common sense with a strong moral bias.

Although now apparently on the verge of economic and political ruin it must be remembered that China alone of all those countries whose first existence was contemporary with hers has survived, and not only survived but has also the most numerous race of people on earth. In arriving at an estimate of the Chinese, the writer says, it is necessary in a measure to disregard the centuries of corrupt official life and consider the stable Chinese in his home and community.

In general, Chinese society is divided, and has been for centuries, into five classes—scholars, farmers, artisans, merchants, and servants and soldiers. The Chinese are a democratic people and there are no special class distinctions nor any particular mode of living characteristic of one class and not of another, so that it is possible for a member of one class to pass to another if he has the intellectual capacity to do so. The industrial, commercial, and educational life of the people, therefore, rather than any social class system, is the basis of living conditions.

The size and density of population are well known, but while we deplore the state of congestion the writer says they are naturally a gregarious people and like it. As was stated earlier, the farmers live in villages. They walk back and forth to their farms although at harvest season they protect their crops by building shacks of sorghum stalks and sleeping there with a shotgun and a dog. They and their families work from daylight to dark, "all illustrating the industry, intelligence, common sense, and thoroughness with which the Chinese use their native resources and which enable them to secure such large results from their lands."

The handicrafts of China have changed little through the past two thousand years, as many of the articles made now were made then. The one great change was the introduction of cotton. The natural resources of the country are practically untouched and it is said Shansi alone could support the world several hundred years with her unexploited coal fields.

Factors which have contributed to the continuation of the Chinese nation are said to be the physical vitality of the people who can labor longer under all extremes of weather and inconvenience than any other people; their natural industry and habits of economy; their intelligence; their powers of adaptability and cheerfulness; and their ability to cooperate into trade guilds.

The commercial life of the Chinese has been slow to respond to the influence of other countries partly from disinclination on the part of the Chinese, and partly because of the lack of transportation facilities which make it impossible in many places to transport even small

loads from one place to another. The inaccuracy of Chinese money and of weights and standards has also been a bar to the development of commerce with the outside world.

While the women of China have in the past occupied a subordinate position the new era of women's advancement has already begun to affect them and opportunities for education are being offered them. When the education of the masses of women, whom the writer considers to be capable of the finest possible intellectual attainment, has begun to be realized, when China's industrial resources have been tapped, and when commerce with foreign nations has become popular, the writer believes that we may expect real changes in the living conditions, since we now see the Chinese as a race which has proven its powers of adaptability, of endurance, and of patience.

Retail Prices in Shanghai, June 15, 1925

THE Shanghai Market Prices Report, June, 1925 (pp. 44, 45), gives the following table of retail prices of food, clothing, fuel and light, and miscellaneous articles in Shanghai, June 15, 1925:

RETAIL PRICES OF COMMODITIES IN SHANGHAI, JUNE 15, 1925

Commodity	Quantity ¹	Unit of money ²	Retail price, June 15, 1925
Food products:			
Rice, white.....	Shih.....	Dollar.....	11.200
Pork, fresh.....	Catty.....	Copper.....	63.300
Beef, fresh.....	Pound.....	Dime.....	3.330
Mutton, fresh.....	do.....	do.....	3.500
Bacon, native.....	Catty.....	Dollar.....	.230
Chicken.....	do.....	Copper.....	89.700
Eggs, fresh.....	Piece.....	do.....	3.400
Fish, fresh.....	Liang.....	do.....	3.200
Fish, salt, native.....	do.....	do.....	2.000
Greens.....	Catty.....	do.....	4.000
Buds, bean.....	do.....	do.....	6.300
Curd, bean.....	Piece.....	do.....	2.000
Oil, bean.....	Catty.....	Dollar.....	.240
Sauce, 2d quality.....	do.....	Copper.....	16.000
Salt, common.....	do.....	do.....	11.200
Sugar, white, "HX".....	do.....	Dollar.....	.062
Sugar, brown.....	do.....	do.....	.080
Tea, "Hung Muey".....	do.....	do.....	.335
Clothing:			
Cotton, raw, No. 1 (Tai Chong).....	do.....	do.....	.700
Machine cotton, 6-cord, 200 yds.....	Roll.....	do.....	.120
Cloth, striped, native, middle quality.....	Chih.....	do.....	.065
Sheetings, grey, 14lbs. (Jap).....	do.....	do.....	.110
Sheetings, black, 16lbs. native.....	do.....	do.....	.165
Jeans, blue, middle quality (Jap).....	do.....	do.....	.140
Checks, native.....	do.....	do.....	.190
Men's felt hats.....	Each.....	do.....	1.100
Men's cotton socks.....	Pair.....	do.....	.320
Shoes, cloth, middle quality.....	do.....	do.....	.700
Fuel and lighting:			
Firewood, good (Szk Eou).....	Bundle.....	do.....	.042
Charcoal (Wenchow).....	Picul.....	do.....	1.300
Anthracite, household.....	do.....	do.....	2.300
Oil, kerosene, "Brilliant".....	Tin.....	do.....	2.350
Safety matches, native.....	10 boxes.....	Copper.....	10.000
Candles, 12 oz. "Prices".....	6 pieces.....	Dollar.....	.190
Miscellaneous articles:			
Towels, No. 5.....	Piece.....	do.....	.190
Soaps, laundry, 120 pieces, "Ku Pan".....	do.....	Copper.....	10.000
Paper, low.....	36 sheets.....	Dollar.....	.090

¹ 1 shih=6,290 cubic inches; 1 catty=1 $\frac{1}{2}$ pounds; 1 liang=1 $\frac{1}{3}$ ounces; 1 chih=14.1 inches; 1 picul=133 $\frac{1}{2}$ pounds.

² The exchange value of the Chinese dollar in May, 1925, averaged 73.125 cents United States currency, 1 dime equaled 17 cents, and there were 228.7 copper coins to the dollar.

WAGES AND HOURS OF LABOR

Wages and Hours of Labor of Woodworkers in Various Countries ¹

THE International Union of Woodworkers, Amsterdam, has recently published a report, from which the information below is taken, showing in tabular form the working conditions of woodworkers in the various countries of the world on October 1, 1924:

¹[International Union of Woodworkers.] Working conditions for woodworkers in various countries—the position on October 1, 1924. [Amsterdam, 1925?] 12 pp.

WAGES AND HOURS OF LABOR OF WOODWORKERS, OCTOBER, 1924, BY COUNTRIES

[At par: franc, lira, dinar, leu=19.3 cents; Scandinavian krone=26.8 cents; öre=0.268 cent; pfennig=0.238 cent; shilling=24.3 cents; penny=2.03 cents; Austrian, Czechoslovak, and Hungarian krone=20.3 cents; groschen=0.193 cent. Exchange rate varies.]

Country and source of information	Hourly wages	Hours	Overtime work, extra payment, and regulation	Vacations	Wages paid for general holidays?
Belgium:					
Centrale Générale du Batiment, de l'Ameublement et des Industries diverses.	Minimum, 2.90 to 3.75 francs; average, 3.10 to 4 francs; average, whole country, 3.50 francs. Wages of stone carvers and highly skilled machinists are generally higher by some 25 centimes. Pattern makers: Brussels, 4.75 to 5 francs; country, 4 to 4.25 francs. Ship joiners, 3.75 francs Basketware makers, 3 francs Adjustment of wages to index figure every two months.	8 per day, 48 per week	Building: Legal maximum, 2 hours daily, in case of abnormal activity, subject to special agreement with most representative group of workers employed. Night work allowed in emergency and in shifting works. Legal extra payment: First hour, 25 per cent; second hour, 33½ per cent; thereafter, 50 per cent. For night and Sunday work, 100 per cent.	No	No
Denmark:					
Snedkerforbund (cabinetmakers) ¹	Cabinetmakers, 160 öre Joiners, 181 öre Joiners, metal industry, 174 öre Piano makers, 186 öre	do	Extra pay: First hour, 25 per cent; second hour, 33½ per cent; thereafter, 50 per cent. For night work, 100 per cent.	No	No
Børstenbinderforbund (brush makers) ¹	Piecework prevalent. No data available.	do	Maximum, 9 hours per week. Overtime work paid for at extra rates.	No	No
Bødkerforbund (coopers) ¹	160 öre	do	Extra pay: First hour, 25 per cent; second hour, 33 per cent; third hour, 50 per cent; thereafter, 100 per cent.	Partially; if so, paid for at normal rates.	To factory workers but not to shop workers.
Førgyldeforbund (gilders) ²	do	do	No maximum. Extra pay: First hour, 25 per cent; second hour, 33 per cent; thereafter, 50 per cent.	May be had, but no wages paid.	No
Traeindustriarbejderforbund (woodworking industry) ²	Copenhagen, 175 öre; country, 140 öre. Unskilled workers, 115 öre	do	Extra pay: First hour, 25 per cent; second hour, 33 per cent; thereafter, 100 per cent.	Some 100 workers in cooperative enterprises have paid vacation.	No
Billedskaerer-og Dekorationsbilledhuggerforbund (carvers and sculptors) ¹	Wood carvers, 1.80 kroner Modelers, 2.00 kroner	do	Extra pay: First hour, 25 per cent; second hour, 33 per cent; thereafter, 50 per cent. No maximum fixed, but overtime infrequent and generally worked by agreement with union.	No	No
Kæretmagerforbund (cartwrights) ²	168 öre	do	Extra pay: First hour, 25 per cent; second hour, 33 per cent; thereafter, 100 per cent.	State and municipal employees have 2-week vacations with regular pay.	No

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<p>Kurvemagerens Forening (basket-ware makers).¹ Skibstømrerforbund (ship joiners).¹ Germany:</p>	<p>125 öre----- Iron-ship joiners, 177 öre----- Wooden-ship joiners, 133 öre and tool allowance of 5 öre per hour.</p>	<p>8 per day, 48 per week----- do-----</p>	<p>Extra pay: 50 öre per hour; Sundays and general holidays, 75 öre; night work, 100 öre. Extra pay: First hour, 25 per cent; second hour, 33$\frac{1}{3}$ per cent; third and fourth hours, 50 per cent; thereafter, 100 per cent.</p>	<p>No----- No-----</p>	<p>To week worker-but not to piece workers. No.</p>
<p>Deutscher Holzarbeiter-Verband.²</p>	<p>Cabinetmaking: Wages regulated by collective bargaining in 17 wage districts. Districts divided into sub-districts, by locality. Minimum hourly wages so determined range from 40.5 pfennig in lowest wage class of Silesia to 73 pfennig at Hamburg. In Berlin wages are fixed by every enterprise independently since February, 1925, and average 85 pfennig per hour. Sawmilling: 18 wage districts. Wages range from 32 pfennig in lowest class of Upper Silesia to 63 pfennig in highest class of Brandenburg. In both industries pieceworkers receive a guaranteed extra wage of 15 per cent. Brush and pencil making: National collective agreement. Country is divided into 3 classes, by locality. Wages amount to 58, 53, and 49 pfennig, respectively. Stick industry: National collective agreement reached in March, 1925. Average rate of 63 pfennig and piece-rate basis to be 66 pfennig.</p>	<p>do----- do-----</p>	<p>Maximum, 51 hours per week, in urgent cases, when the enterprise is working with normal number of workers. Overtime subject to agreement with works council. Extra pay, 10 per cent----- In case of disagreement as to normal number of workers resort is had to district wages council, whose award is binding. Further overtime hours, Sunday, and night work, and extra rates of pay regulated in district agreements separately.</p>	<p>All workers have right to vacation, ranging from 3 days after 6 months' consecutive employment to 7 days after 3 years' employment on same job. Average wages fixed by agreement are paid. No.</p>	<p>No.</p>
<p>Deutscher Sattler-, Tapezierer- und Portefeuller-Verband.³</p>	<p>In 35 large towns with 8,100 paper hangers, minimum of 68 to 70 pfennig. In 42 medium-sized towns with 1,540 paper hangers, minimum of 64 pfennig. In 23 small towns with 520 paper hangers, minimum of 59 pfennig.</p>	<p>In 35 large towns (8,100 workers), 8 per day and 46 to 48 per week. In 35 medium-sized towns (1,300 workers), 8 per day and 48 per week. In 18 small towns (475 workers), 8 per day and 48 per week. In Augsburg (35 workers), 50 per week. In 7 medium-sized towns (150 workers), up to 54 per week. In 5 small towns (45 workers), up to 54 per week.</p>	<p>Rather general extra pay of 25 per cent for first and second hours; in some instances 10 per cent, and 25 per cent thereafter. Overtime of 1 to 2 hours allowed, but seldom worked.</p>	<p>In 60 localities, question is regulated by collective agreement; vacations paid for at regular rates. No.</p>	<p>No.</p>

¹ All conditions established by collective agreement. ² Wages and hours established by collective agreement. ³ Certain of these conditions are established by collective agreement.

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WAGES AND HOURS OF LABOR OF WOODWORKERS, OCTOBER, 1924, BY COUNTRIES—Continued

Country and source of information	Hourly wages	Hours	Overtime work, extra payment, and regulation	Vacations	Wages paid for general holidays?
France: Fédération des Travailleurs de l'Industrie du Bois.	Cabinetmaking: 4.50 francs in Paris; 3 to 3.50 francs in the country. Sawmilling: 4.50 francs in Paris; 2.50 to 3 francs in the country. Basketware industry: 1.80 to 2.50 francs (except St. Claude and Paris, where wages are slightly better). In Paris a tool allowance of 1 to 2 per cent is paid.	In cabinetmaking 8 per day by decree which is badly observed. In sawmilling and basketware industries, decrees in preparation.	120 hours per year in urgent cases. . . . Legal extra pay fixed, but very seldom paid.	No-----	No
Great Britain: National Amalgamated Furnishing Trades' Association. ¹	3s. 2d. to 1s. 6d. If working away from shop, 1s. per meal, and lodging where necessary.	8 per day, 44 per week. Or 8½ per day, 47 per week with Saturday half holiday.	Extra pay: First and second hours, 25 per cent or 50 per cent; thereafter, 100 per cent. Overtime allowed only in urgent cases, with normal number of employees working.	Vacations compulsory, but no wages or allowance paid. Some district agreements provide that at least 6 days in summer and 3 at Christmas or New Year's shall be given.	No.
Amalgamated Society of Woodworkers. ²	Building: Over 75 per cent of membership, 1s. 8d.; 25 per cent, 1s. 4d. to 1s. 8d. Shipbuilding: London, 1s. 3¼d.; Liverpool, 1s. 5d.; other places, 1s. 2½d. And tool allowance of 3s. per week.	Building: 44 per week in winter, 46½ in summer, with Saturday half holiday. Shipbuilding: 48 per week in London; 47 per week in other places.	Building: Overtime allowed only in urgent cases, and not for more than 4 consecutive days except by consent of appropriate joint committee. Extra pay: First and second hours, 25 per cent; third and fourth hours, 50 per cent; thereafter, 100 per cent. Shipbuilding: Maximum 30 hours per month, except in certain specified cases and by agreement. Extra pay: 50 per cent; for Sunday work, 100 per cent.	Yes; but no wages paid. . . .	No
Amalgamated Society of Woodcutting Machinists.	Sawmilling: London, 1s. 9¼d. to 1s. 8¼d.; Liverpool, 1s. 8¼d.; other places, 1s. 8d. to 1s. 7d.; Scotland, 1s. 5d. In Scotland, a demand for an increase of wages to 1s. 8d. has been submitted to arbitration, but no award had been made at time of report.	47 hours per week-----	Extra pay: 50 per cent-----	-----	-----
Holland: ⁴ Alg. Ned. Bond van Meubelmakers, Behangers en Aanverwante Vakgenooten. ¹	Minimum: Cabinetmakers, 68 cents; paper hangers, 66 cents; average, 7 to 9 cents higher.	8½ hours per day, 48 hours per week.	Maximum, 200 hours per year, 10 per week. Extra pay: 20 per cent; for Saturday and night work, 30 per cent; for Sunday work, 100 per cent.	For each quarter year of consecutive employment, 1 working-day with normal wages. Maximum, 4 days.	Yes; full pay.

Yugoslavia: Osrednje drustvo lesnih delavcev in srodnih stroev na slovenskem ozemlju (Laibach).	Woodworkers in Slovenia, 3 to 7 dinars.	In Slovenian towns, 8 per day; in the country, 9 to 10. In enterprises with less than 15 employees, 9 per day. Act Feb. 28, 1922.	Overtime during four times four weeks in one calendar year on permit by competent public authorities.	No.....	Worker has option of working on general holidays if employer is not willing to pay for them.
	Verband der Holzarbeiter (Agram).	Carpenters and joiners (cabinetmakers), 8 to 16 dinars. Pattern makers, 10 to 16 dinars. Coopers, 6 to 12 dinars. Cartwrights, 6 to 10 dinars. Unskilled sawyers, 3 to 8 dinars.		8 per day, 48 per week. Badly observed.		No.....	No.
Luxemburg: Industrie-Verband der Bau- und Holz- arbeiter des Grossherzogtums Luxemburg.	Joiners, 3 to 3.50 francs. Cabinetmakers, 2.50 to 3.75 francs. Machinists in woodworking industry, 3.50 to 4 francs.	10 per day, 60 per week.	No maximum Extra pay: 30 per cent.	In Esch on the Alzette only, with full pay. After 1 to 5 years of consecutive employment, 3 days; thereafter, 6 days.	No
	Norway: ¹ Norsk Sag-, Tomt-og Hövlariarbeider- forbund.	Piecework prevalent. Average hourly wages: Wood-yard workers, 1.78 kronen; machinists in the woodworking industry (highly skilled), 1.70 kronen; unskilled workers, 1.57 kronen. Free fuel, and tool allowance of 4 öre per hour.	8½ per day, 48 per week.	Maximum, 30 hours per month in urgent cases. Extra pay: First and second hours, 25 per cent; thereafter, 50 per cent; for Sunday and night work, 100 per cent. Work in sawmills after midnight prohibited by law.	After at least 12 weeks of consecutive employment, 8-day vacation with full pay.
[117]	Norsk Möbelindus- triarbeiderforbund.	Average hourly wages, 1.85 kronen. And tool allowance of 3 öre per hour.	48 per week.	Extra pay: First and second hours, 25 per cent; thereafter, 50 per cent; for Sunday work, 100 per cent.	All workers have right to 8-day vacation with full pay.
	Austria: Verband der Holzar- beiter Oesterreichs. ²	Piano workers, 12,000 kronen. Paper hangers, 11,000 kronen. Cabinetmakers, 10,500 kronen. Carvers, 10,500 kronen. Other crafts, 8,200 to 10,200 kronen. Sawyers, 6,400 kronen. Tool allowance of 10 per cent.	8 per day, 48 per week.	Maximum, 30 hours per year; with special permit from public authorities, 60 hours. Extra pay: 50 per cent.	(Legal.) After 1 to 5 years, 1 week; thereafter, 2 weeks with full pay.	Generally not.
Poland: Związek robotników przemysłu drzew- nego w Polsce. ³	(Cabinetmakers, 40 to 140 groschen. Machinists (unskilled), 30 to 90 groschen. Paper hangers, 45 to 120 groschen. Sawyers, 25 to 55 groschen.)	8 per day, 46 per week.	(Legal.) Extra pay: First and second hours, 50 per cent thereafter, 100 per cent. Maximum, 120 hours per year.	(Legal.) After 1 year, 8 days; after 3 years, 15 days, with full pay.	Full pay.

¹ All conditions established by collective agreement.

² Wages and hours established by collective agreement.

⁴ In the Dutch mirror and picture frame industries a collective agreement exists with almost the same conditions as described above. As these industries mainly center in Amsterdam, and are of very slight importance in the country, the agreement concerns Amsterdam only. Working conditions in the cane-chair industry have not been laid down in a collective agreement, but are same as in the other crafts. Conditions prevailing in the basketware industry are extremely bad, as in most other countries.

⁵ Except where expressly noted as having been established by law ("legal"), conditions were established by collective agreement.

⁶ Wages established by collective agreement.

WAGES AND HOURS OF LABOR OF WOODWORKERS, OCTOBER, 1924, BY COUNTRIES—Continued

[118]

Country and source of information	Hourly wages	Hours	Overtime work, extra payment, and regulation	Vacations	Wages paid for general holidays?
Rumania: "Holzarbeiter." Official organ of the Rumanian Communist Woodworkers' Union. ¹	Range from those paid at Klausenburg (minimum) to those paid at Arad (maximum). At Klausenburg: Unskilled workers, 7.10 to 9.50 lei; skilled workers, 9.50 to 21.70 lei. At Arad, from 14 to 27 lei.				
Sweden: Sv. Sägverksindustriarbetareförbundet.	Average, at piecework rates: Sawyers, 90 öre; unskilled workers, 81 öre; wood yard workers, 100 öre; raftsmen and wood sorters (both seasonal workers), 115 öre. Free medical treatment and fuel and housing allowance.	48 per week, with Saturday half holiday.	Extra pay: First and second hours, 40 per cent; night work, 75 per cent; Sunday work, 100 per cent.	Allowance of 40 kronen for 1 week; for workers under 18 years of age, 20 kronen.	No
Sv. Träindustriarbetareförbundet. ¹	Country divided into 10 wage districts. Minimum, skilled workers, 80 to 120 öre; unskilled workers, 8 to 10 öre lower; average, some 10 öre higher. Brush makers and picture-frame workers, 100 öre. Tool allowance of 1 krone per week.	-----do-----	Extra pay: First and second hours, 35 per cent; thereafter, 70 per cent; Sunday work, 100 per cent. Maximum, 50 hours per week or 200 per year. In very urgent cases another 150 hours may be worked, by special permit.	4 to 6 days with full pay.	
Sv. Byggnadsträarbetareförbundet. ¹	Joiners in building industry, 1.22 to 1.60 öre. Glaziers, 1.25 to 1.35 öre	-----do-----	Maximum, 50 hours per month; 200 per year. Extra pay: First and second hours, 35 per cent; nightwork, 70 per cent; Sunday work, 100 per cent.	For glaziers only, 4 to 6 days with full pay.	No
Switzerland: Schweizerischer Bau- und Holzarbeiter-Verband.	Average, 1914 to 1923 (frances): Parquet workers—1914, 0.63; 1918, 1.18; 1920, 2.12; 1921, 2.13; 1922, 1.66; 1923, 2.06. Sawyers—1914, 0.57; 1918, 0.93; 1920, 1.36; 1921, 1.38; 1922, 1.26; 1923, 1.19. Cabinetmakers, machinists, carvers and glaziers—1914, 0.63; 1918, 1.22; 1920, 1.51; 1921, 1.69; 1922, 1.48; 1923, 1.50. Paper hangers—1914, 0.67; 1918, 1.32; 1920, 1.72; 1921, 1.73; 1922, 1.56; 1923, 1.54. Carpenters—1914, 0.62; 1918, 1.34; 1920, 1.55; 1921, 1.50; 1922, 1.37; 1923, 1.39.	For shopworkers generally, 48, with Saturday half holiday. Building: Joiners and paper hangers, 48; parquet workers, 45 to 48; carpenters, 44 in winter, 52 in summer.		3 to 6 days in woodworking industry; in building industry vacations seldom granted.	No

Czechoslovakia: Verband der Holz- arbeiter und Drech- sler (Reichen- berg). ¹	Cabinetmakers, 4 to 4.80 kronen.....	48. Saturday half holi- day optional.	Maximum, with special permit, 2 hours per day for 4 (in some cases 20) consecutive weeks.	Cabinetmakers at Rei- chenberg, 6 days with pay. In other places often 4 paid general holidays or special holidays. In the but- ton industry 3 to 10 days. (This will have to be revised accord- ing to new holidays act.)	No.
	Piano workers, 4.60 kronen.....				
Unie drevodelníku (Prague). ³	Turners, 3.20 to 4.50 kronen.....	48 per week, with Satur- day half holiday.	Overtime by special permit of factory inspector. Extra pay: First and second hours, 30 per cent; thereafter, 50 per cent. For night work, 100 per cent.	After one-half year, 3 days; after 1 year, 6 days, with full pay. (This will have to be revised according to new holidays act.)	No.
	Sawyers, 3.50 to 4.20 kronen.....				
	Woodcutters, 3.50 kronen.....				
	Tool allowance of 1 to 2 per cent.....				
Hungary: Magyarországi Fam- unkázók Szövet- sége. ¹	Cabinetmakers in Greater Prague, 2.60 to 7.50 kronen. Average, 5.50 kronen.	90 per cent of member- ship work 8 per day; 10 per cent work a little longer.	Extra pay: First and second hours, 30 per cent; third and fourth hours, 60 per cent; thereafter, 100 per cent. For Sunday work, 100 per cent.	For paper hangers and brush makers only, 3 to 7 days after 5 years' consecutive employ- ment on the same job.	No.
	Carvers, 4 to 8 kronen; in the country, 2 to 3.50 kronen.				
	Mother-of-pearl turners, 2.80 to 4 kronen.				
	Sawyers, 2 to 3.60 kronen.....				
	Cabinetmakers, 8,000 to 15,000 kronen.				
	Wood turners, 9,000 to 16,000 kronen.				
Machinists, 7,000 to 14,000 kronen.					
Budapesti Szobrás- zók Szakegylete.	Brush makers: Men, 8,000 to 12,000 kronen; women, 3,500 to 8,000 kronen.	48 per week.....	Unlimited..... Extra pay, 30 per cent.....	No.....	No.
	Basketware makers, 6,000 to 12,000 kronen.				
	Paper hangers, 9,000 to 17,000 kronen.				
	Cartwrights, 10,000 to 24,000 kronen.				
	Wood carvers, 17,000 kronen.....				
Stone carvers, ¹ 21,000 kronen.					
Plasterers and mold makers, ¹ 19,000 kronen.					

¹ All conditions established by collective agreement.³ Certain of these conditions are established by collective agreement.

No data were available from the Italian Woodworkers' Federation, so that Italy had to be omitted from the table above. The following data, taken from the official protest of the Italian Confederation of Labor against the admission of the Fascist workers' delegates at the last International Labor Conference at Geneva, show conditions in Cremona, described as being "the mightiest bulwark of Fascist domination." In 1921-22 a collective agreement, covering the woodworking industry, established the following wages: For machinists, 3.17 lire per hour; highly skilled workers, 2.78 lire; skilled workers, 2.42 lire; and unskilled workers, 2.23 lire. The present collective agreement (that of 1924-25) reached by the Fascist woodworkers' organization provides as follows: Machinists, 2.58 lire per hour; highly skilled workers, 2.32 lire; skilled workers, 2.25 lire; and unskilled workers, 2.01 lire. "It should moreover be borne in mind that since 1921 the cost of living in Italy has by no means decreased, indeed, has increased very considerably."

Earnings of Factory Workers in New York State

THE following figures showing the gradual increase in the earnings of office workers in New York State from June, 1914, to October, 1925, are taken from the November, 1925, issue of The Industrial Bulletin, published by the industrial commissioner of that State:

	Average weekly earnings ¹
June, 1914.....	\$19. 18
December, 1916.....	19. 58
December, 1917.....	21. 07
October, 1918.....	24. 11
October, 1919.....	27. 13
October, 1920.....	31. 06
October, 1921.....	31. 27
October, 1923:	
Men.....	42. 18
Women.....	20. 77
All employees.....	32. 56
October, 1924:	
Men.....	43. 60
Women.....	21. 29
All employees.....	33. 58
October, 1925:	
Men.....	44. 38
Women.....	22. 63
All employees.....	34. 49

New Closing Law in Argentina²

THE retention of clerks between the hours of 8 p. m. and 6. a. m. in stores and other commercial establishments rendering public service is forbidden in Argentina, according to the provisions of the 8 o'clock closing law (No. 11320) which was passed

¹ For both men and women unless otherwise specified.

² La Prensa, Buenos Aires, May 30, 1925, p. 10.

on May 29, 1925, by the Chamber of Deputies after having been amended by the Senate.

Exemptions.—The law exempts restaurants, hotels, boarding houses, dairies, newspaper presses, and undertaking establishments, which may remain open all night. Bars, cafés, confectionery stores, and auction houses selling furniture and art objects may remain open until 1 a. m. Stores in which tobacco, books, periodicals, or flowers are sold may remain open until 1 a. m. if attended only by the proprietors. Hairdressing establishments may remain open until 10 o'clock on Saturdays and on days preceding holidays. Pharmacies which take turns carrying on business on Sundays may remain open until 10 p. m.; as may also other pharmacies, providing they are attended during the evening hours by the employer or by employees not working more than eight hours a day. Workers in these establishments shall be entitled to a rest equivalent to the time they were employed between the hours of 8 p. m. and 6. a. m. In continuous industries employees may not work more than 8 hours in every 24 and the working hours must alternate periodically.

The above-mentioned establishments must post in a conspicuous place one or more records containing the names and job specifications of all workers as well as their working hours and time allowed for meals and rest.

Penalties.—First violations of the law are punishable by fines ranging from 20 to 100 pesos national currency,³ and second offenses by double the amount.

Closing Law in the Dominican Republic⁴

ALL commercial and industrial establishments as well as public offices in the Dominican Republic must close all day on Sundays and on legal holidays, according to a new law of that country effective since June 1, 1925. Barber shops and grocery stores may remain open on these days until 10 a. m., and public markets until noon. The law exempts from its provisions restaurants, hotels, dairies, bakeries, printing offices, hospitals, post offices, and telephone exchanges. The closing hour on ordinary days for business establishments is 7 p. m.

Change in London Building-Trade Hours

SINCE August, 1923, the English building trades have been working under an agreement which set the normal week at 44 hours except during the part of the year when daylight saving, known in England as summer time, prevails, when it was lengthened to 46½ hours. This worked out at approximately seven months under the shorter, and five months under the longer schedule. The unions accepted the arrangement very reluctantly, claiming that 44 hours should be the maximum throughout the year, and in

³ Peso at par = 96.48 cents; exchange rate varies.

⁴ Gaceta Oficial, Santo Domingo, May 30, 1925; and Pan American Union Bulletin, Washington, September, 1925, p. 932.

London many of the rank and file refused to work the longer hours. For two years there has been friction and unrest over the summer hours, and the effort to enforce them has been attended with continual trouble. Recently, however, an agreement was signed by the London master builders' association and the two bodies in which the London building workers are organized, which it is hoped will not only settle this dispute, but go far toward restoring peace in the industry. The Manchester Guardian, in its issue for November 13, 1925, gives an outline of the new arrangement:

Under the new agreement a 44-hour week is fixed for all the year round, but the men agree that overtime of two hours a day at time and a quarter pay shall be permitted for the first five working-days of the week. All the unions, except the plasterers, have agreed to the proposals.

Steps are being taken to have the form of the terms copyrighted, so that no party outside the agreement may be in a position to use it for encouraging men to leave their jobs or to become parties to using it for other ends.

Apprentices are not affected and will be encouraged to leave work early if they are disposed to attend evening classes. It has been agreed, however, that overtime should continue until the abnormal demand for labor in the building industry ceases, but that overtime should only be permitted in shops or on jobs where notice has been posted by authority of the joint signatories to the agreement. No employee, moreover, shall be dismissed on account of his objection to work overtime.

Wage Increases in Haiti

A COMMUNICATION from the American Consul at Cape Haitien, Haiti, dated October 12, 1925, indicates that the wages of various classes of workers had been increased materially during the preceding three months. The report states that mechanics, chauffeurs, and store clerks are receiving rates of from 10 to 20 per cent over those received in 1924. The statement below shows a few actual and typical examples of daily or monthly wages paid during 1924 as compared with those paid in October, 1925, in the specified occupations.

	1924	October, 1925
Common laborers (per day)-----	\$0. 20-\$0. 25	\$0. 25-\$0. 35
Domestic servants (per month)-----	3. 00- 5. 00	6. 00-10. 00
Cooks (per month)-----	5. 00- 8. 00	8. 00-12. 00

Wages in Japan in June, 1925

A RECENT consular report gives the average daily wages paid in the principal cities of Japan in June, 1925. The average daily wages of 8 classes of female workers combined was 0.956 yen,¹ and of 42 classes of male workers, 2.20 yen. The following table shows the wages paid in the different occupations:

	Average daily wages (yen)
Filature operatives, female.....	0.95
Spinning-mill operatives, female.....	1.10
Silk-throwing operatives, female.....	.87
Cotton weavers, female.....	.95
Silk weavers, hand, female.....	1.09
Knitting-mill operatives, male.....	1.69
Knitting-mill operatives, female.....	.89
Turners.....	2.26
Finishers.....	2.29
Founders.....	2.19
Blacksmiths.....	2.16
Wooden-pattern workers.....	2.33
Potters.....	1.94
Glass workers.....	2.09
Cement workers.....	1.99
Brickmakers.....	1.62
Tile makers.....	2.04
Drug makers.....	1.43
Matchmakers, male.....	1.53
Matchmakers, female.....	.67
Oil pressers.....	1.92
Paper makers, Japanese paper.....	1.36
Paper makers, foreign paper.....	1.59
Leather makers.....	2.10
Flour-mill workers.....	1.70
Sake makers.....	1.95
Soy makers.....	1.78
Sugar-mill workers.....	1.97
Confectionery makers.....	1.77
Canners.....	2.12
Tailors.....	2.55
Cobblers.....	2.40
Clog makers.....	1.92
Carpenters.....	2.98
Plasterers.....	3.22
Stonemasons.....	3.51
Bricklayers.....	3.31
Tile layers.....	3.43
Painters.....	2.85
Sawyers.....	2.41
Joiners.....	2.57
Lacquer workers.....	2.17
Steel workers.....	1.55
Mat makers.....	2.80
Sign painters.....	2.26
Bookbinders.....	2.11
Stevedores.....	2.55
Laborers, male.....	2.12
Laborers, female.....	1.15
Fishermen.....	1.62
House servants, male..... ²	21.13
House servants, female..... ²	18.58

¹ Yen at par=49.85 cents; exchange rate varies.

² Rate per month, with food and lodging.

Labor Supply, Hours of Work, and Wages in Swedish Agriculture, 1924¹

DATA contained in a recent report² on labor conditions in agriculture in Sweden are based on information received from 2,137 rural communes, of which 656 or 30.7 per cent reported a good labor supply, 1,334, or 62.4 per cent, a sufficient supply, and 110, or 5.2 per cent, an insufficient supply, while 37, or 1.7 per cent, could not give a definite reply.

Hours of labor.—For the ordinary farm laborers the average net working hours in summer were 9.9 and the rest period was 2.1 hours; in winter the working hours were 7.8 and the rest period was 1.3 hours. For horsemen, the average net hours of work were 10.6 and the rest period was 2.2 hours during the summer; during the winter they were 8.7 and 1.6 hours, respectively. For cattlemen the average hours of work were 10.4 in summer and 10.2 in winter and the rest periods were 3.2 and 3.1 hours, respectively.

Wages.—The average yearly wages of male farm servants in 1924 were 570 kronor³ in cash, which with the addition of the estimated value of board and lodging would make the total yearly earnings 1,164 kronor. Female farm servants received an average of 430 kronor in cash, the estimated value of board and lodging making the total annual earnings 933 kronor. The average wages of horsemen were 624 kronor per year; including payments in kind they amounted to 1,371 kronor. Cattlemen received an average of 717 kronor in cash, which with the payments in kind made the average yearly earnings 1,469 kronor.

The average daily wages of farm laborers in 1924 were as follows:

	Per day (kronor)		Per day (kronor)
Males, permanent employees:		Females, permanent employees:	
Without board—		Without board—	
Summer.....	4.29	Summer.....	2.98
Winter.....	3.36	Winter.....	2.32
With board—		With board—	
Summer.....	2.97	Summer.....	2.07
Winter.....	2.21	Winter.....	1.54
Males, temporary employees:		Females, temporary employees:	
Without board—		Without board—	
Summer.....	4.79	Summer.....	3.27
Winter.....	3.72	Winter.....	2.54
With board—		With board—	
Summer.....	3.34	Summer.....	2.28
Winter.....	2.48	Winter.....	1.71

Agricultural wages increased steadily during the period 1914 to 1920, until the peak was reached in 1920 at 210 to 225 per cent over 1913 wages. During the three years following, wages decreased from 40 to 50 per cent, but in 1924 the decrease stopped and a tendency toward an increase was shown, so that at the end of 1924 they were about 80 per cent higher than in 1913. For further data on wages in agriculture in Sweden, see MONTHLY LABOR REVIEW for April, 1921, September, 1922, June, 1923, and September, 1924.

¹ For workers employed by the year, wages are mainly for fiscal year 1924-25.

² Sweden. [Socialdepartementet.] Socialstyrelsen. Arbetartillgång, arbetstid och arbetslön inom Sveriges jordbruk år 1924. Jämte specialundersökning rörande vissa arbets- och löneförhållanden för betodlingsarbetare i Skåne. Stockholm, 1925. 77 pp.

³ Krona at par=26.8 cents; exchange rate varies.

PRODUCTION AND EFFICIENCY OF LABOR

International Statistics of Production and Per Capita Output of Coal

The German Federal Coal Council (*Reichskohlenrat*), a body which regulates the German coal industry,¹ has recently issued a bulletin² giving international statistics on coal production, such as total production of the various varieties of coal, number of workers employed, duration of shift, per capita output per shift or year, exports and imports, wholesale prices, and wages of miners. Since authentic international production data, and especially data on per capita output, are very rare and hard to obtain, the following table has been compiled from the above source, showing for the year 1913 and the postwar years the total coal production of all important coal-producing countries in Europe, the number of workers employed in the mines, the duration of their shift, and their per capita output.³ To these European data there have been added the corresponding data for the United States as shown in the publications of the U. S. Geological Survey⁴ and the Bureau of Mines.⁵

COAL PRODUCTION, WORKERS EMPLOYED, HOURS OF LABOR, AND PER CAPITA OUTPUT, BY COUNTRY AND YEAR

Country, district, and year	Annual production (short tons)	Number of workers		Duration of shift (hours)	Per capita output per shift (short tons)		
		Under-ground	Total		Total workers	All under-ground workers	Pick miners
Germany:							
West Upper Silesia—							
1913	12,256,585		31,730	9-10	1.26	1.80	7.46
1920	8,696,124		42,037	7½			
1921	8,030,328		46,168	7½			
1922	9,738,909		48,220	7½	.69	1.03	4.82
1923	9,639,701		48,497	7½	.69	1.02	4.81
1924	12,015,179		41,848	8½	1.03	1.44	6.62
1925, first quarter			44,738	8½	1.16	1.61	7.36
District Dortmund—							
1913				8½	1.03	1.30	2.05
1920				7	.70	.92	1.65
1921				7	.69	.89	1.73
1922				7	.70	.90	1.75
1923				7			
1924				8	.95	1.19	2.09
1925, first quarter				8	.99	1.24	2.24

¹ See article on socialization measures in Germany and Austria in MONTHLY LABOR REVIEW, November, 1919, pp. 73-75.

² Germany. Reichskohlenrat. Statistische Übersicht über die Kohlenwirtschaft im Jahre 1924. Berlin, 1925, 63 pp.

³ The figures given for European countries in the following table cover all kinds of coal except lignite.

⁴ United States. Geological Survey. Mineral Resources of the United States, 1922. Part II: Coal in 1922. Washington, 1924; and Mimeographed Report No. 379: Production of coal in the United States in 1923.

⁵ United States. Bureau of Mines. Mimeographed Report No. 435: Coal production in the United States in 1924.

COAL PRODUCTION, WORKERS EMPLOYED, HOURS OF LABOR, AND PER CAPITA OUTPUT, BY COUNTRY AND YEAR—Continued

Country, district, and year	Annual production (short tons)	Number of workers		Duration of shift (hours)	Per capita output per shift (short tons)		
		Underground	Total		Total workers	All underground workers	Pick miners
Germany—Continued.							
District Aix-la-Chapelle—							
1913	3,599,042		13,762	8½	.84	1.05	1.73
1920	2,416,264		14,507	7	.55	.73	1.33
1921	2,376,580		14,829	7	.54	.75	1.52
1922	2,634,521		15,415	7	.55	.74	1.38
1923	1,473,788		10,719	7	.41	.55	1.02
1924	3,179,062		17,639	8½	.67	.88	1.61
1925, first quarter			18,054	8½	.74	.95	1.70
Lower Silesia—							
1913	6,093,570		27,290	8½	.74	1.02	2.21
1920	4,680,408		36,230	7	.45	.64	1.49
1921	5,149,992		39,277	7	.46	.66	1.62
1922	6,050,680		41,606	7	.49	.69	1.69
1923	5,870,903		43,552	7	.47	.66	1.61
1924	6,157,504		36,716	8	.61	.86	1.83
1925, first quarter			32,251	8	.69	.95	1.88
Ruhr district—							
1913	125,893,802		372,389	8½	1.03	1.28	-----
1920	96,743,135		469,781	7	-----	-----	-----
1921	102,718,757		542,496	7	.69	.89	1.72
1922	105,711,529		544,961	7	.70	.90	1.75
1923	45,792,162		507,478	7	-----	-----	-----
1924	103,696,506		443,552	8	.95	1.19	2.10
1925, first quarter			447,923	8	.99	1.24	2.24
Free State of Saxony—							
1913	6,002,078		24,362	8-9	.78	1.01	-----
1920	4,465,458		34,373	7	-----	-----	-----
1921	4,971,418		37,146	7	-----	-----	-----
1922	4,621,986		36,019	7	.46	.63	1.72
1923	4,170,039		38,041	7	.41	.56	1.46
1924	4,176,653		31,815	8	.52	.71	1.76
1925, first quarter			28,079	8	.60	.81	1.94
Great Britain:							
1913	321,830,428	909,834	1,127,890	8½	1.14	1.22	-----
1919	257,256,005	945,806	1,191,313	7½	.88	1.09	-----
1920	256,955,075	990,359	1,248,224	7½	.81	1.09	-----
1921	182,742,054	918,066	1,144,311	7½	1.90	1.08	-----
1922	279,534,793	933,029	1,162,754	7½	1.01	1.14	-----
1923	309,121,896	979,785	1,220,431	7½	1.00	1.26	-----
1924	301,429,976		1,179,281	7½	.98	1.24	-----
1925, first quarter			1,074,079	7½	1.01	-----	-----
France:							
1913	44,191,607	129,891	195,833	9	.69	1.08	-----
1919	23,773,530	114,440	172,062	8 to 9	.49	.82	-----
1920	26,789,691	145,904	220,468	8 to 9	.58	.80	-----
1921	31,130,102	155,436	235,924	8	.57	.87	-----
1922	34,351,644	149,950	226,677	8	.55	.82	-----
1923	41,508,877	167,582	253,818	8	.61	.89	-----
1924	48,518,892	204,660	281,715	8	.62	.88	-----
Belgium:							
1913	25,178,965	105,921	146,084	9	.58	.81	3.48
1919	20,373,996	93,432	137,399	8	-----	-----	-----
1920	24,679,619	110,116	159,944	8	.53	.75	-----
1921	23,975,243	112,978	162,840	8	.50	.74	3.60
1922	23,378,893	104,150	153,003	8	.51	.76	3.69
1923	25,261,638	107,354	159,433	8	.53	.76	3.87
1924	25,749,962	116,832	168,016	8	.51	.74	3.87
1925, first quarter		120,647	172,365	8	.52	.75	3.86
Netherlands:							
1913	2,064,627	7,169	9,715	9	3 212.75	3 287.70	-----
1919	3,750,059	14,134	20,318	8	3 180.78	3 265.66	-----
1920	4,344,204	15,943	22,874	8	3 185.19	3 272.27	-----
1921	4,322,158	17,269	24,996	8	3 173.06	3 250.22	-----
1922	5,037,557	17,823	25,163	8	3 189.60	3 282.19	-----
1923	5,821,299	19,384	26,896	8	3 216.05	3 298.73	-----
1924	6,791,332	21,619	29,612	8	3 229.28	3 314.16	-----
Czechoslovakia:							
1913	15,731,516		65,942	9½	.84	-----	-----
1919	11,911,448		66,186	8½	.66	-----	-----
1920	13,537,503		74,779	8½	.61	-----	-----

1 Strike from April 4 to July 2.

2 Provisional figure.

3 Per year.

4 Data supplied by United States Bureau of Mines.

COAL PRODUCTION, WORKERS EMPLOYED, HOURS OF LABOR, AND PER CAPITA OUTPUT, BY COUNTRY AND YEAR—Continued

Country, district, and year	Annual production (short tons)	Number of workers		Duration of shift (hours)	Per capita output per shift (short tons)		
		Under-ground	Total		Total workers	All under-ground workers	Pick miners
Czechoslovakia—Continued.							
1921	13,253,304		75,893	8½	.64		
1922	10,919,771		72,101	8	.69		
1923	13,610,498		68,895	8	.82		
1924	15,828,511		69,001	8	.84		
Poland:							
East Upper Silesia—							
1913	35,622,250		89,581		1.32		
1922	28,010,799		144,605		.66		
1923	29,189,169		150,856		.67		
1924	26,128,054		124,450		.80		
1925, first two months			96,638		1.01		
Dombrowa—							
1913	7,533,187		23,522		1.16		
1922	7,776,797		49,038				
1923	8,178,038		50,133		.62		
1924	7,269,814						
Cracow—							
1913	2,172,653		6,975		1.10		
1922	2,189,188		14,831				
1923	2,257,531		14,921		.60		
1924	2,010,613						
United States:							
Pennsylvania anthracite—							
1913	91,525,000		175,745	8-10	2.02		
1919	88,092,000	*107,829	154,571	8	2.14	43.1	
1920	89,598,000	*101,023	145,074	8	2.28	43.3	
1921	90,473,000	*116,817	159,499	8	2.09	42.9	
1922	54,683,000	*114,279	156,849	8	2.31	43.2	
1923	93,339,000	*114,721	157,743	8	2.21	43.0	
1924	87,927,000	*119,463	160,009	8	2.00	42.7	
Bituminous coal—							
1913	478,435,000		571,882	8-10	3.61		
1919	465,860,000	*508,801	621,998	8	3.84	44.7	
1920	568,667,000	*529,812	639,547	8	4.00	44.9	
1921	415,922,000	*567,289	663,754	8	4.20	44.9	
1922	422,268,000	*582,409	687,958	8	4.28	45.1	
1923	564,157,000	*598,486	702,817	8	4.48	45.3	
1924	483,687,000	*531,904	619,604	8	4.56	45.3	
Canada:							
1913	14,799,419		27,917		3537.93		
1919	10,754,573		27,198		3502.65		
1920	13,035,457		29,387		3507.06		
1921	11,614,243		30,222				
1922	11,753,734						
1923	13,915,252		30,000		3553.36		

* Per year.

* Data supplied by United States Bureau of Mines.

Production

DURING the World War, production in all fields of industry underwent a reduction so as to permit a large output of war materials. After the conclusion of peace the scant stocks of manufactured goods and the great demand for such goods brought about a strong revival of industry in most countries and consequently also a greatly increased demand for coal. The increased demand for coal, however, could not be met fully because in the first postwar years production of coal fell off considerably in nearly all the important coal-producing countries, owing to the fact that during the war the mines had been irrationally exploited, only the richest seams being worked; and chiefly because the mine workers' daily per capita output had decreased, especially in European countries. This decrease in per capita output was largely due to the universal introduction in postwar

times of shorter shifts (7 to 8 hours) for miners. It had been generally expected that with the introduction of a shorter working-day the workers, being less exposed to the influence of fatigue, would work more intensively. In most instances, however, this expectation has not been fulfilled. Not only the daily per capita output but also the hourly output decreased. This phenomenon may be ascribed to several physical and psychological causes, such as the difficulty of resuming systematic, well regulated work after years of military service spent in exposure to danger and privations, but largely in idleness; exhaustion of nervous energy; reaction from the long-endured military discipline; irritation over the nonfulfillment of too liberal promises made to ex-soldiers; resentment against the war profiteers with their ill-gotten riches; and general labor unrest.

Thus, in 1919 the world's coal production fell to 1,148,607,000 short tons as compared with 1,341,511,000 tons in 1913, a decrease of 14.4 per cent. In 1920 it rose to 1,286,396,000 short tons, or only 4.1 per cent less than the pre-war production. This increase was, however, chiefly due to the fact that in that year the production of bituminous coal in the United States increased by nearly 103 million short tons over that of 1919. By that time the revival of industry in Europe began to slacken and the demand for coal grew less. The world coal market would have collapsed as early as 1921 owing to an oversupply of coal, if several large miners' strikes had not somewhat disburdened it. In Great Britain there was a miners' strike in November and December, 1920, followed by the long strike in 1921 which caused a loss in production of over 74 million short tons. Then came the strike of the miners in the United States in 1922, which lasted several months, causing also a great loss in production. The French-Belgian occupation of the Ruhr district in 1923 was responsible for another decrease in production, amounting to approximately 75 million short tons.

The great decline of coal production in 1921 and 1922, is the more remarkable when it is remembered that the world consumption of coal normally increases by leaps and bounds. In the 20 years preceding 1914 the average annual increase was 42,000,000 short tons. There is probably no fact that speaks more eloquently of the economic disorganization wrought by the war than this decline in the production of coal.

In 1923 and 1924 the world's coal production came very near to the pre-war level. The per capita output of mine workers had also increased gradually, in some countries even exceeding the pre-war output. There was therefore no longer any reason for the former general clamor for increased production of coal. The supply of coal had become ample but sales began to slacken and in 1924 a crisis set in in the European coal-mining industry. Production ceased to be the chief problem of the industry, and how to increase sales and how to meet foreign competition became the principal problems.

The principal reason for the decreased consumption of coal is to be found in the stagnation of world commerce. Other contributory factors are the increasing use of water power, the rapidly expanding electrification of railroads and industries, the increasing use of oil as fuel, and the installation of more economic heating systems by large consumers of coal.

All efforts hitherto made in Europe with a view to increasing the consumption of coal have centered in lowering the costs of production so as to be enabled to cut the price of coal. The measures taken so far have, however, not been successful. Mine workers' wages, which form the largest item in the costs of production, are already very low and the miners' organizations have so far successfully opposed all wage cuts. The mine owners therefore demand that the duration of the shift be increased. But it is very hard to make an increase in the hours of labor plausible to miners when they know that there is an overproduction of coal and that thousands of miners are out of work and subsisting on unemployment doles.

In 1925 the crisis in the European coal industry become even more accentuated than in 1924 and there are no indications of an improvement of the situation in the near future.

Per capita production

INTERNATIONAL statistical data on coal production and especially those on per capita output of mine workers are not comparable from country to country because the location and richness of the coal deposits, the methods of mining, and the mechanical and technical equipment vary greatly in the individual countries. Only national data are comparable.

In Germany per capita output per shift showed a great falling off in postwar years, in all the mining districts, up to 1924 when an improvement set in. This improvement was chiefly due to an increase in the duration of the shift by one hour. Owing to the decreased per capita output a greatly increased working force had to be employed in all mining districts. In 1924, however, the working staffs had been reduced considerably, especially in the Ruhr district, and the improvement in per capita output must, therefore, in part be also ascribed to increased efficiency of the workers. The improvement in per capita output continued during the first quarter of 1925.

In Great Britain the per capita output per shift reached its lowest point in 1920 with 0.81 ton. In 1921 and 1922 it rose to 0.90 and 1.01 tons, respectively. It decreased again slightly in 1923 to 1 ton and in 1924 to 0.98 ton, and during the first quarter of 1925 stood at 1.01, a decrease of about 11 per cent as compared with 1913. This decrease is largely due to a reduction of the duration of the shift in postwar times from $8\frac{1}{2}$ to $7\frac{1}{2}$ hours.

While the total production has increased in France, per capita output per shift has decreased considerably; in 1924 the per capita output was only 0.62 ton, as against 0.69 ton in 1913. If only underground workers are considered the corresponding figures are 1.08 and 0.88 tons.

Belgian coal production in 1924 shows an increase over that in 1913, but the per capita output per shift of all mine workers and that of all underground workers has decreased in postwar times, although that of pick miners has increased from 3.48 tons in 1913 to 3.87 tons in 1924, in spite of a reduction of the daily hours of labor from nine to eight.

The Netherlands is the only European country in which coal production has increased in a surprising manner, and also the only one in which the per capita output of all workers combined and of under-

ground workers only, increased in postwar times. The per capita output per year of all workers rose from 212.75 tons in 1913 to 229.28 tons in 1924, and in the case of underground workers only, the corresponding figures are 287.70 and 314.16 tons.

The newly-acquired Polish mines in East Upper Silesia show a great falling off in production in spite of the fact that the working force employed has been greatly increased. The mines in Dombrowa and Cracow have maintained their pre-war production but only by means of a working staff twice as large as in 1913. The per capita output per shift in the East Upper Silesia mines has decreased from 1.32 tons in 1913 to 0.66 ton in 1922. In 1923 it rose to 0.67 ton, in 1924 to 0.80 ton, and in the first two months of 1925 to 1.01 tons.

In Czechoslovakia, the per capita output per shift was the same in 1924 as in 1913, namely 0.84 ton.

In contrast with the large coal-producing countries in Europe the United States not only maintained its pre-war coal production in most of the postwar years but even increased it considerably in 1920 and 1923. A slump in bituminous coal production took place in 1921, and in 1922 in both bituminous coal and anthracite production. In the latter year this was due to the miners' strike which lasted several months. In 1924 producers curtailed bituminous coal production considerably, owing to unfavorable conditions in the iron and steel industry.

The most remarkable fact is that in postwar times the per capita output per shift in American bituminous coal mines increased from year to year in spite of shorter hours of labor; in 1913 the average per capita output was 3.61 short tons and in 1924 it had gradually increased to 4.56 tons. In anthracite production per capita output reached its highest level in 1922 with 2.31 short tons, which represent an increase of about 14 per cent over 1913; since then per capita output has fallen off considerably, and in 1924 it was only 2 short tons, as compared with 2.02 short tons in 1913.

Canada's coal production in postwar times has never reached the level of pre-war production. Per capita output, although it decreased in the first postwar years, in 1923 exceeded the pre-war figure.

CHILD LABOR

Child Labor in Canada¹

“CHILD labor with all its sinister accompaniments is already raising its ugly head” in the Dominion of Canada, Miss Helen Gregory MacGill declared in a paper read before the conference of the Canadian Council on Child Welfare, which met at Ottawa, September 28 to October 1, 1925.

Laws have been passed by the various Provinces directly or indirectly relating to working children, but there is great need for coordination and correlation of this legislation not only as between Provinces but within individual Provinces. On the whole, the Canadian child labor laws “present a curious patchwork, an undigested hodgepodge of good intentions frustrated by administrative amendments.”

For instance, the minimum wage boards of British Columbia and Ontario protect to some degree the wages and hours of young girls, but boys do not come at all within the jurisdiction of these boards and boys have been and will continue to be substituted for girls.

In Ontario, New Brunswick, and Quebec children may work in factories 10 hours a day and 60 hours a week,² and in emergencies 72½, 80, and 72 hours, respectively. Manitoba permits 54 hours per week in factories and in emergencies, 70 hours; Saskatchewan, 48 hours; in emergencies, 72½ hours. In British Columbia children under 16 years of age may be employed 66½ hours a week, and young girls have sometimes worked 77 hours a week in fruit and confectionery shops. In the British Columbian act, seats for clerks are mandatory but no one is employed by the municipalities to enforce the law nor has the minimum wage board any authority to see that this provision is carried out. The clerks themselves are afraid to make charges against their employers in this connection for fear of losing their jobs. Indeed, this section of the law would be a dead letter throughout the Province if it were not for some well-disposed employers who are themselves willing to put the regulations into effect.

In British Columbia and Nova Scotia the factory act provisions in regard to minimum age, hours, and time for beginning and ending work are set aside during fruit canning and packing and fishing seasons. In the former Province the restrictions relative to the work of all children, young girls, and women are completely rescinded during such seasons. Nova Scotia also makes concessions to these industries, but with reservations.

In Alberta, employment of girls under 15 years of age, in offices, shops, and factories between 11 p. m. and 7 a. m. is prohibited; in

¹ Labor Gazette, Ottawa, October, 1925, pp. 981, 983-991.

² In Quebec cotton and textile mills, children may work 53 hours per week.

Manitoba, of children under 12 years of age, habitually, between 9 p. m. and 6 a. m.; in New Brunswick of "female persons" between 10 p. m. and 6 a. m.; in Nova Scotia of girls between 9 p. m. and 6 a. m. (girls under 18 may, however, be employed for 36 days per annum for not more than 12½ hours per day); in Ontario, of boys under 16 and girls under 18 between 6 p. m. and 7 a. m. in shops and between 6.40 p. m. and 7 a. m. in factories, except for 36 days per annum in emergencies when employment may be extended to 72½ hours per week; in Quebec, of children under 18 years of age between 9 p. m. and 6 a. m.; in Saskatchewan, of boys under 16 and girls under 18 after 6.30 p. m. except for 36 days a year in emergencies, when employment may be extended to 72½ hours per week, such employment, however, not being allowed between 10 p. m. and 7 a. m. for persons under 18 years of age.

British Columbia has raised the age precluded from night work to 15 years for both boys and girls, but Prince Edward Island and the Yukon have no prohibition as to night work.

Alberta is declared to have done well in limiting children's hours to 8 a day and 48 a week.

In Alberta, British Columbia, and Saskatchewan the compulsory school age is 15 years; in Nova Scotia cities, 16 years, but in this Province any child over 13 years of age may remain away from school if he is actually engaged in gainful employment and "satisfies the school commissioners that it is necessary for him to work." Moreover, a child over 13 who has passed grade 5 may secure an exemption of 30 days from school attendance if "his services are required in husbandry or necessary household duties, or some one is dependent upon him, or he has valid excuse."

In New Brunswick the age for entering factories is 14 years. In this Province the workmen's compensation board has been recently empowered "to prohibit by publication in the Royal Gazette the employment of boys under 14 and girls under 18 years of age in factories, the work of which the board may deem unwholesome or dangerous." In Manitoba the law permits boys to begin working in shops at 13 years of age and girls at 14 years of age, the allowed hours being 8 per day and 48 per week. Boys over 14 years of age, however, may be employed 14 hours per day and 60 hours per week. Under a resolution the compulsory school age may be raised to 15 years by school trustees, provided they have employed a school-attendance officer. Children between 14 and 16 years of age are obliged to attend school unless they are regularly employed in household duties or in industrial or farm work, but a child over 12 years of age may be exempted by the school principal or any "competent authority" from school attendance for 6 weeks if the services of such child "are required in husbandry or urgent and necessary household duties."

The compulsory school age in Ontario is nominally 16 years, but practically 14 years with various exceptions for work permits. In rural districts it is not even required to go through the form of securing such certificates.

Prince Edward Island makes it obligatory for children to be in attendance for "60 per cent of the school period"; in Quebec there is no compulsory school law but a child may not be employed in busi-

ness, trade, or industry unless he or she can read or write fluently. In the Yukon district a child under 12 years of age is required to attend school 16 weeks per annum.

The Provinces, Miss MacGill pointed out, raise the compulsory school age and then promptly relax the enforcement of such regulations, every Province having its special exemptions for "husbandry," "household duties," "maintenance of self" or some "other dependent," or "during the fishing and fruit season." She closed her address by suggesting in some detail minimum standards for child welfare in Canada.

On the last day of the conference of the Canadian Council on Child Welfare it was decided to include the following in the 1925-1930 program of that body:

1. Effort to obtain recognition of the following standards in legislation affecting employment of juveniles in Canada:

(a) The minimum age for permanent gainful employment during the school year of either sex shall be 15 years.

(b) Night employment shall be prohibited for persons under 18 years of age.

(c) Employment of persons under 21 years of age in dangerous, unhealthy, or hazardous occupations shall be prohibited.

(d) Persons under 18 years of age shall not be employed more than 8 hours a day or 44 hours a week and shall have a rest period of one day in seven. Hours spent in continuation classes shall be counted as hours of labor.

(e) Minimum wage regulations shall apply to all persons of both sexes 18 years of age.

2. Investigation into aims and methods of juvenile employment divisions and vocational guidance bureaus in Canada, the United States, and elsewhere with a view to development of the most effective services in these fields.

LABOR AGREEMENTS, AWARDS, AND DECISIONS

AGREEMENTS

Brewery, Flour, Cereal, and Soft Drink Workers—Label Agreement

A COPY of the combination label agreement used by the International Union of United Brewery, Flour, Cereal, and Soft Drink Workers of America follows:

First. That in consideration of the employment agreement in existence between the undersigned firm and Local Union No. — of the International Union of United Brewery, Flour, Cereal, and Soft Drink Workers of America, the international union agrees to furnish the union label as long as the employment agreement is in force and existence. The union label may be used on sacks, barrels, or packages containing union-made flour, on which the firm may see fit to use said label.

Second. In case of termination of the employment agreement by lapse of time, or in case of violation of its terms or of this label agreement, when no new agreement can be consummated, or the differences adjusted, the undersigned firm agrees, on demand of the international union or its duly authorized local representatives, to at once discontinue the use of the union label and surrender the cut and property rights in said label to the International Union of United Brewery, Flour, Cereal, and Soft Drink Workers of America.

Third. In no case shall the local or International Union of United Brewery, Flour, Cereal, and Soft Drink Workers be required to refund any money for such unused barrels, sacks, or other packages, used by the undersigned firm to distribute its product on which the union label appears.

Cap Makers—Milwaukee

LOCAL No. 16 of the United Cloth Hat, Cap, and Millinery Workers' International Union, at Milwaukee, entered into an agreement with four local firms for one year from August 1, 1925. The agreement provides for a closed shop, 44-hour week, week work, and a minimum wage of \$40 a week, except for lining workers.

The sections referring to holidays, labels, and unemployment insurance follow:

Party of the second part shall not be required to work on the following legal holidays: New Year's Day, Decoration Day, Fourth of July, Labor Day, Thanksgiving Day, and Christmas Day, and no deduction shall be made therefor from the wages of the party of the second part.

All labels of party of the second [part] used by party of the first part shall be furnished by party of the second part at cost of \$3.75 a roll, said labels to be under the exclusive control of the party of the second part.

Employers and employees engaged in the cap trade and business in large industrial centers realize the duty and correlative right of workers to protection against periods of economic stress and unemployment; that the employers of workers are not responsible for slack seasons and depressions in the trade; that the trade owes the employee a livelihood in slack as well as in busy seasons. Therefore, it is agreed and understood that in the event that party of the first part fail to employ party of the second part for a full period of 48 weeks, then, and in that event, party of the first part shall be liable for and pay to party of the

second part for the use and benefit of its members employed by party of the first part a sum of money equal to 5 per cent of the total wages paid to said employees during the current year in the following manner, to wit: In the event that said employment is less than 48 weeks and more than 43 full weeks, 1 per cent of the sum equal to 5 per cent as herein stated shall be paid to party of the second part for each week less than said 48 weeks; in the event that said employment is equal to 43 full weeks or less for the current year, of the whole of said 5 per cent as herein above described shall be paid by party of the first part to party of the second part, which latter party shall equitably divide and distribute same among those of its members employed by party of the first part as and for an unemployment insurance.

The party of the first part shall sign and furnish to the chairman of the party of the second part a verified statement weekly showing the amount of money paid to each member of party of the second part as herein described and the hours of shop employment and operation, said statements to be compared with the books of party of the first part at the expiration of this agreement.

Wood Heel Industry—Haverhill, Mass.

AN arbitration agreement effective until December 31, 1926, affecting 900 workers in 16 factories, was made between the Shoe Workers Protective Union of Haverhill and the Haverhill Wood Heel Manufacturers' Association, January 15, 1925, providing for a closed shop and that there shall be no strike, lockout, or cessation of work. By its terms the board of arbitration is given the right to determine the manner of conducting its hearings, to summon witnesses, to conduct an investigation of all matters in dispute referred to it, and to settle the same, and its findings which are to be made in writing are to be conclusive and binding upon the parties.

The following extracts show the other provisions of the agreement:

The manufacturer agrees that there shall be no laying off of members of the crew during slack periods, and during the slack periods work shall be distributed as equally as possible among the crews.

During the months of December, January, February, March, April, and May of each year the regular working time shall be five and one-half days each week of 48 hours. The remaining six months of the year the working week shall be five 9-hour days of 45 hours.

The agent of Local No. 11 may within legal limits, if in his opinion overtime work is necessary, grant additional hours. For overtime work, operators shall be paid additional compensation at their regular rate. This article is not arbitrable.

All differences between the parties to this agreement shall be referred for final settlement to a board of arbitration consisting of three members [named]. All of said members shall serve until the expiration of this agreement.

A vacancy in the membership of said board of arbitration caused by the death, resignation, refusal, or inability to serve of the third or neutral member, shall be filled by the appointment of a new member of said board by the then agent of Local No. 11 of the Shoe Workers' Protective Union and the then secretary of the Haverhill Wood Heel Manufacturers' Association: *Provided, however,* That if within 12 secular days from the creation of such vacancy, the said agent and the said secretary shall fail to agree upon and designate the third or neutral member of said board, then said appointment of the third or neutral member shall be named in writing by any five of [eight] named persons, acting upon the written application of said secretary or said agent, but no neutral member shall be so named unless he has the indorsement of either said secretary or said agent.

In case of the failure of any member of said board other than the neutral member to serve for three days for any cause, then the other members of the board of arbitration shall proceed and transact business, and in such case their decision shall be the decision of the board, and if they fail to agree the decision of the neutral member shall be the decision of the board.

Every decision of the said board of decision [sic] shall so far as it may be possible, relate back to, and become effective as of, the date of the original claim for arbitration, and the same matter shall not be brought before the board again within six months from the date of said decision.

If either party shall refuse to arbitrate any controversy under the foregoing provisions and such provisions for legal reasons can not be enforced, then and in such case the parties respectively agree that they will submit such controversy to arbitration under the provisions of chapter 251 of the general laws, and will execute an agreement, therefor in accordance with said chapter, which agreement shall name as arbitrators the persons then constituting the aforesaid board of arbitration, and shall contain, so far as it properly may, the provisions of this agreement respecting arbitration; and it is further agreed that in case of a refusal to sign such agreement, this agreement itself shall constitute an agreement for arbitration under provisions of said chapter.

The third or neutral member of said board of arbitration shall be reimbursed for all expenses and disbursements incurred by him in the performance of his duties, and shall be paid a reasonable compensation for his services, the parties hereto agreeing to pay in equal shares all sums of money required for the above-mentioned purposes. Clerical or stenographic services incurred by the board shall be borne equally by the association and union.

The various clauses of this agreement are to be independent of each other, and if any one clause is for any reason invalid, the invalidity thereof shall not affect the other clauses.

Withdrawal from the Wood Heel Manufacturers' Association shall not free any of the members from responsibility under this agreement.

AWARDS AND DECISIONS

Clothing Industry—Decisions of Hart, Schaffner, & Marx Trade Board

Examination of Goods

THE Hart, Schaffner, & Marx Trade Board, in decision No. 1447, November 9, 1925, rendered a decision in regard to inspection of goods by officials before it was done by the regular examiners. The union objected to this as taking work away from the examiner. The opinion of the trade board follows:

In the opinion of the trade board the officials of the union, particularly interested in the purchase and the quality of the woolens, have occasionally checked inspected special pieces of goods without resort to examination by the cloth examiners. It is admitted that examinations or inspections of this sort are exceptional and occasional.

So long as they are exceptional and occasional the trade board finds them allowable. It may well be that the woolen buyers may wish to check up on a particular parcel of goods, as they appear to have done hitherto, and such inspection should be made by the company's official. If the inspection became a regular rather than an occasional feature, then the union might have some claim for restoration of the "first examination."

Pay for Time Lost

IN DECISION No. 1446, November 10, 1925, the Hart, Schaffner, & Marx Trade Board gave a decision in regard to time lost by a prospective employee. The company made a request for a cloth examiner, who was sent by the union. He reported at 1 o'clock but was not put at work until 1.41 p. m. The union demanded pay for this time, but the company objected to paying men "for such time as they wait pending enrollment and assignment to work." The trade board ruled as follows:

It seems to the trade board that the only interest of the people lies in a reasonably prompt attention to the men who report on requisition, and not have the

men sit and wait. And there is no reason why the man should not be taken care of promptly by the foreman or some of his assistants. After all, the company can release a man if he is found incompetent during the first two weeks. The trade board can not recognize a sweeping requirement that the company must pay invariably for whatever time is lost by waiting. Each instance would have to be dealt with on its own merits.

In the present case the trade board allows the claim in the interest of prompt dealing with applicants.

Clothing Industry—New York

THE impartial chairman in the New York Clothing Industry on November 7, 1925, rendered a decision in case No. 136, relative to a registered contractor not being given work.

The firm contended that the workmanship of the contractor was unsatisfactory; that during the previous month it had been obliged to pay \$250 for busheling on work made in this shop and to pay in advance for work on which the contractor had withheld delivery; and that it had filed four complaints with the exchange because of unsatisfactory work.

The union contended that the firm had originally employed this contractor without consulting the union; that his 65 employees were entitled to the work of the firm; that the coats complained of had been damaged before they were made up; and that the firm's complaint about workmanship was due to a desire to secure a reduction in price.

The impartial chairman, after an investigation, stated that "there has been a radical change in the management of the shop, which warrants the expectation that the workmanship will be greatly improved." He therefore directed "the firm to send another trial lot to this shop, the contractor to be responsible for any loss the firm may suffer should the workmanship not prove satisfactory."

Motion-Picture Employees and Stage Hands—Decisions of Industrial Commission of Colorado

IN FILE No. 1273, November 25, 1925, the Industrial Commission of Colorado fixed the rate for stage hands and moving-picture employees at Colorado Springs, the employees having filed a demand for an increase in wages and reduction of hours as follows:

For operators of moving-picture machines, a change from \$35 for 8 hours per day, 6 days constituting a week, to \$37.50 per week, 7½ hours per day, 6 days constituting a week. For relief men for machine operators a change from 75 cents per hour to 85 cents per hour. At the present time the above change affects four operators and two relief men.

Their demands also include a change in wage for electrician, property man, assistant carpenter, and flyman on two days vaudeville show, from \$15.75 weekly salary to \$17 per week. This demand at the present time affects only four employees.

The employees contended that they were entitled to the increase in wages because of the increase in living costs, low wages in comparison with the wages paid other craftsmen, and a greater patronage of the theater sufficient to compensate for the increase, and that the operators were entitled to a decrease of hours "for the reason that

said operators are absolutely confined within their working booths for periods as long as four hours at a time without any arrangement for even short-time relief and that said half hour would be of great aid to said employees and has been granted to such operators in other cities."

The employers contended that if the demands were granted it would materially add to the cost of production and that the earnings did not justify such increases.

The commission's report was as follows:

The commission finds from the evidence herein that said employees are entitled to the increase in wages demanded herein; that the reduction in hours for motion-picture machine operators is not justified at this time.

Therefore, it is the order and decision of the commission that for two days vaudeville per week, electrician, property man, assistant carpenter, and flyman be paid a weekly salary of \$17; that motion-picture machine operators be paid \$37.50 for 8 hours per day for 6 days per week, and that relief men be paid 85 cents per hour. The above wages to be effective December 1, 1925.

Railroads—Decisions of Railroad Labor Board

Cabin Interlocker

IN DECISION No. 3926, November 23, 1925, the question of the use of a "cabin interlocker" at a crossing was considered. At Mineola, the tracks of the Texas & Pacific Railway Co. are intersected by a branch of the Missouri-Kansas-Texas Railroad, necessitating the erection of a tower in which three lever men were employed to manipulate the levers controlling the operation of trains over the crossing. As very few trains were operated over the branch line, the Texas & Pacific Railway Co., in the interest of economy, did away with the tower and installed a "cabin interlocker" in its place.

Under the present arrangement the normal position of signals and derails is clear for the Texas & Pacific tracks, and when Missouri-Kansas-Texas trains find it necessary to cross over a member of the train crew enters the tower and operates the signals, permitting the train to pass through and, again setting signals and derails in clear position for the Texas & Pacific tracks.

The employees contended that through a technicality the positions of three men had been excluded from the telegraphic agreement—

as the same tower is there and also the levers which govern the operation of tracks over the crossing; that these levers are now being handled by trainmen from a central point, the same as the regular towermen who were employed prior to the abolishment of the positions. They ask that the positions be restored and the employees replaced thereon and compensated for monetary loss since November 26, 1923, account of trainmen performing this service.

The board, however, upheld the action of the carrier.

Discharge of Assistant Yardmaster

IN DECISION No. 3902, November 19, 1925, the Railroad Labor Board decided the status of an assistant yardmaster on the St. Louis-San Francisco Railway, who had been dismissed for appearing as a witness for defendant in a suit. He had been in the employ of the company for about 20 years, acting as brakeman, conductor,

switchman, and assistant yardmaster. In July, 1924, while acting temporarily for a few days as general yardmaster—

Mr. R. was summoned as a witness in the Federal court in behalf of a defendant who was an employee of the carrier and was being prosecuted by the carrier for the alleged offense of breaking into a box car. Mr. R. had previously declined to attend court upon the mere request of the defendant and did not attend until he had been subpoenaed. He then called on the telephone the same train master who had assigned him to the position of general yardmaster and informed him of the summons. The train master told him to go as a witness and that he would take care of his work until his return. He was absent from his work about 1 hour and 45 minutes.

The summons was read to Mr. R. over the telephone and the superintendent of the carrier in a letter to him claimed that the summons was telephoned to Mr. R. by the defendant's lawyer and that he was not, in fact, legally summoned. The evidence shows that Mr. R. did ask the name of the man reading the summons to him but did not ask his official position. There is nothing in the record that shows any lack of good faith on the part of Mr. R. or any justification for the assumption that he had manifested any eagerness to appear as a witness in behalf of his fellow employee, who was finally discharged without conviction.

The carrier takes the position that the Railroad Labor Board has no jurisdiction over this case, because the position held by Mr. R. at the time of the occurrence was an official one that took him from under the transportation act, 1920.

Opinion.—The Labor Board finds—

1. That, upon the merits of the matter, the dismissal of the employee was not justified; and,

2. That his case is within the jurisdiction of the board.

It would be a long stretch of a technicality that would give Mr. R. the status of an official simply because he may have been temporarily holding an official position for a few days, and thus deprive him of his rights under the transportation act incident to his general status as an employee.

Decision.—The Railroad Labor Board decides on the evidence presented in this dispute that Mr. R. shall be reinstated to the service of the carrier with seniority rights unimpaired and paid for all time lost, less the amount earned in other employment.

Rearrangement of Messenger Runs

DECISION No. 3929, November 23, 1925, grew out of rule 59, in decision No. 2132 (MONTHLY LABOR REVIEW, April, 1924, p. 107), directing the Southeastern Express Co., among other things, to grant its employees one day's rest in seven. To carry out this requirement the carrier, February 26, 1924, posted bulletins rearranging the messenger runs operating between Bristol, Knoxville, and Chattanooga, Tenn.

The employees protested the rearrangement of runs, contending that rule 59, above mentioned, did not contemplate changing the runs of messengers, that the carrier should have provided messengers to relieve the regular messengers on their lay-off days, and that the act of the carrier was in violation of rule 88 of the agreement, reading as follows:

“RULE 88. *Rates.*—Established positions shall not be discontinued and new ones created under a different title covering relatively the same class of work for the purpose of reducing the rate of pay or evading the application of these rules.”

The employees request that all the runs involved in the rearrangement be restored as they were prior to decision No. 2132, and that the express messengers be paid for all extra expense incurred thereby and for all extra hours worked by reason of the change.

The carrier states that the rearrangement of this messenger service was made in order to obtain the maximum service from the monthly assignments of these employees without the payment of overtime and in order to give each messenger affected one day off duty each week, and there is no rule which will prevent it from making any changes in its schedules or terminals that may be deemed

advisable from an economical and operating standpoint, when such changes will decrease the costs and expenses of operations and perfect the express service rendered to the public.

The carrier contends that it did not abolish old established positions and create new ones under different titles but merely rearranged the messenger service for the purpose of applying rule 59 of decision No. 2132 of the Labor Board, and in doing so some of the rates of the messengers were decreased from \$158.80 to \$151.30 per month and others were increased from \$143.80 to \$151.30 per month, which rearrangement of messenger service is not a violation of rule 88 of the agreement, as the messengers were not cut off and put back under a new title, and there has been no reduction in the force of messengers.

Decision.—The carrier was within its rights in rearranging the runs of express messengers for the purpose of giving these employees one regular day off duty in seven.

Status of Strikers

IN DECISION No. 3905, November 20, 1925, the Railroad Labor Board stated its position in regard to the relation existing between a carrier and its employees on strike, under certain circumstances.

The Delaware, Lackawanna & Western R. R. Co. had arranged with contractors in various cities to handle its freight locally. The board having stated in decision No. 1279, October 23, 1922, that the freight-house employees of the contractors were under the jurisdiction of the Labor Board, the carrier discontinued the contracting system at Scranton and took over the operation of the freight house, retaining the contractor's employees, and ignoring the employees in its service at the time the handling of its freight house had been let out, claiming that as such employees had struck at the time the work was contracted they had "ceased to be its employees," having "severed their connection with the carrier."

The Brotherhood of Railway Clerks complained to the board because the former employees had not been reinstated when the carrier ceased contracting.

The Railroad Labor Board, after an examination of the question, rendered decision No. 1361, from which the following extracts are taken:

The carrier takes the position that the men can not present their grievance to the Labor Board, because they have refused to work for the so-called contractors under the diminished wages and mutilated working rules imposed.

These contracts were merely subterfuges by which the carrier arbitrarily changed the wages and working conditions of these employees without compliance with the provisions of the law. The employees sought conferences with the carrier, but they were denied this right.

The carrier had taken steps which purported to close its shops, transfer its employees to a new employer, remove them from the application of the transportation act, 1920, and obliterate their wage and rule agreements. This was equivalent to a lockout. This was done under a claim of legal right, and the employees apparently acquiesced in the carrier's view of the matter that the shops had been closed and that they had been thrown out of employment. The Labor Board can not afford to strain at a technicality and say that these men, with their entire status as railway employees apparently destroyed by a deliberate act of the carrier, should not be allowed to complain before the board because they stopped work under the contractor.

The board adhered to its views as expressed in the above extract and added the following:

While, as stated, the decision did not specifically provide that the employees who may have suspended work be returned to the service, the opinion above

expressed clearly shows that it was not the intention of the board to consider such employees as having lost their rights to their former positions.

Decision.—The carrier is directed to take up with any employee who may have suspended work the matter of reinstatement upon the application of the interested employee or his representative.

Railroads—Decision of Station Service Board of Adjustment, New Haven System

IN DOCKET No. 47, November 19, 1925, the Station Service Board of Adjustment, Operating Department, New Haven System, a seniority question was involved. A storekeeper at the Boston freight terminal was released on account of certain alleged irregularities. Later his restoration, with seniority rights unimpaired, was authorized by the superintendent, and he displaced a delivery clerk at the terminal. The latter protested his displacement.

The board approved the restoration of the storekeeper with seniority rights unimpaired. However, it objected to his exercising displacement privileges and directed the restoration of the delivery clerk to his former position, permitting the storekeeper "to exercise his bidding rights for advertised vacancies."

Street Railways—Boston

ON THE expiration of the agreement between the Boston Elevated Railway Co. and its employees, the following questions concerning proposed changes in the existing contract of employment were submitted to a board of arbitration:

1. The changes requested by each party in part 5—"Classification, hours, and rates of the present agreement."

2. Shall there be a differential for motormen on surface car lines operating more than one car.

3. What disposition shall be made of the truck drivers' cases now pending between the association and the company under section 406.

As to 1. The association has requested that the rates of wages of all employees of the company who are members of the association be increased 22½ cents per hour.

On the other hand, the trustees have requested that the basic wage of 72½ cents per hour be reduced to 65 cents per hour.

The arbitrators considered the various questions at issue and rendered a report October 23, 1925, from which the following extracts are taken:

The act under which the road is now being operated assumes that the car rider will pay the whole expense. The taxpayer steps in only to meet deficits which are to be temporary, and which are to be repaid later out of receipts from car riders. It is assumed that the trustees can increase fares indefinitely and they are instructed to do so if necessary to meet requirements.

We agree that within reasonable limits the expense of our transportation system should be paid by those who ride and not by the taxpayer.

The policy to which, heretofore, the Commonwealth has committed itself has been to place upon the car rider the burden of paying the carrying charges of the rapid transit facilities. Most of these facilities, whether provided by overhead or subsurface construction, have served to relieve a surface congestion

which tended to become a nuisance not only to the car rider, but to the vehicle operator and pedestrian as well.

All classes of the highway-using public have been benefited by subway or elevated construction, but the rentals, computed to cover interest and sinking-fund requirements on its cost, have been levied only upon the car rider. When the pressure upon the car fare becomes acute, the tendency in every arbitration is to pass this cost of service pressure on to the employees by the argument that the 10-cent fare is already overloaded, and will collapse under the additional burden of an increase of wages. Obviously, therefore, this logic asks the employees as such to bear some of the expense of providing adequate highway facilities for the public, and rapid transit for car riders. To present the car rider with service at cost is merely presenting him with the burden of carrying the cost of a service only a portion of which is rendered to him. An equally large part of the service is rendered to the public, and to the extent that it is, should be borne by the public, and without complaint. Therefore it has appeared to the board that a denial of the right to an increased wage until the cities and towns which have to date been assessed for the deficits of previous years have been reimbursed is based upon a fallacy. Surely no part of this burden should be passed on to the employees.

Furthermore, to suggest that because the fares can not be raised and because the public control act provides for a fixed return upon invested capital, the employees can not be paid a fair and reasonable wage is thoroughly unjust. It appears to be a sound assumption that the legislature intended that labor should receive a reasonable wage as well as capital a fixed return. Capital can not expect to be guaranteed against a varying return upon its investment and shift to the employees the burden of absorbing the fluctuations of income from the industry.

In regard to the differential between surface motormen who drive one car and those who drive trains the board said:

We are of opinion that there is not enough difference between these duties to warrant a differential in wages.

In regard to a differential between rapid transit guards and motormen the board said:

We are of opinion that the present differential between surface-car motormen and rapid-transit motormen is at least sufficient. Therefore, we could not make a differential between rapid-transit guards and rapid-transit motormen except by reducing the wages of the guards.

In regard to one-man car operators and bus drivers, the board said:

In 1923 the board of arbitration, in commenting upon a similar issue, stated that "in those cases where the operators must collect the fares, make change, and issue transfers, the present differential of 8 cents per hour is inadequate." No change was then made in the differential for the reason, among others, that a large proportion of one-man car operation did not require fare collection, the proportion of one-man car operation was only about 25 per cent, and a substantial increase in the basic rate was being awarded. At the present time the proportion of one-man car operation is between 45 and 50 per cent and gradually increasing.

The arbitrators are convinced that the difference between the work of the motorman of the one-man car and the motorman of the two-man car under the conditions existing in Boston upon the elevated system calls for a differential in excess of the present rate of 8 cents per hour. Accordingly, they decide upon an increase to 10 cents per hour, which differential is hereby awarded. The same differential is also awarded to bus drivers.

The board awarded no change in the basic wage rates.

Collective Agreements in Norway in 1924¹

AT THE end of 1924 there were 409 collective agreements in force in Norway, affecting 111,476 workers. Of the agreements in force at the end of the year, 39 were general agreements which covered most of the factories in the particular trade or industry and affected over 70,000 workers. Sixty of the agreements, covering 3,436 workers, were new agreements. The most important provisions of the agreements were those relating to wages. Wage increases were shown in 177 agreements affecting 84,668 workers. The former wage rate was continued in 108 agreements covering 17,643 workers. A minimum wage was fixed in 149 agreements involving 44,437 workers, and a "standard" wage was fixed in 42 agreements covering 6,618 workers, while 2 agreements covering 5,750 workers provided that the work should be paid for partly according to a minimum and partly according to a standard wage.

Another of the more important provisions in the agreements in 1924 was that relating to vacations. Under the agreements about 92 per cent of the workers are to receive 8 or 12 days' vacation, the 8-day vacation being the usual one provided for.

Prior to 1914, agreements of two and three years' duration were ordinarily made. Since 1918 they have as a rule been for only one year, but there is a tendency now to make them effective for a longer period.

¹ Norway. Statistiske Centralbyrå. Megling og voldgift. Tariffavtaler og arbeidskonflikter. Oslo, 1925. 28*, 48 pp. Norges offisielle statistikk, VII, 177.

EMPLOYMENT AND UNEMPLOYMENT

Employment in Selected Industries in November, 1925

EMPLOYMENT in manufacturing industries of the United States increased 0.2 per cent in November as compared with October. This is the fourth successive month of increased employment, and while the increase is smaller than in either August, September, or October it is notable in that customarily in November so many industries report reduced forces that a lowering of the employment index might be expected. The bureau's index of employment for November is 92.5 as compared with 92.3 in October. Pay-roll totals increased 0.4 per cent in November and per capita earnings increased 0.2 per cent.

These figures are based on reports received by the Bureau of Labor Statistics from 9,405 establishments in 53 industries covering 2,937,894 employees whose combined earnings during one week of November were \$79,372,005. The same establishments in October reported 2,930,660 employees and total pay rolls of \$79,022,468.

Comparison of Employment in October and November, 1925

THE volume of employment increased in November in five of the nine geographic divisions of the United States. Generally speaking, the Eastern and Southern States show gains, while the Western States show decreases. The largest gain in employment—1.4 per cent—and the largest gain in pay-roll totals—2.5 per cent—were in the South Atlantic division, while the greatest losses in the two items were 2 per cent in employment in the Pacific division and 2.6 per cent in pay-roll totals in the West North Central division.

Five of the 12 groups of industries gained in employment in November, while 8 groups show increased pay-roll totals. The miscellaneous group and metals, other than iron and steel, each gained over 2 per cent both in employees and employees' earnings; the leather group lost 2.9 per cent of its employees, and pay-roll totals were reduced 7.6 per cent; and other group changes were small.

Twenty-nine of the 53 industries show an increase in employees, rubber boots and shoes leading with a 5.4 per cent advance. Substantial, though somewhat smaller, gains also appear in the agricultural implement, machine tool, stamped and enameled ware, carpet, electrical machinery, shirt, and furniture industries. The cotton-goods industry gained 2.3 per cent and the iron and steel industry gained 1.5 per cent in employees.

The greatest decreases in employment were in such distinctly seasonal industries as ice cream (8.1 per cent), carriages, fertilizers, and women's clothing. The boot and shoe industry shows a drop of 3.9 per cent in employment with a drop of 10.4 per cent in pay-roll totals, while the automobile industry coupled a drop of 1 per cent in employment with an increase of 0.5 per cent in pay-roll totals.

Thirty-one industries show increased pay-roll totals, the leading industries in this respect being pianos, with a gain of 6.1 per cent;

rubber boots and shoes, with a gain of 6 per cent; and agricultural implements, electrical machinery and apparatus, and electrical car building and repairs, each with a gain of over 5 per cent. Machine tools, slaughtering and meat packing, and paper boxes each gained 4 per cent or over; and carpets, brass and copper products, book and job printing, and shirts each gained 3 per cent or over.

The most pronounced falling off in pay-roll totals was in the boot and shoe industry, which shows a decrease of 10.4 per cent. Other substantial decreases in this item were almost entirely seasonal ones, women's clothing leading this group with a decline of over 9 per cent.

For convenient reference the latest figures available relating to all employees, excluding executives and officials, on Class I railroads, drawn from Interstate Commerce Commission reports, are given at the foot of the first and second tables.

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS DURING ONE WEEK EACH IN OCTOBER AND NOVEMBER, 1925

Industry	Estab-lish-ments	Number on pay roll		Per cent of change	Amount of pay roll		Per cent of change
		October, 1925	Novem-ber, 1925		October, 1925	November, 1925	
Food and kindred products	1,268	206,199	204,539	-0.8	\$5,176,426	\$5,166,900	-0.2
Slaughtering and meat packing.....	80	75,622	77,684	+2.7	1,926,925	2,007,349	+4.2
Confectionery.....	260	35,951	35,268	-1.9	648,637	634,113	-2.2
Ice cream.....	127	7,951	7,305	-8.1	264,336	251,073	-5.0
Flour.....	346	16,671	16,221	-2.7	451,455	430,025	-4.7
Baking.....	440	59,034	57,528	-2.6	1,565,804	1,518,036	-3.1
Sugar refining, cane.....	15	10,970	10,533	-4.0	319,269	325,404	+1.9
Textiles and their products	1,739	570,132	575,663	+1.0	11,258,074	11,314,630	+0.5
Cotton goods.....	324	190,135	194,564	+2.3	3,024,988	3,112,008	+2.9
Hosiery and knit goods.....	265	86,461	87,409	+1.1	1,609,339	1,638,607	+1.8
Silk goods.....	209	62,380	62,471	+0.1	1,356,858	1,336,417	-1.5
Woolen and worsted goods.....	192	68,507	69,088	+0.8	1,499,753	1,529,826	+2.0
Carpets and rugs.....	31	21,557	22,329	+3.6	571,167	593,598	+3.9
Dyeing and finishing textiles.....	87	29,882	30,043	+0.5	750,292	733,464	-2.2
Clothing, men's.....	276	58,622	57,526	-1.9	1,350,690	1,306,607	-3.3
Shirts and collars.....	89	22,867	23,576	+3.1	369,610	380,692	+3.0
Clothing, women's.....	184	17,643	16,790	-4.8	469,988	426,688	-9.2
Millinery and lace goods.....	82	12,095	11,807	-1.7	255,389	256,723	+0.5
Iron and steel and their products	1,590	613,507	620,490	+1.1	18,299,390	18,363,365	+0.3
Iron and steel.....	207	272,743	276,864	+1.5	8,366,053	8,331,493	-0.4
Structural ironwork.....	156	21,981	21,461	-2.4	631,050	610,827	-3.2
Foundry and machine-shop products.....	798	202,698	204,477	+0.9	5,949,569	6,059,240	+1.8
Hardware.....	65	34,963	35,107	+0.4	889,972	898,272	+0.9
Machine tools.....	158	27,030	28,120	+4.0	841,253	877,165	+4.3
Steam fittings and steam and hot-water heating apparatus.....	114	36,750	36,737	-0.0	1,100,773	1,058,374	-3.9
Stoves.....	92	17,342	17,724	+2.2	520,710	527,994	+1.4
Lumber and its products	1,010	203,615	202,137	-0.7	4,631,677	4,586,341	-1.0
Lumber, sawmills.....	384	110,715	107,915	-2.5	2,334,298	2,270,326	-2.7
Lumber, millwork.....	254	33,683	33,450	-0.7	840,038	820,813	-2.3
Furniture.....	372	59,217	60,772	+2.6	1,457,341	1,495,202	+2.6
Leather and its products	368	125,578	121,962	-2.9	2,885,567	2,666,940	-7.6
Leather.....	141	28,554	28,758	+0.7	732,008	737,041	+0.7
Boots and shoes.....	227	97,021	93,204	-3.9	2,153,559	1,929,899	-10.4
Paper and printing	849	165,010	166,512	+0.9	5,234,110	5,343,946	+2.1
Paper and pulp.....	207	55,383	55,180	-0.4	1,475,840	1,499,121	+1.6
Paper boxes.....	167	19,727	20,076	+1.8	431,645	449,066	+4.0
Printing, book and job.....	266	44,146	44,879	+1.7	1,493,510	1,540,594	+3.2
Printing, newspapers.....	209	45,754	46,377	+1.4	1,833,115	1,855,165	+1.2
Chemicals and allied products	247	81,415	81,296	-0.1	2,350,515	2,391,275	+0.5
Chemicals.....	84	21,652	21,919	+1.2	542,185	555,673	+2.5
Fertilizers.....	106	8,662	8,159	-5.8	156,550	147,705	-5.6
Petroleum refining.....	57	51,101	51,218	+0.2	1,681,780	1,687,897	+0.4

¹ Less than one-tenth of 1 per cent.

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COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS DURING ONE WEEK EACH IN OCTOBER AND NOVEMBER, 1925—Continued

Industry	Establishments	Number on pay roll		Per cent of change	Amount of pay roll		Per cent of change
		October, 1925	November, 1925		October, 1925	November, 1925	
Stone, clay, and glass products	646	113,726	112,671	-0.9	\$3,036,120	\$3,028,593	-0.2
Cement.....	85	25,957	25,187	-3.0	774,341	773,005	-0.2
Brick, tile, and terra cotta.....	373	33,722	33,175	-1.6	873,440	853,761	-2.3
Pottery.....	58	13,094	12,875	-1.7	352,259	342,378	-2.8
Glass.....	130	40,953	41,434	+1.2	1,036,071	1,059,449	+2.3
Metal products, other than iron and steel	157	42,093	42,972	+2.1	1,146,802	1,180,219	+2.9
Stamped and enameled ware.....	42	15,168	15,778	+4.0	403,999	411,183	+1.8
Brass, bronze, and copper products.....	115	26,925	27,194	+1.0	742,803	769,036	+3.5
Tobacco products	182	44,096	43,753	-0.8	787,035	805,499	+1.1
Chewing and smoking tobacco and snuff.....	30	8,135	7,837	-3.7	125,226	115,612	-7.7
Cigars and cigarettes.....	152	35,961	35,916	-0.1	671,809	689,887	+2.7
Vehicles for land transportation	922	529,636	525,144	-0.8	17,471,194	17,654,310	+1.0
Automobiles.....	217	362,817	359,111	-1.0	12,645,228	12,702,205	+0.5
Carriages and wagons.....	75	2,912	2,663	-8.6	66,077	61,218	-7.4
Car building and repairing, electric-railroad.....	187	17,508	17,631	+0.7	513,872	539,996	+5.1
Car building and repairing, steam-railroad.....	493	146,399	145,739	-0.5	4,246,017	4,350,801	+2.5
Miscellaneous industries	377	235,663	240,755	+2.2	6,705,568	6,870,867	+2.5
Agricultural implements.....	91	25,131	26,207	+4.3	710,459	750,401	+5.6
Electrical machinery, apparatus, and supplies.....	136	106,015	109,714	+3.5	3,005,272	3,157,494	+5.1
Pianos and organs.....	36	7,582	7,631	+0.6	234,958	249,185	+6.1
Rubber boots and shoes.....	11	16,761	17,664	+5.4	414,004	438,916	+6.0
Automobile tires.....	62	55,531	54,361	-2.1	1,608,706	1,572,419	-2.3
Shipbuilding, steel.....	41	24,643	25,178	+2.2	732,169	702,472	-4.1
Total	9,405	2,930,660	2,937,894	+0.2	79,022,468	79,372,005	+0.4

Recapitulation by Geographic Divisions

GEOGRAPHIC DIVISION							
New England.....	1,290	424,252	427,432	+0.7	\$10,264,375	\$10,239,864	-0.2
Middle Atlantic.....	2,338	838,325	842,212	+0.5	23,330,708	23,407,097	+0.3
East North Central.....	2,488	970,553	970,364	-(¹)	29,878,117	30,138,709	+0.9
West North Central.....	887	149,018	147,305	-1.1	3,746,479	3,647,874	-2.6
South Atlantic.....	971	245,808	249,055	+1.4	4,678,548	4,794,581	+2.5
East South Central.....	392	98,019	99,000	+1.0	1,934,130	1,957,748	+1.2
West South Central.....	343	71,335	71,542	+0.3	1,544,114	1,546,141	+0.1
Mountain.....	153	26,740	26,349	-1.5	714,988	714,688	-(¹)
Pacific.....	543	106,800	104,635	-2.0	2,931,009	2,925,303	-0.2
Total	9,405	2,930,660	2,937,894	+0.2	79,022,468	79,372,005	+0.4

Employment on Class I Railroads

Sept. 15, 1925.....	1,787,024		² \$236,973,787	
Oct. 15, 1925.....	1,800,453	+0.8	² 250,508,828	+5.7

¹ Less than one-tenth of 1 per cent.² Amount of pay roll for 1 month.

Comparison of Employment in November, 1924, and November, 1925

THE volume of employment in November, 1925, was 8.3 per cent greater than in November, 1924, pay-roll totals had increased 14.2 per cent, and per capita earnings had increased 5.5 per cent, as shown by reports, for the two periods, from 8,142 establishments in 53 industries.

In this comparison over an interval of 12 months large gains are shown in 8 of the 9 geographic divisions as to employment and in every division as to pay-roll totals. The greatest gains were in the East North Central States—17.4 per cent in employment and 28.1 per cent in employees' earnings—the East South Central States following with a gain of 8 per cent in employment and a gain of 13.8 per cent in pay-roll totals. The solitary decrease was a drop of 0.6 per cent in employment in the West South Central States, this division also showing the one small increase (1.4 per cent) in pay-roll totals. The increases in pay-roll totals in the remaining 8 divisions ranged from 4.6 per cent to 28.1 per cent.

Ten of the 12 groups of industries gained employees in November, 1925, as compared with the same month of 1924, and every group gained in employees' earnings. The vehicles group shows a gain of 21.7 per cent in employees and a gain of 35.5 per cent in employees' earnings. The food and the tobacco groups are the two groups showing decreased employment.

Increased employment in November, 1925, over November, 1924, is shown in 41 of the 53 separate industries and increased pay-roll totals are shown in 47 industries, the automobile industry showing a continuance of its huge increases, with a gain of 42.9 per cent in employment and a gain of 62.2 per cent in employees' earnings. Machine tools, agricultural implements, stamped and enameled ware, hosiery, glass, and silk also show notable gains in both items. The smallest gain in employment in the industries mentioned was 14 per cent in silk goods and the smallest gain in pay-roll totals was 16.6 per cent in the glass industry.

As in October the outstanding decreases in this comparison over a period of 12 months were in the woolen and worsted and the steam car building and repairing industries.

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS DURING ONE WEEK EACH IN NOVEMBER, 1924, AND NOVEMBER, 1925

Industry	Estab-lish-ments	Number on pay roll		Per cent of change	Amount of pay roll		Per cent of change
		Novem-ber, 1924	Novem-ber, 1925		Novem-ber, 1924	Novem-ber, 1925	
Food and kindred products	920	185,503	181,960	-1.9	\$4,605,929	\$4,617,040	+0.2
Slaughtering and meat packing.....	79	82,105	77,398	-5.7	2,080,524	2,002,063	-3.8
Confectionery.....	228	29,464	30,470	+3.4	525,287	551,622	+5.0
Ice Cream.....	96	6,157	6,416	+4.2	201,487	224,962	+11.7
Flour.....	245	13,911	13,746	-1.2	366,491	370,746	+1.2
Baking.....	258	45,082	44,370	-1.6	1,171,441	1,173,995	+0.2
Sugar refining, cane.....	14	8,784	9,560	+8.8	260,699	293,652	+12.6
Textiles and their products	1,594	514,710	546,048	+6.1	9,937,297	10,716,955	+7.8
Cotton goods.....	302	171,894	183,679	+6.9	2,701,695	2,926,922	+8.3
Hosiery and knit goods.....	249	72,925	83,845	+15.0	1,289,474	1,585,803	+23.0
Silk goods.....	201	53,094	60,513	+14.0	1,065,002	1,292,064	+21.3
Woolen and worsted goods.....	165	68,913	61,874	-10.2	1,623,911	1,357,240	-16.4
Carpets and rugs.....	29	21,799	22,146	+1.6	582,463	688,340	+18.0

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS DURING ONE WEEK EACH IN NOVEMBER, 1924, AND NOVEMBER, 1925—Continued

Industry	Establishments	Number on pay roll		Per cent of change	Amount of pay roll		Per cent of change
		November, 1924	November, 1925		November, 1924	November, 1925	
Textiles and their products—							
Continued.							
Dyeing and finishing textiles	84	27,845	29,628	+6.4	\$659,843	\$722,348	+9.5
Clothing, men's	255	51,429	55,413	+7.7	1,128,716	1,263,503	+11.9
Shirts and collars	78	20,226	22,761	+12.5	307,279	361,310	+17.6
Clothing, women's	154	15,066	15,104	+0.7	338,107	376,597	+11.4
Millinery and lace goods	76	11,579	11,085	-4.3	240,807	242,308	+0.6
Iron and steel and their products	1,364	591,405	577,955	+8.8	15,966,121	17,145,891	+13.6
Iron and steel	200	248,092	269,163	+8.5	7,330,372	8,124,296	+10.8
Structural ironwork	138	16,913	18,563	+9.8	440,556	523,884	+18.9
Foundry and machine-shop products	633	165,283	178,868	+8.2	4,642,727	5,311,217	+14.4
Hardware	54	32,666	33,475	+2.5	800,787	857,220	+7.0
Machine tools	154	21,399	27,513	+28.6	610,052	855,374	+40.3
Steam fittings and steam and hot-water heating apparatus	101	30,722	33,727	+9.8	778,112	979,089	+25.8
Stoves	84	16,330	16,646	+1.9	463,515	494,311	+6.6
Lumber and its products	936	185,973	190,258	+2.3	4,074,906	4,320,225	+6.0
Lumber, sawmills	350	103,551	102,308	-1.2	2,122,592	2,156,872	+1.6
Lumber, millwork	246	29,930	32,080	+7.2	715,421	790,235	+10.5
Furniture	340	52,492	55,870	+6.4	1,236,983	1,373,118	+11.0
Leather and its products	345	115,374	115,440	+0.1	2,477,869	2,533,562	+2.2
Leather	116	25,344	26,326	+3.9	623,105	679,859	+9.1
Boots and shoes	199	90,030	89,104	-1.0	1,854,764	1,853,703	-0.1
Paper and printing	758	146,064	150,125	+2.8	4,480,668	4,907,925	+7.2
Paper and pulp	199	52,131	52,928	+1.5	1,363,711	1,442,253	+5.8
Paper boxes	148	17,118	17,466	+2.0	371,162	393,211	+5.9
Printing, book and job	226	38,083	39,163	+2.8	1,249,038	1,338,326	+7.1
Printing, newspapers	185	38,732	40,568	+4.7	1,496,757	1,628,135	+8.8
Chemicals and allied products	228	73,315	79,610	+8.6	2,182,493	2,352,977	+7.8
Chemicals	79	19,471	20,533	+5.5	485,153	523,589	+7.9
Fertilizers	102	6,089	7,859	+13.3	129,103	141,491	+9.6
Petroleum refining	57	46,905	51,218	+9.2	1,568,147	1,687,897	+7.6
Stone, clay, and glass products	549	100,013	104,628	+4.6	2,626,025	2,834,632	+8.2
Cement	75	23,976	23,069	-3.8	689,439	711,752	+3.2
Brick, tile, and terra cotta	297	28,958	29,398	+1.5	761,836	772,183	+1.4
Pottery	50	11,849	11,678	-1.4	278,484	312,615	+12.3
Glass	127	35,230	40,483	+14.9	896,266	1,038,082	+15.6
Metal products, other than iron and steel	82	31,292	36,522	+16.7	795,695	963,953	+24.9
Stamped and enameled ware	40	12,371	15,534	+25.6	290,575	405,111	+39.4
Brass, bronze, and copper products	42	18,921	20,988	+10.9	505,120	588,842	+16.6
Tobacco products	173	40,568	39,626	-2.3	729,825	734,110	+0.6
Chewing and smoking tobacco and snuff	30	8,383	7,837	-6.5	124,041	115,612	-6.8
Cigars and cigarettes	143	32,185	31,789	-1.2	605,784	618,507	+2.1
Vehicles for land transportation	876	417,940	508,451	+21.7	12,637,518	17,117,962	+35.5
Automobiles	199	245,633	351,063	+42.9	7,650,619	12,412,154	+62.2
Carriages and wagons	33	1,748	1,988	+13.7	39,676	47,462	+19.6
Car building and repairing, electric-railroad	176	17,207	17,320	+0.7	518,513	531,713	+2.5
Car building and repairing, steam-railroad	468	153,302	138,080	-9.9	4,428,710	4,126,633	-6.8
Miscellaneous industries	337	296,864	228,851	+10.6	5,826,021	6,542,844	+12.3
Agricultural implements	83	18,220	23,187	+27.3	478,380	672,395	+40.6
Electrical machinery, apparatus, and supplies	116	91,801	103,968	+13.3	2,496,563	2,993,055	+19.9
Pianos and organs	29	6,859	6,951	+1.3	223,266	228,982	+2.6
Rubber boots and shoes	10	15,580	16,275	+4.4	407,112	402,577	-1.1
Automobile tires	60	50,791	53,810	+5.9	1,537,589	1,559,352	+1.4
Shipbuilding, steel	39	23,703	24,660	+4.0	683,111	686,483	+0.5
Total	8,142	2,549,121	2,759,474	+8.3	65,434,367	74,712,065	+14.2

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS DURING ONE WEEK EACH IN NOVEMBER, 1924, AND NOVEMBER, 1925—Continued

Recapitulation by Geographic Divisions

Industry	Estab-lish-ments	Number on pay roll		Per cent of change	Amount of pay roll		Per cent of change
		Novem-ber, 1924	Novem-ber, 1925		Novem-ber, 1924	Novem-ber, 1925	
GEOGRAPHIC DIVISION							
New England.....	1,068	370,421	386,777	+4.4	\$8,711,069	\$9,235,123	+6.0
Middle Atlantic.....	2,134	782,635	813,067	+3.9	21,100,922	22,613,271	+7.2
East North Central.....	2,150	776,043	911,225	+17.4	22,144,430	28,360,691	+28.1
West North Central.....	717	132,198	137,142	+3.7	3,262,929	3,395,027	+6.0
South Atlantic.....	852	218,324	232,661	+6.6	4,099,005	4,511,259	+10.1
East South Central.....	345	86,918	93,834	+8.0	1,640,873	1,866,873	+13.5
West South Central.....	297	69,273	68,870	-0.6	1,477,481	1,498,651	+1.4
Mountain.....	127	23,967	24,831	+3.6	651,876	681,913	+4.6
Pacific.....	452	89,342	91,017	+1.9	2,405,782	2,540,217	+5.6
Total.....	8,142	2,540,121	2,759,474	+8.3	65,434,367	74,712,065	+14.3

Employment on Class I Railroads

Oct. 15, 1924.....	1,806,342	-----	¹ \$248,374,250	-----
Oct. 15, 1925.....	1,800,453	-0.3	1 250,508,828	+0.9

¹ Amount of pay roll for 1 month.

Per Capita Earnings

PER CAPITA earnings increased in November as compared with October in 29 industries and decreased in the remaining 24 industries. The most pronounced increase was 6.2 per cent in the cane-sugar refining industry, while the outstanding decrease was 6.7 per cent in the boot and shoe industry.

Comparing per capita earnings for November, 1925, and November, 1924, increases are shown in 44 of the 53 industries. Six of these increases are over 10 per cent each, the industries showing this marked improvement in the earnings of their employees in a year's time being steam fittings, pottery, automobiles, stamped and enameled ware, women's clothing, and agricultural implements. The three industries showing the greatest falling off in per capita earnings in the year's time are woolen and worsted goods, rubber boots and shoes, and automobile tires.

COMPARISON OF PER CAPITA EARNINGS, NOVEMBER, 1925, WITH OCTOBER, 1925, AND NOVEMBER, 1924

Industry	Per cent of change November, 1925, compared with—		Industry	Per cent of change November, 1925, compared with—	
	October, 1925	November, 1924		October, 1925	November, 1924
Sugar refining, cane.....	+6.2	+3.5	Carpets and rugs.....	+0.3	-0.6
Pianos and organs.....	+5.4	+1.2	Fertilizers.....	+0.2	-3.3
Car building and repairing, electric-railroad.....	+4.4	+1.9	Machine tools.....	+0.2	+9.1
Ice cream.....	+3.4	+7.2	Petroleum refining.....	+0.2	-1.4
Car building and repairing, steam-railroad.....	+2.9	+3.5	Furniture.....	(1)	+4.3
Cement.....	+2.9	+7.3	Leather.....	(1)	+5.0
Cigars and cigarettes.....	+2.8	+3.4	Automobile tires.....	-0.1	-4.3
Brass, bronze, and copper products.....	+2.5	+5.1	Printing, newspapers.....	-0.1	+3.9
Millinery and lace goods.....	+2.2	+5.1	Shirts and collars.....	-0.1	+4.5
Paper boxes.....	+2.2	-3.8	Lumber, sawmills.....	-0.2	+2.8
Paper and pulp.....	+2.0	+4.2	Confectionery.....	-0.3	-1.5
Automobiles.....	+1.5	+13.6	Baking.....	-0.5	+1.8
Electrical machinery, apparatus, and supplies.....	+1.5	+5.8	Brick, tile, and terra cotta.....	-0.6	-0.2
Printing, book and job.....	+1.5	+4.2	Stoves.....	-0.8	+4.7
Slaughtering and meat packing.....	+1.4	+2.1	Structural ironwork.....	-0.9	+8.3
Agricultural implements.....	+1.3	+10.4	Pottery.....	-1.2	+13.9
Carriages and wagons.....	+1.3	+5.2	Clothing, men's.....	-1.4	+3.9
Chemicals.....	+1.2	+2.3	Lumber, millwork.....	-1.6	+3.1
Glass.....	+1.1	+1.5	Silk goods.....	-1.7	+6.4
Woolen and worsted goods.....	+1.1	-6.9	Iron and steel.....	-1.9	+2.1
Foundry and machine-shop products.....	+1.0	+5.7	Flour.....	-2.1	+2.4
Hosiery and knit goods.....	+0.8	+7.0	Stamped and enameled ware.....	-2.1	+11.0
Hardware.....	+0.6	+4.5	Dyeing and finishing textiles.....	-2.8	+3.0
Rubber boots and shoes.....	+0.6	-5.2	Steam fittings and steam and hot-water heating apparatus.....	-3.8	+14.6
Cotton goods.....	+0.5	+1.3	Chewing and smoking tobacco and snuff.....	-4.2	-0.3
			Clothing, women's.....	-4.6	+10.7
			Shipbuilding, steel.....	-6.1	-3.4
			Boots and shoes.....	-6.7	+1.0

¹ Less than one-tenth of 1 per cent.

Comparing per capita earnings for October and November in the 9 geographic divisions, increases are shown in 5 divisions and decreases in 4 divisions, the Pacific States showing the greatest increase—1.9 per cent—and the West North Central States the greatest decrease—1.5 per cent.

When November, 1924, and November, 1925, are compared increases are shown in each division, the East North Central States showing a gain of over 9 per cent. The Pacific States, which last month showed a decrease in this comparison covering a year's interval, this month show a gain of 3.6 per cent.

COMPARISON OF PER CAPITA EARNINGS, NOVEMBER, 1925, WITH OCTOBER, 1925, AND NOVEMBER, 1924, BY GEOGRAPHIC DIVISIONS

Geographic division	Per cent of change November, 1925, com- pared with—	
	October, 1925	November, 1924
Pacific.....	+1.9	+3.6
Mountain.....	+1.4	+1.0
South Atlantic.....	+1.0	+3.3
East North Central.....	+0.9	+9.1
East South Central.....	+0.3	+5.3
Middle Atlantic.....	-0.1	+3.2
West South Central.....	-0.2	+2.0
New England.....	-1.0	+1.5
West North Central.....	-1.5	+2.2
Total.....	+0.2	+5.5

Time and Capacity Operations

REPORTS in percentage terms from 7,296 establishments show that in November the establishments in operation were working an average of 94 per cent of full time and employing an average of 85 per cent of a normal full force of employees. These percentages are unchanged from the October report and are in accord with the slight changes in employment and pay-roll totals shown for the larger number of establishments covered in the first table of this report.

One per cent of the reporting establishments were idle, 72 per cent were operating on a full-time schedule, and 27 per cent on a part-time schedule, while 47 per cent had a full normal force of employees and 52 per cent were operating with a reduced force.

FULL AND PART TIME AND FULL AND PART CAPACITY OPERATION IN MANUFACTURING ESTABLISHMENTS IN NOVEMBER, 1925

Industry	Establishments reporting		Per cent of establishments operating—		Average per cent of full time operated in establishments operating	Per cent of establishments operating—		Average per cent of full time operated in establishments operating
	Total number	Per cent idle	Full time	Part time		Full capacity	Part capacity	
Food and kindred products.....	1,017	1	67	32	90	50	49	87
Slaughtering and meat packing.....	41		66	34	93	29	71	86
Confectionery.....	215	(¹)	73	26	96	51	48	91
Ice cream.....	93	1	95	4	99	4	95	67
Flour.....	300	1	38	61	77	47	52	82
Baking.....	358	(¹)	81	19	96	68	32	95
Sugar refining, cane.....	10		50	50	86	20	80	75
Textiles and their products.....	1,238	1	67	32	93	45	54	86
Cotton goods.....	261	2	64	34	92	57	41	90
Hosiery and knit goods.....	182		66	34	95	47	53	88
Silk goods.....	159		72	28	96	48	52	88
Woolen and worsted goods.....	176		74	26	95	44	56	85
Carpets and rugs.....	21		86	14	97	33	67	81
Dyeing and finishing textiles.....	72	1	44	54	89	33	65	81
Clothing, men's.....	173	4	68	28	88	39	57	86
Shirts and collars.....	54		83	17	95	54	46	90
Clothing, women's.....	90	1	66	33	90	43	56	80
Millinery and lace goods.....	50	2	52	46	85	16	82	66

¹ Less than one-half of 1 per cent.

FULL AND PART TIME AND FULL AND PART CAPACITY OPERATION IN MANUFACTURING ESTABLISHMENTS IN NOVEMBER, 1925—Continued

Industry	Establishments reporting		Per cent of establishments operating—		Average per cent of full time operated in establishments operating	Per cent of establishments operating—		Average per cent of full time operated in establishments operating
	Total number	Per cent idle	Full time	Part time		Full capacity	Part capacity	
Iron and steel and their products.	1,285	(1)	69	31	94	31	69	73
Iron and steel	157	1	65	34	94	41	58	89
Structural ironwork	122		81	19	96	38	62	78
Foundry and machine-shop products	658		66	34	94	25	75	75
Hardware	46		70	30	97	35	65	85
Machine tools	134		90	10	99	22	78	66
Steam fittings and steam and hot-water heating apparatus	90		70	30	97	51	49	85
Stoves	78		47	53	89	40	60	85
Lumber and its products.	837	1	77	22	97	52	46	99
Lumber, sawmills	321	3	73	24	96	50	46	88
Lumber, millwork	203	(1)	78	22	97	55	44	93
Furniture	313		80	20	98	52	48	90
Leather and its products.	288	1	65	34	99	45	54	85
Leather	104	1	83	16	97	47	52	85
Boots and shoes	184	1	55	43	85	44	54	85
Paper and printing.	601	(1)	83	16	97	66	33	94
Paper and pulp	156	1	83	16	97	56	42	94
Paper boxes	126		77	23	95	61	39	92
Printing, book and job	196		78	22	96	62	38	92
Printing, newspapers	123		100		100	92	8	99
Chemicals and allied products.	204	(1)	72	27	96	35	64	74
Chemicals	58		72	28	95	53	47	83
Fertilizers	103		72	28	97	16	84	62
Petroleum refining	43	2	72	26	95	58	40	94
Stone, clay, and glass products.	526	3	67	30	93	51	47	83
Cement	67		90	10	98	81	19	96
Brick, tile, and terra cotta	296	4	61	35	90	45	51	86
Pottery	48		44	56	91	42	58	86
Glass	115	2	80	18	97	51	47	88
Metal products, other than iron and steel.	128		79	21	99	38	62	94
Stamped and enameled ware	32		75	25	97	44	56	83
Brass, bronze, and copper products	96		80	20	99	36	64	84
Tobacco products.	108		67	33	94	37	63	87
Chewing and smoking tobacco and snuff	24		38	63	91	17	83	76
Cigars and cigarettes	84		75	25	95	43	57	90
Vehicles for land transportation.	774	1	79	21	96	57	42	89
Automobiles	147	1	78	22	97	54	45	87
Carriages and wagons	59	3	59	37	92	41	56	84
Car building and repairing, electric-railroad	151		85	15	98	70	30	95
Car building and repairing, steam-railroad	417	(1)	80	20	96	56	44	87
Miscellaneous industries.	290	1	74	25	95	41	58	82
Agricultural implements	74		80	20	96	36	64	77
Electrical machinery, apparatus, and supplies	111		76	24	96	47	53	89
Pianos and organs	30		90	10	99	73	27	92
Rubber boots and shoes	9		44	56	93	33	67	83
Automobile tires	42	5	40	55	86	31	64	81
Shipbuilding, steel	24		100		100	8	92	55
Total.	7,296	1	72	27	94	47	52	85

¹ Less than one-half of 1 per cent.

Wage Changes

FIFTY-SIX establishments in 24 industries reported wage-rate increases in the month ending November 15. These increases, averaging 5.8 per cent, affected 2,823 employees, or 19 per cent of the total employees in the establishments concerned.

Wage-rate decreases were reported by 11 establishments in 10 industries. These decreases, averaging 7.7 per cent, affected 1,649 employees or 7 per cent of the total employees in the establishments concerned.

WAGE ADJUSTMENT OCCURRING BETWEEN OCTOBER 15 AND NOVEMBER 15, 1925

Industry	Establishments		Per cent of increase or decrease in wage rates		Employees affected		
	Total number reporting	Number reporting increase or decrease in wage rates	Range	Average	Total number	Per cent of employees	
						In establishments reporting increase or decrease in wage rates	In all establishments reporting
Increases							
Slaughtering and meat packing.....	89	1	6	6.0	81	5	(1)
Ice cream.....	127	1	3	3.0	17	16	(1)
Flour.....	346	1	5	5.0	137	109	1
Baking.....	440	3	9.5-13	10.1	21	10	(1)
Hosiery and knit goods.....	265	2	9.5-10	9.6	17	6	(1)
Silk goods.....	209	1	10	10.0	82	10	(1)
Iron and steel.....	207	1	1.5	1.5	200	43	(1)
Structural ironwork.....	156	2	3-10	5.4	7	14	(1)
Foundry and machine-shop products.....	798	3	4-20	11.0	307	22	(1)
Machine tools.....	158	2	5	5.0	23	18	(1)
Stoves.....	92	3	7-10	9.9	113	13	1
Lumber, sawmills.....	384	4	1-10	5.7	498	42	(1)
Lumber, millwork.....	254	2	5-10	7.7	55	9	(1)
Furniture.....	372	5	5-8	6.8	47	8	(1)
Printing, book and job.....	266	5	2-19	6.9	28	5	(1)
Printing, newspapers.....	209	2	2-12	3.1	175	48	(1)
Chemicals.....	84	1	10	10.0	110	7	1
Fertilizers.....	106	2	5-9	6.7	48	79	(1)
Brick, tile, and terra cotta.....	373	1	15	15.0	7	100	(1)
Glass.....	130	1	5-15	7.5	185	90	(1)
Brass, bronze, and copper products.....	115	1	9	9.0	7	9	(1)
Automobiles.....	217	2	5-10	5.7	116	13	(1)
Electrical machinery, apparatus, and supplies.....	136	3	1.1-7	1.6	516	26	(1)
Shipbuilding, steel.....	41	2	9.3	9.3	26	8	(1)
Decreases							
Woolen and worsted goods.....	192	1	10	10.0	72	100	(1)
Iron and steel.....	207	2	5.8-6.8	6.6	1,270	100	(1)
Foundry and machine-shop products.....	798	1	20	20.0	20	15	(1)
Lumber, sawmills.....	384	1	11.1	11.1	125	56	(1)
Lumber, millwork.....	254	1	20	20.0	30	12	(1)
Furniture.....	372	1	2	2.0	4	11	(1)
Printing, book and job.....	266	1	3	3.0	12	100	(1)
Fertilizers.....	106	1	10	10.0	16	59	(1)
Cigars and cigarettes.....	152	1	10	10.0	95	29	(1)
Carriages and wagons.....	75	1	10	10.0	5	71	(1)

¹ Less than one-half of 1 per cent.

Indexes of Employment and Pay-roll Totals in Manufacturing Industries

INDEX numbers for November and October, 1925, and for November, 1924, showing relatively the variation in number of persons employed and in pay-roll totals in each of the 53 industries surveyed by the Bureau of Labor Statistics, together with general indexes for the combined 12 groups of industries, appear in the following table.

The general index of employment for November, 1925, is 92.5 and the general index of pay-roll totals is 96.2.

In computing the general index and the group indexes, the index numbers of the separate industries are weighted according to the importance of the industries.

INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES, NOVEMBER, 1924, AND OCTOBER AND NOVEMBER, 1925

[Monthly average, 1923=100]

Industry	1924		1925			
	November		October		November	
	Employment	Pay-roll totals	Employment	Pay-roll totals	Employment	Pay-roll totals
General index	87.8	87.6	92.3	96.2	92.5	96.2
Food and kindred products	95.2	97.2	94.8	97.5	93.7	97.1
Slaughtering and meat packing.....	91.2	94.2	83.8	86.9	86.1	90.6
Confectionery.....	95.6	98.9	99.9	105.9	98.0	103.6
Ice cream.....	84.7	84.9	96.3	100.4	88.5	95.4
Flour.....	96.2	97.5	94.7	100.2	92.2	95.5
Baking.....	102.1	104.0	104.2	107.7	101.5	104.4
Sugar refining, cane.....	84.0	85.6	95.7	94.4	91.9	96.2
Textiles and their products	85.8	83.0	89.5	90.3	89.8	89.6
Cotton goods.....	80.3	76.2	83.1	79.9	85.0	82.2
Hosiery and knit goods.....	89.2	92.0	101.1	112.2	102.2	114.2
Silk goods.....	95.2	93.9	107.6	116.1	107.7	114.4
Woolen and worsted goods.....	95.7	98.5	87.3	84.0	88.0	85.7
Carpets and rugs.....	93.0	91.0	91.2	88.9	94.5	92.4
Dyeing and finishing textiles.....	95.9	96.7	100.7	107.9	101.2	105.5
Clothing, men's.....	82.2	72.2	87.6	79.6	86.0	77.0
Shirts and collars.....	80.5	80.1	87.6	90.5	90.3	93.2
Clothing, women's.....	81.3	76.6	84.4	95.3	80.4	86.6
Millinery and lace goods.....	81.9	82.8	78.5	79.3	77.2	79.6
Iron and steel and their products	81.7	81.9	87.2	92.2	88.5	92.7
Iron and steel.....	88.5	89.7	93.9	99.1	95.3	98.7
Structural ironwork.....	85.5	84.7	95.1	102.6	92.9	99.3
Foundry and machine-shop products.....	75.6	73.8	80.9	82.8	81.6	84.3
Hardware.....	89.1	92.0	91.7	99.3	92.1	100.2
Machine tools.....	77.8	78.1	93.7	103.9	97.5	108.4
Steam fittings and steam and hot-water heating apparatus.....	92.9	84.7	102.4	108.3	102.4	104.0
Stoves.....	89.5	91.0	90.7	98.7	92.7	100.1
Lumber and its products	93.2	95.8	94.3	102.4	93.2	100.9
Lumber, sawmills.....	91.2	93.5	90.4	98.3	88.2	95.7
Lumber, millwork.....	96.6	98.4	104.0	112.3	103.2	109.7
Furniture.....	98.1	102.3	101.8	110.1	104.4	113.0
Leather and its products	91.4	84.8	94.6	92.0	91.9	85.4
Leather.....	88.7	88.4	90.8	93.1	91.4	93.8
Boots and shoes.....	92.3	83.3	95.8	91.6	92.1	82.1
Paper and printing	101.1	103.4	101.9	108.0	103.0	110.4
Paper and pulp.....	93.1	97.1	94.9	101.1	94.5	102.7
Paper boxes.....	104.7	109.2	105.6	111.6	107.5	116.1
Printing, book and job.....	102.5	103.5	100.6	107.4	102.3	110.9
Printing, newspaper.....	105.5	107.6	108.3	114.1	109.8	115.4
Chemicals and allied products	89.0	92.2	98.0	99.8	97.6	100.5
Chemicals.....	89.9	94.6	94.7	100.1	95.8	102.6
Fertilizers.....	85.2	87.5	107.3	105.5	101.1	99.6
Petroleum refining.....	89.5	90.8	98.4	98.0	98.6	98.4

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INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES, NOVEMBER, 1924, AND OCTOBER AND NOVEMBER, 1925—Continued

Industry	1924		1925			
	November		October		November	
	Employment	Pay-roll totals	Employment	Pay-roll totals	Employment	Pay-roll totals
Stone, clay and glass products	94.8	98.8	100.5	109.1	99.7	108.8
Cement.....	99.2	102.2	99.8	106.3	96.8	106.1
Brick, tile, and terra cotta.....	96.2	101.5	100.7	106.8	99.1	104.8
Pottery.....	107.5	100.3	107.2	120.1	105.4	116.8
Glass.....	87.5	94.6	98.1	108.5	99.3	111.0
Metal products, other than iron and steel	90.1	89.8	98.3	99.2	100.2	102.3
Stamped and enameled ware.....	84.9	79.9	99.1	101.5	103.0	103.4
Brass, bronze, and copper products.....	92.5	93.5	98.0	98.4	99.0	101.9
Tobacco products	97.0	100.3	95.1	99.0	94.6	100.6
Chewing and smoking tobacco and snuff.....	97.4	94.3	93.8	99.8	90.3	92.1
Cigars and cigarettes.....	97.0	101.0	95.3	98.9	95.2	101.6
Vehicles for land transportation	84.2	83.8	94.6	99.5	93.7	101.0
Automobiles.....	83.5	81.8	119.3	130.7	118.1	131.4
Carriages and wagons.....	85.5	82.0	109.1	106.2	99.7	98.3
Car building and repairing, electric-railroad.....	88.5	89.6	89.1	90.8	89.8	95.4
Car building and repairing, steam-railroad.....	84.4	84.8	78.6	79.9	78.2	81.9
Miscellaneous industries	84.8	87.4	89.2	93.2	91.0	93.0
Agricultural implements.....	77.9	79.7	95.0	106.5	99.1	112.4
Electrical machinery, apparatus, and supplies.....	88.6	89.9	94.6	98.9	98.0	104.0
Pianos and organs.....	99.0	119.3	98.6	113.0	99.2	119.9
Rubber boots and shoes.....	79.0	88.1	80.8	90.4	85.2	95.9
Automobile tires.....	101.7	104.3	109.2	107.2	107.0	104.7
Shipbuilding, steel.....	77.2	80.7	78.1	84.1	79.8	80.7

Brass, Bronze, and Copper Products' Index Numbers, January, 1923, to November, 1925

STATISTICS for the brass, bronze, and copper products' industry, beginning with January, 1923, have been added to similar data hitherto published for 52 industries.

The brass, bronze, and copper products' relatives have been incorporated into the indexes for the metal products (other than iron and steel) group, and the revised figures for that group are given in the accompanying table, together with the relatives for the two industries which the group now includes.

INDEX NUMBERS OF EMPLOYMENT AND PAY-ROLL TOTALS—BRASS, BRONZE,
 AND COPPER PRODUCTS AND STAMPED AND ENAMELED WARE, AND REVISED
 GROUP INDEX NUMBERS

[Monthly average, 1923=100]

Month and year	Metal products, other than iron and steel					
	Group index		Stamped and enameled ware		Brass, bronze, and copper products	
	Employment	Pay-roll totals	Employment	Pay-roll totals	Employment	Pay-roll totals
1923						
January.....	99.7	94.0	104.9	103.6	97.3	90.4
February.....	103.3	99.0	106.9	106.5	101.6	96.2
March.....	105.8	105.9	110.6	114.8	103.5	102.6
April.....	106.2	109.5	109.3	113.2	105.0	108.2
May.....	104.5	109.4	107.0	111.9	103.4	108.5
June.....	102.8	106.5	102.8	107.7	102.8	106.1
July.....	100.7	101.7	100.7	97.5	100.5	103.2
August.....	98.3	96.1	93.0	90.5	100.7	98.1
September.....	95.4	93.5	91.8	86.5	97.0	95.1
October.....	94.6	93.9	92.1	89.2	95.7	95.6
November.....	93.8	93.9	89.1	88.1	95.9	96.1
December.....	95.2	96.7	92.0	90.3	96.7	99.0
1924						
January.....	95.9	95.1	94.0	87.5	96.8	97.9
February.....	100.8	102.6	101.9	102.2	100.3	102.8
March.....	101.6	105.3	105.4	106.9	100.1	104.7
April.....	99.9	100.6	100.0	100.7	99.9	100.6
May.....	96.5	94.8	94.0	89.0	97.6	96.9
June.....	91.3	86.7	86.8	78.6	93.2	89.7
July.....	85.4	78.2	81.3	71.3	87.4	80.8
August.....	84.1	80.0	81.0	71.9	85.5	83.0
September.....	85.0	83.6	79.2	73.7	87.6	87.3
October.....	88.8	86.6	85.1	77.2	90.5	90.0
November.....	90.1	89.8	84.9	79.9	92.5	93.5
December.....	93.4	95.5	87.1	84.1	96.2	99.7
1925						
January.....	93.6	95.0	87.0	79.6	96.6	100.7
February.....	95.5	98.1	90.9	88.1	97.6	101.8
March.....	97.3	99.9	95.0	94.5	98.3	101.9
April.....	95.5	94.9	92.9	91.8	96.7	96.0
May.....	95.9	97.9	91.8	90.1	97.8	100.8
June.....	95.9	97.0	91.9	89.8	97.7	99.6
July.....	95.4	94.1	89.8	80.5	98.0	99.1
August.....	95.5	98.3	91.0	88.5	97.6	101.9
September.....	96.3	92.6	94.0	86.8	97.4	94.7
October.....	98.3	99.2	99.1	101.5	98.0	98.4
November.....	100.2	102.3	103.0	103.4	99.0	101.9

The following table and chart show the general index of employment in manufacturing industries from June, 1914, to November, 1925, and the general index of pay-roll totals from November, 1915, to November, 1925.

GENERAL INDEX OF EMPLOYMENT AND OF PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES

Employment (June, 1914, to November, 1925)

[Monthly average, 1923=100]

Month	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925
January		91.9	104.6	117.0	115.5	110.1	116.1	76.8	87.0	98.0	95.4	90.0
February		92.9	107.4	117.5	114.7	103.2	115.6	82.3	87.7	99.6	96.6	91.6
March		93.9	109.6	117.4	116.5	104.0	116.9	83.9	83.2	101.8	96.4	92.3
April		93.9	109.0	115.0	115.0	103.6	117.1	84.0	82.4	101.8	94.5	92.1
May		94.9	109.5	115.1	114.0	106.3	117.4	84.5	84.3	101.8	90.8	90.9
June	98.9	95.9	110.0	114.8	113.4	108.7	117.9	84.9	87.1	101.9	87.9	90.1
July	95.9	94.9	110.3	114.2	114.6	110.7	110.0	84.5	86.8	100.4	84.8	89.3
August	92.9	95.9	110.0	112.7	114.5	109.9	109.7	85.6	83.0	99.7	85.0	89.9
September	94.9	98.9	111.4	110.7	114.2	112.1	107.0	87.0	90.6	99.8	86.7	90.9
October	94.9	100.8	112.9	113.2	111.5	106.8	102.5	88.4	92.6	99.3	87.9	92.3
November	93.9	103.8	114.5	115.6	113.4	110.0	97.3	89.4	94.5	98.7	87.8	92.5
December	92.9	105.9	115.1	117.2	113.5	113.2	91.1	89.9	96.6	96.9	89.4	-----
Average	¹ 94.9	97.0	110.4	115.0	114.2	108.2	109.9	85.1	88.4	100.0	90.3	² 91.1

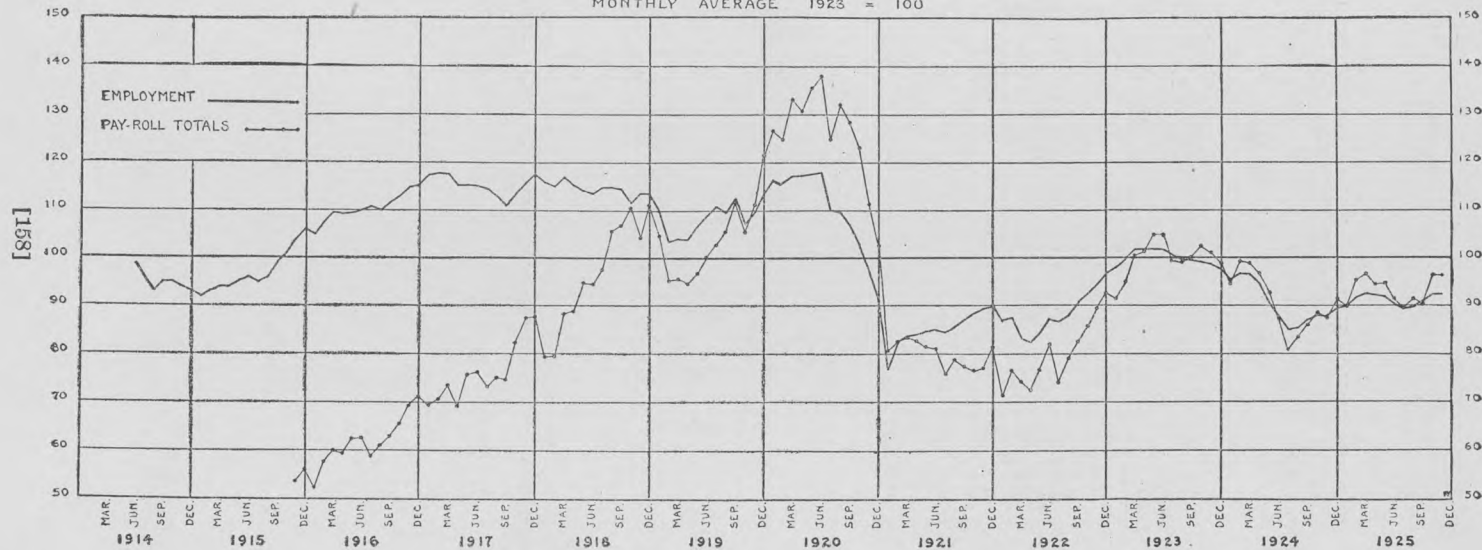
Pay-roll totals (November, 1915, to November, 1925)

Month	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925
January		52.1	69.8	79.6	104.2	126.6	80.6	71.5	91.8	94.5	90.0
February		57.8	70.5	79.8	95.0	124.8	82.4	76.7	95.2	99.4	95.1
March		60.0	73.6	88.2	95.4	133.0	83.3	74.2	100.3	99.0	96.6
April		59.7	69.4	88.8	94.5	130.6	82.8	72.6	101.3	96.9	94.2
May		62.1	75.8	94.5	96.7	135.7	81.8	76.9	104.8	92.4	94.4
June		62.5	76.1	94.3	100.2	138.0	81.0	82.0	104.7	87.0	91.7
July		58.7	73.1	97.5	102.5	124.9	76.0	74.1	99.9	80.8	89.6
August		60.9	75.0	105.3	105.3	132.2	79.0	79.3	99.3	83.5	91.4
September		62.9	74.4	106.6	111.6	128.2	77.8	82.7	100.0	86.0	90.4
October		65.5	82.2	110.3	105.5	123.6	76.8	86.0	102.3	88.5	95.2
November	53.8	69.2	87.4	104.1	111.3	111.3	77.2	89.8	101.0	87.6	96.2
December	56.0	71.0	87.8	111.2	121.5	102.4	81.5	92.9	98.9	91.7	-----
Average	³ 54.9	61.9	76.3	96.7	103.6	125.9	80.0	79.3	100.0	90.6	² 93.3

¹ Average for 7 months.² Average for 11 months.³ Average for 2 months.

GENERAL INDEXES OF EMPLOYMENT & OF PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES.

MONTHLY AVERAGE 1923 = 100



Employment and Earnings of Railroad Employees, October, 1924, and September and October, 1925

THE following table shows the number of employees and the earnings in various occupations among railroad employees in October, 1925, in comparison with employment and earnings in September, 1925, and October, 1924.

The figures are for Class I roads—that is, all roads having operating revenues of \$1,000,000 a year and over.

EMPLOYMENT AND EARNINGS OF RAILROAD EMPLOYEES IN OCTOBER, 1924, AND SEPTEMBER AND OCTOBER, 1925

[From monthly reports of Interstate Commerce Commission. As data for only the more important occupations are shown separately, the group totals are not the sum of the items under the respective groups; the grand totals will be found on pp. 146 and 149]

Month and year	Professional, clerical, and general			Maintenance of way and structures		
	Clerks	Stenographers and typists	Total for group	Laborers (extra gang and work train)	Track and roadway section laborers	Total for group
<i>Number of employees at middle of month</i>						
October, 1924	168,421	25,063	282,263	64,319	222,152	420,930
September, 1925	167,014	25,126	282,617	67,780	224,481	428,808
October, 1925	167,493	25,117	282,977	64,728	223,981	425,647
<i>Total earnings</i>						
October, 1924	\$22,046,407	\$3,087,111	\$38,740,072	\$5,128,083	\$16,976,263	\$39,610,019
September, 1925	21,351,310	3,037,065	38,171,954	5,286,505	16,255,618	38,909,518
October, 1925	22,147,031	3,118,010	39,260,590	5,232,451	17,079,387	40,284,290
<i>Maintenance of equipment and stores</i>						
	Carmen	Machinists	Skilled trade helpers	Laborers (shops, engine houses, power plants, and stores)	Common laborers (shops, engine houses, power plants, and stores)	Total for group
<i>Number of employees at middle of month</i>						
October, 1924	122,967	62,807	119,311	44,815	60,617	539,798
September, 1925	114,550	59,602	111,347	42,380	57,998	512,301
October, 1925	116,710	60,651	113,303	43,046	58,457	519,972
<i>Total earnings</i>						
October, 1924	\$18,602,900	\$10,208,973	\$13,544,369	\$4,381,503	\$5,200,108	\$72,318,309
September, 1925	16,224,047	9,062,215	11,829,020	3,938,088	4,589,826	64,815,405
October, 1925	17,571,622	9,799,610	12,821,038	4,161,827	4,952,607	69,458,095

EMPLOYMENT AND EARNINGS OF RAILROAD EMPLOYEES IN OCTOBER, 1924,
AND SEPTEMBER AND OCTOBER, 1925—Continued

Month and year	Transportation other than train and yard					Transportation (yardmasters, switch tenders, and hostlers)
	Station agents	Telegraphers, telephoners, and towermen	Truckers (stations, warehouses, and platforms)	Crossing and bridge flagmen and gatemen	Total for group	
<i>Number of employees at middle of month</i>						
October, 1924.....	31,276	26,442	39,929	23,057	210,920	24,287
September, 1925.....	30,988	25,840	40,938	22,734	212,213	23,915
October, 1925.....	30,907	25,949	41,648	22,589	211,901	24,007
<i>Total earnings</i>						
October, 1924.....	\$4,884,377	\$3,949,004	\$3,841,271	\$1,738,127	\$26,052,854	\$4,454,525
September, 1925.....	4,749,347	3,794,498	3,790,750	1,710,054	25,601,698	4,386,747
October, 1925.....	4,863,585	3,949,495	4,089,551	1,700,957	26,455,735	4,496,206
<i>Transportation, train and engine</i>						
	Road conductors	Road brakemen and flagmen	Yard brakemen and yardmen	Road engineers and motor-men	Road firemen and helpers	Total for group
<i>Number of employees at middle of month</i>						
October, 1924.....	37,607	76,861	52,905	44,684	46,477	328,144
September, 1925.....	37,350	75,747	52,310	44,486	46,095	327,170
October, 1925.....	38,223	77,349	54,954	45,285	46,912	335,949
<i>Total earnings</i>						
October, 1924.....	\$9,186,405	\$14,002,781	\$9,401,923	\$12,129,806	\$9,008,905	\$67,198,471
September, 1925.....	8,875,868	13,311,176	8,985,866	11,809,134	8,863,864	65,088,465
October, 1925.....	9,506,760	14,377,146	9,869,769	12,828,595	9,577,684	70,553,912

Recent Employment Statistics

Public Employment Offices

Connecticut

THE Bureau of Labor of Connecticut has supplied the following statistics on the operations of the five free public employment offices of that State in November, 1925:

ACTIVITIES OF CONNECTICUT PUBLIC EMPLOYMENT OFFICES IN NOVEMBER, 1925

Sex	Applications for employment	Applications for help	Situations secured	Per cent of applicants placed	Per cent of applications for help filled
Males.....	2,548	1,855	1,742	68.3	-----
Females.....	1,664	1,489	1,361	81.7	-----
Total.....	4,212	3,344	3,103	73.6	92.7

Illinois

The Labor Bulletin of the Illinois Department of Labor in its November, 1925, issue shows activities of the Illinois free employment offices for the month of October, 1924 and 1925, as follows:

ACTIVITIES OF ILLINOIS FREE EMPLOYMENT OFFICES IN OCTOBER, 1924 AND 1925

Item	October, 1924			October, 1925		
	Males	Females	Total	Males	Females	Total
Number of registrations.....	12,973	6,788	19,761	17,388	6,702	24,090
Help wanted.....	8,972	5,199	14,171	14,455	5,312	19,767
Persons referred to positions.....	8,916	5,157	14,073	13,712	5,306	19,018
Persons reported placed.....	7,597	4,341	11,938	12,111	4,595	16,706
Persons registered for each 100 places open.....			139.4			121.8

Massachusetts

The Department of Labor and Industries of Massachusetts reports as follows on the work of the four public employment offices in October, 1924 and 1925:

ACTIVITIES OF FOUR PUBLIC EMPLOYMENT OFFICES IN MASSACHUSETTS IN OCTOBER, 1924 AND 1925

Month and year	Working days	Applications for positions	Help wanted	Persons referred to positions	Persons placed in employment
October, 1924.....	26	39,115	3,422	4,319	2,941
October, 1925.....	26	39,668	4,159	5,176	3,598

Ohio

The Ohio Department of Industrial Relations has supplied the following data on placement work of the State-city employment service of Ohio in November, 1925:

OPERATIONS OF STATE-CITY EMPLOYMENT SERVICE OF OHIO IN NOVEMBER, 1925

Group	Number of applicants	Help wanted	Persons referred to positions	Persons reported placed in employment
Males:				
Nonagricultural.....	31,715	14,241	14,053	12,834
Farm and dairy.....	460	550	457	392
Total.....	32,175	14,791	14,510	13,226
Females.....	14,701	7,373	7,238	6,457
Grand total.....	46,876	22,164	21,748	19,683

Oklahoma

The following figures from the November 15, 1925, issue of the Oklahoma Labor Market, published by the State bureau of labor statistics, show the operations of the public employment offices of

that State in October, 1924, and September and October, 1925, as follows:

ACTIVITIES OF OKLAHOMA PUBLIC EMPLOYMENT OFFICES IN OCTOBER, 1924,
AND SEPTEMBER AND OCTOBER, 1925

Industry	Number placed in employment		
	October, 1924	September, 1925	October, 1925
Agriculture.....	1,063	1,520	1,038
Building and construction.....	116	129	98
Clerical (office).....	2	6	10
Manufacturing.....	41	92	104
Personal service.....	1,310	962	877
Miscellaneous.....	2,156	2,068	2,278
Total.....	4,688	14,797	4,405

¹ As published. Actual sum of items, 4,777.

Pennsylvania

The Department of Labor and Industry of Pennsylvania reports as follows on the activities of the State employment offices for September, 1924 and 1925:

	September, 1924 (4 weeks)	September, 1925 (5 weeks)
Persons applying for positions:		
Men.....	6,965	10,009
Women.....	3,407	4,130
Total.....	10,372	14,139
Persons asked for by employers:		
Men.....	4,349	7,011
Women.....	1,581	2,530
Total.....	5,930	9,541
Persons placed in employment:		
Men.....	4,014	6,414
Women.....	1,218	2,013
Total.....	5,232	8,427

Wisconsin

The Industrial Commission of Wisconsin, in a mimeographed report, has supplied the following information as to the activities of the Federal-State-municipal employment service of Wisconsin in October, 1924 and 1925:

ACTIVITIES OF FEDERAL-STATE-MUNICIPAL EMPLOYMENT SERVICE OF WISCONSIN IN OCTOBER, 1924 AND 1925

Item	October, 1924			October, 1925		
	Males	Females	Total	Males	Females	Total
Applications for work.....	11,995	4,595	16,590	14,098	4,778	18,876
Help wanted.....	11,212	3,528	14,740	14,061	4,155	18,216
Referred to positions.....	10,533	3,772	14,305	12,788	4,117	16,905
Placed in employment.....	8,623	2,733	11,356	11,032	3,036	14,068

State Departments of Labor

Illinois

THE DATA given below from The Labor Bulletin of November, 1925, published by the Illinois Department of Labor shows changes in employment in representative factories of that State in October, 1925:

CHANGES IN VOLUME OF EMPLOYMENT IN OCTOBER, 1925, AS COMPARED WITH SEPTEMBER, 1925, AND OCTOBER, 1924

Industry	October, 1925		Per cent of change	
	Number of firms reporting	Number of employees	September, 1925, to October, 1925	October, 1924, to October, 1925
Stone, clay, and glass products:				
Miscellaneous stone and mineral products.....	23	1,588	-2.6	+2.8
Lime, cement, and plaster.....	9	505	+4	+24.0
Brick, tile, and pottery.....	34	5,463	-5.4	-1.2
Glass.....	14	4,983	+10.0	+28.4
Total.....	80	12,559	+9.6	+11.0
Metals, machinery, conveyances:				
Iron and steel.....	116	35,129	+1.5	+3.9
Sheet metal work and hardware.....	30	9,547	+2.2	+16.7
Tools and cutlery.....	16	1,571	+8.2	+3.1
Cooking, heating, ventilating apparatus.....	23	4,877	+1.1	-4.5
Brass, copper, zinc, babbitt metal.....	23	3,060	+1.7	+5.8
Cars and locomotives.....	14	9,018	-4.3	-32.2
Automobiles and accessories.....	27	11,755	+13.2	+44.8
Machinery.....	50	17,852	+2.4	+21.8
Electrical apparatus.....	26	32,643	+3.1	-14.9
Agricultural implements.....	28	7,965	+3.0	+33.5
Instruments and appliances.....	7	2,173	+4.7	-3.9
Watches, watch cases, clocks, and jewelry.....	15	7,915	+5	+5.4
Total.....	375	143,485	+2.6	+1.6
Wood products:				
Sawmill and planing-mill products.....	32	2,711	+1	+5.4
Furniture and cabinet work.....	45	6,994	+2.0	+5.0
Pianos, organs, and other musical instruments.....	15	3,249	+13.4	+16.9
Miscellaneous wood products.....	23	2,669	-3.6	-7.2
Household furnishings.....	7	714	+5.2	+5.2
Total.....	122	16,337	+2.9	+3.4
Furs and leather goods:				
Leather.....	9	2,229	+1.6	+15.6
Furs and fur goods.....	8	96	+9.1	+7.9
Boots and shoes.....	16	11,632	+1.4	+3.8
Miscellaneous leather goods.....	8	1,529	+6.7	+181.0
Total.....	41	15,486	+2.0	+5.5
Chemicals, oils, paints, etc.:				
Drugs and chemicals.....	20	2,061	+4.0	+1.0
Paints, dyes, and colors.....	24	2,589	+1.2	+15.1
Mineral and vegetable oil.....	10	5,188	+2.0	+18.7
Miscellaneous chemical products.....	9	3,937	+2.8	+10.8
Total.....	63	13,775	+2.6	+11.0
Printing and paper goods:				
Paper boxes, bags, and tubes.....	35	4,419	+3.5	+37.1
Miscellaneous paper goods.....	16	1,069	+1.1	+3.8
Job printing.....	76	7,931	-6.2	+2.9
Newspapers and periodicals.....	12	3,642	-4	+7
Edition bookbinding.....	9	1,793	+13.4	-----
Total.....	148	18,854	-9	+4.5

CHANGES IN VOLUME OF EMPLOYMENT IN OCTOBER, 1925, AS COMPARED WITH SEPTEMBER, 1925, AND OCTOBER, 1924—Continued

Industry	October, 1925		Per cent of change	
	Number of firms reporting	Number of employees	September, 1925, to October, 1925	October, 1924, to October, 1925
Textiles:				
Cotton and woolen goods.....	9	1,419	+1.8	+11.6
Knit goods, cotton and woolen hosiery.....	6	2,914	+2.8	+12.7
Thread and twine.....	6	607	+17.0	- .6
Total.....	21	4,940	+4.1	+10.3
Clothing, millinery, laundering:				
Men's clothing.....	5	10,257	-3.5	+2.6
Men's shirts and furnishings.....	4	1,164	-2.5	+18.7
Overalls and work clothing.....	10	830	+3.6	-3.0
Men's hats and caps.....	2	68	-1.4	+136.2
Women's clothing.....	20	1,283	+4.2	-1.4
Women's underwear.....	10	686	+16.3	+59.0
Women's hats.....	8	582	-19.4	-26.7
Laundering, cleaning, and dyeing.....	35	2,371	-2.7	+7.0
Total.....	94	17,241	-2.4	+3.5
Food, beverages, and tobacco:				
Flour, feed, and other cereal products.....	24	1,120	+1.4	-4.1
Fruit and vegetable canning and preserving.....	15	844	-78.3	-53.3
Miscellaneous groceries.....	26	4,686	- .8	-2.8
Slaughtering and meat packing.....	19	21,963	+ .4	-3.7
Dairy products.....	10	3,710	- .4	+6.0
Bread and other bakery products.....	18	2,496	+3.6	-3.7
Confectionery.....	18	2,345	+4.9	-8.1
Beverages.....	19	1,412	-3.6	+10.6
Cigars and other tobacco products.....	13	1,141	-13.8	-18.1
Manufactured ice.....	22	259	-25.4	-1.6
Ice cream.....	16	736	-12.5	- .8
Total.....	200	40,702	-7.2	+2.5
Total, manufacturing industries.....	1,144	283,359	+ .8	+2.6
Trade, wholesale and retail:				
Department stores.....	28	3,452	+5.4	+1.7
Wholesale dry goods.....	6	540	+6.3	-11.4
Wholesale groceries.....	6	877	+3.8	+6.1
Mail-order houses.....	3	14,595	+9.0	-5.8
Total.....	43	19,464	+8.0	-4.6
Public utilities:				
Water, light, and power.....	5	14,480	- .2	-5.6
Telephone.....	9	27,404	- .3	+5.2
Street railways.....	27	27,136	+ .9	+ .9
Railway car repair shop.....	24	12,226	- .1	-8.6
Total.....	65	81,246	+ .1	- .8
Coal mining.....	50	14,672	+1.7	+27.6
Building and contracting:				
Building construction.....	113	7,851	+ .6	+26.8
Road construction.....	11	580	+17.2	-29.9
Miscellaneous contracting.....	27	1,719	+17.0	+2.6
Total.....	151	10,150	+3.9	+18.6
Total, all industries.....	1,453	408,891	+1.1	+2.3

Maryland

The Commissioner of Labor and Statistics of Maryland has furnished the following statistics on changes in volume of employment in that State from October to November, 1925:

COMPARISON OF EMPLOYMENT IN IDENTICAL MARYLAND ESTABLISHMENTS IN OCTOBER AND NOVEMBER, 1925¹

Industry	Number of establishments reporting for both months	Employment		Pay roll	
		Number of employees November, 1925	Per cent of increase (+) or decrease (-) as compared with October, 1925	Amount, November, 1925	Per cent of increase (+) or decrease (-) as compared with October, 1925
Bakery.....	5	540	+3.6	\$15,759	-1.0
Beverages and soft drinks.....	5	215	-5.3	5,459	-12.5
Boots and shoes.....	9	1,387	+1.7	25,026	+1.8
Boxes, paper and fancy.....	9	538	+ .9	7,630	-5.2
Boxes, wooden.....	4	298	+1.3	4,880	-4.5
Brass and bronze.....	4	2,505	-3.1	60,039	+3.6
Brick, tile, etc.....	5	758	+ .6	18,715	-7.7
Brushes.....	6	1,112	+9.7	20,820	+3.2
Car building and repairing.....	5	4,431	- .7	149,890	-1.1
Chemicals.....	6	1,260	-2.2	33,672	-5.3
Clothing, men's outer garments.....	5	2,328	-4.0	43,458	-8.1
Clothing, women's outer garments.....	7	763	-25.9	11,152	-13.2
Confectionery.....	7	1,753	+10.9	21,288	+1.6
Cotton goods.....	5	1,371	+ .5	23,357	+ .6
Fertilizer.....	5	529	-23.0	10,491	-23.2
Food preparation.....	4	135	-5.0	3,122	-11.2
Foundry.....	12	1,317	.....	32,644	-3.1
Furnishing goods, men's.....	7	2,963	+5.0	38,191	+4.0
Furniture.....	11	1,111	- .1	26,569	+7.1
Glass.....	3	789	+6.3	17,423	- .1
Ice cream.....	4	291	-11.6	9,679	-4.4
Leather goods.....	6	715	-2.2	14,746	+2.7
Lithographing.....	5	570	-2.3	16,528	-4.3
Lumber and planing.....	9	720	-3.7	17,307	-3.4
Mattresses and spring beds.....	4	154	+1.3	3,845	+12.5
Patent medicine.....	4	868	+2.4	13,292	+1.3
Pianos.....	3	897	+1.1	26,068	+8.7
Plumbers' supplies.....	4	1,234	+ .5	35,304	+1.0
Printing.....	9	1,312	- .9	46,596	+ .5
Rubber tire manufacture.....	1	1,791	-4.4	108,518	-10.6
Ship building.....	3	563	-6.5	14,957	-20.4
Shirts.....	6	878	-2.6	12,217	+ .5
Silk goods.....	4	744	+6.2	10,880	+4.3
Slaughtering and meat packing.....	3	997	+ .9	28,084	+3.4
Stamping and enameled ware.....	3	926	+5.7	16,937	+3.9
Tinware.....	4	2,858	-0.9	61,214	-6.6
Tobacco.....	8	1,129	+4.6	16,832	+3.3
Umbrellas.....	3	424	+6.6	7,610	+8.4
Miscellaneous.....	19	4,220	+2.1	92,998	+2.8

¹ Pay-roll period one week, except rubber-tire manufacture, for which such period was one-half month.

Massachusetts

A press release from the Department of Labor and Industries of Massachusetts shows the following changes in volume of employment in various industries in that State from September to October, 1925:

NUMBER OF EMPLOYEES IN 993 MANUFACTURING ESTABLISHMENTS IN MASSACHUSETTS, WEEK INCLUDING OR ENDING NEAREST TO SEPTEMBER 15 AND OCTOBER 15, 1925

Industry	Number of establishments reporting	Number of wage earners employed			
		September, 1925	October, 1925		
			Full time	Part time	Total
Automobiles, including bodies and parts.....	18	4,314	4,288	75	4,363
Bookbinding.....	15	993	786	219	1,005
Boot and shoe cut stock and findings.....	48	2,221	1,573	671	2,244
Boots and shoes.....	72	23,068	11,259	11,645	22,904
Boxes, paper.....	25	2,165	1,386	927	2,313
Boxes, wooden packing.....	13	1,144	846	338	1,184
Bread and other bakery products.....	51	3,946	4,075	98	4,173
Carpets and rugs.....	5	3,679	1,798	1,952	3,750
Cars and general shop construction and repairs, steam railroads.....	4	2,887	1,939	975	2,914
Clothing, men's.....	31	3,948	2,820	1,117	3,937
Clothing, women's.....	37	1,554	1,183	379	1,562
Confectionery.....	13	3,423	3,566	137	3,703
Copper, tin, sheet iron, etc.....	18	1,086	1,016	51	1,067
Cotton goods.....	55	36,555	25,345	13,777	39,122
Cutlery and tools.....	23	4,643	3,887	1,050	4,967
Dyeing and finishing textiles.....	7	6,341	1,251	5,215	6,466
Electrical machinery, apparatus, and supplies.....	13	11,319	10,943	815	11,758
Foundry products.....	25	2,663	1,823	782	2,605
Furniture.....	33	3,402	3,618	33	3,651
Gas and by-products.....	12	1,029	1,020	-----	1,020
Hosiery and knit goods.....	12	5,099	2,323	2,792	5,115
Jewelry.....	36	2,737	2,633	232	2,865
Leather, tanned, curried, and finished.....	26	4,272	3,131	1,103	4,234
Machine-shop products.....	38	7,496	6,583	1,041	7,624
Machine tools.....	23	1,806	1,558	356	1,914
Musical instruments.....	12	1,241	1,267	61	1,328
Paper and wood pulp.....	21	5,749	4,460	1,572	6,032
Printing and publishing, book and job.....	39	3,418	3,183	212	3,395
Printing and publishing, newspaper.....	19	2,303	2,334	-----	2,334
Rubber footwear.....	3	8,294	7,224	1,141	8,365
Rubber goods.....	7	3,143	3,197	-----	3,197
Silk goods.....	10	3,971	3,723	312	4,035
Slaughtering and meat packing.....	5	1,458	300	1,204	1,504
Stationery goods.....	8	1,609	1,620	18	1,638
Steam fittings and steam and hot-water heating apparatus.....	9	1,902	1,948	-----	1,948
Stoves and stove linings.....	5	1,607	1,284	448	1,732
Textile machinery and parts.....	15	5,187	2,746	2,413	5,159
Tobacco.....	5	770	643	131	774
Woolen and worsted goods.....	57	19,117	10,442	9,141	19,583
All other industries.....	125	28,377	14,757	13,669	28,426
Total, all industries.....	993	229,946	159,778	76,132	235,910

New York

The New York State Department of Labor has furnished the following tabulation of changes in employment and pay rolls in New York State factories in November, 1925. The table is based on returns from a fixed list of approximately 1,700 factories. The weekly pay roll for the middle week of November was \$14,700,438.

CHANGES IN EMPLOYMENT AND PAY ROLL IN NEW YORK STATE FACTORIES FROM NOVEMBER, 1924, AND OCTOBER, 1925, TO NOVEMBER, 1925

Industry	Per cent of increase (+) or decrease (-)			
	October, 1925, to November, 1925		November, 1924, to November, 1925	
	Employment	Pay roll	Employment	Pay roll
Cement.....	-1.4	-3.6	+23.1	+28.3
Brick.....	-13.1	-12.3	+13.7	+15.6
Pottery.....	+1.7	-1.8	-1.1	+5.6
Glass.....	+3.3	+6.8	+16.8	+23.8
Pig iron.....	+7.2	+7.6	+16.9	+19.4
Structural iron.....	-1.5	-.4	+6.1	+13.7
Hardware.....	+2.3	+2.8	+22.7	+24.9
Stamped ware.....	+6.6	+3.6	+20.3	+25.8
Cutlery.....	+3.0	+2.8	+4	+10.8
Steam and hot water.....	+5.6	+4.0	+14.3	+19.6
Stoves.....	+1.8	-5.1	-1.2	+10.4
Agricultural implements.....	+4.8	+5.4	+28.9	+32.2
Electrical machinery, etc.....	+5.3	+7.3	+10.1	+14.9
Foundry.....	+2.2	+8.8	+3.7	+9.7
Autos and parts.....	-2.2	-3.2	+21.7	+29.1
Cars, locomotives, etc.....	+16.0	+15.0	-20.6	-22.1
Railway repair shops.....	+9	-2.7	-6.9	-8.0
Millwork.....	-.6	-.1	+4.6	+4.1
Sawmills.....	-14.0	-13.2	-21.4	-18.6
Furniture and cabinet.....	+4.1	+6.0	+5.6	+12.0
Furniture.....	+4.8	+7.1	+5.4	+12.0
Pianos.....	+4	+7.7	+5.2	+8.6
Leather.....	+1.7	+5.0	-6.3	-2.1
Boots and shoes.....	-5.0	-10.8	+1.0	+4.6
Drugs.....	+9	+1.9	+4.6	+6.0
Petroleum.....	-1.0	+3.5	-13.9	-10.8
Paper boxes.....	+2.5	+5.5	-.9	+2.3
Newspapers.....	-.3	(1)	+12.8	+20.9
Book and job.....	+1.0	+4.4	-1.6	+2.6
Silk goods.....	+1.6	+2.3	+12.1	+18.5
Carpets.....	+9	-.1	+4.6	+5.8
Woolens.....	+3.4	+1.1	+6.8	-2.9
Cotton goods.....	+2.3	+8.3	-9.9	-10.5
Cotton and woolen.....	+1.1	+1.8	+14.6	+18.2
Dyeing.....	+1.4	+1.0	+2.6	-1.4
Men's clothing.....	-4.8	-12.6	+2.7	+2.6
Shirts and collars.....	+2.7	+2.6	+8.4	+14.3
Women's clothing.....	-5.3	-11.4	+6.6	+21.1
Women's headwear.....	+9	-1.1	-2.9	+1.4
Flour.....	-.3	(1)	+1.8	+4.0
Sugar.....	-.3	+2.0	+26.6	+20.6
Slaughtering.....	+2.0	+5.0	-2.0	-2.9
Bread.....	-3.2	-4.0	-3.2	-.9
Confectionery.....	-1.6	+1.3	-1.1	-1.5
Cigars.....	-.9	+2.8	-15.3	-9.8
Total.....	+1.6	+1.9	+3.6	+7.3

¹ Change of less than one-tenth of 1 per cent.

Oklahoma

The Oklahoma Labor Market, published by the Bureau of Labor Statistics of Oklahoma, in its issue of November 15, 1925, contains the following information on changes in employment and pay rolls in 710 establishments in that State from September to October, 1925:

CHANGES IN EMPLOYMENT AND PAY ROLLS IN 710 INDUSTRIAL ESTABLISHMENTS
IN OKLAHOMA, SEPTEMBER TO OCTOBER, 1925

Industry	Number of plants reporting	October, 1925			
		Employment		Pay roll	
		Number of employees	Per cent of increase (+) or decrease (-) compared with September, 1925	Amount	Per cent of increase (+) or decrease (-) compared with September, 1925
Cottonseed-oil mills.....	13	311	+90.8	\$6,099	+86.4
Food production:					
Bakeries.....	35	517	+3.2	13,929	+6.2
Confections.....	7	83	+22.1	1,387	+29.4
Creameries and dairies.....	11	117	+12.5	2,710	+12.9
Flour mills.....	44	344	-6.3	8,159	-3.3
Ice and ice cream.....	33	388	-30.0	19,387	-26.0
Meat and poultry.....	14	1,650	-4	36,622	+1.7
Lead and zinc:					
Mines and mills.....	46	3,498	+9.4	102,649	+14.2
Smelters.....	17	2,130	+5.4	59,590	+8.7
Metals and machinery:					
Auto repairs, etc.....	29	1,645	+27.7	57,362	+59.5
Foundries and machine shop.....	38	977	-4.9	25,407	-9.6
Steel-tank construction.....	16	531	-3.7	11,340	-2.1
Oil industry:					
Production and gasoline extraction.....	123	3,621	+6	105,945	-2.0
Refineries.....	66	4,964	-9.8	154,107	-3.6
Printing: Job work.....	24	259	+2.4	7,010	-1.8
Public utilities:					
Steam-railroad shops.....	11	1,863	+1.8	49,798	+7
Street railways.....	6	630	-5.8	16,228	+1.3
Water, light and power.....	50	1,229	-4.8	33,517	-1.4
Stone, clay and glass:					
Brick and tile.....	11	359	-13.7	6,950	-4.0
Cement and plaster.....	6	1,035	-5.9	26,390	-3.4
Crushed stone.....	6	256	-9.2	3,404	-11.5
Glass manufacturing.....	9	995	+28.2	25,560	+26.3
Textiles and cleaning:					
Textile manufacturing.....	9	337	+14.2	5,307	+25.0
Laundries and cleaning.....	52	1,474	+2.9	25,230	+1.8
Woodworking:					
Sawmills.....	14	294	-18.6	3,574	-44.9
Millwork, etc.....	20	367	+1.7	9,686	-8.7
Total, all industries.....	710	29,874	+7	808,347	+4.1

Wisconsin

The Wisconsin Labor Market for November, 1925, issued by the State Industrial Commission, contains the following data on volume of employment in Wisconsin industries in October, 1925:

PER CENT OF CHANGE IN NUMBER OF EMPLOYEES AND IN TOTAL AMOUNT OF PAY ROLL IN IDENTICAL ESTABLISHMENTS IN WISCONSIN INDUSTRIES FROM OCTOBER, 1924, AND SEPTEMBER, 1925, TO OCTOBER, 1925

Kind of employment	Per cent of increase (+) or decrease (-)			
	September to October, 1925		October, 1924, to October, 1925	
	Employment	Pay roll	Employment	Pay roll
<i>Manual</i>				
Agriculture.....			-34.8	-43.7
Logging.....			-4.7	-5.3
Mining.....	+18.2			
Lead and zinc.....	+1.8	+1.8	+66.1	+60.6
Iron.....	+4.3	+1.5	+63.2	+52.4
Stone crushing and quarrying.....	-4.9	+2.4	+73.3	+84.0
Manufacturing.....	-13.7	-7.3	-8.8	-8.3
Stone and allied industries.....	-5	+3.8	+7.3	+13.6
Brick, tile, and cement blocks.....	-10.6	-7.9	-1.5	-7.5
Stone finishing.....	-3.0	-4.2	+2.8	-12.6
Metal.....	-16.2	-9.7	-4.9	-4.5
Pig iron and rolling mill products.....	+1.2	+6.6	+19.9	+27.6
Structural-iron work.....	+1.2	+5.4	+14.3	+16.7
Foundries and machine shops.....	-3.5	+2.6	-5.2	+12.4
Railroad repair shops.....	+2.0	+8.7	+25.8	+40.9
Stoves.....	-1	+2.2	-8.3	-5.5
Aluminum and enamelware.....	+3.7	-1.1	+11.8	+15.1
Machinery.....	+7.4	+17.6	+8.2	+13.8
Automobiles.....	+7.1	+19.2	+42.1	+51.3
Other metal products.....	-4.2	+3	+25.8	+27.7
Wood.....	-3.6	+2	+19.3	+28.3
Sawmills and planing mills.....	+4	+5.7	-1	+2.9
Box factories.....	-5.7	-1.6	-14.5	-12.7
Panel and veneer mills.....	-1.6	+7.4	-11.0	-9.6
Sash, door, and interior finish.....	+1.0	+15.4	+9.8	+18.7
Furniture.....	+9	+4.6	+11.5	+13.8
Other wood products.....	+3.3	+14.8	+6.7	+9.1
Rubber.....	+3.5	+7.6	+5.6	+9.3
Leather.....	-1.3	+9	+6.6	+3.4
Tanning.....	+2.4	+3.7	+2.4	+8.6
Boots and shoes.....	+2.0	+9.5	+7.1	+19.7
Other leather products.....	+2.4	-1.4	+2.5	-2
Paper.....	+2.9	+2.8	-5.8	+2.2
Paper and pulp mills.....	+4.0	+9.9	+1.9	+6.2
Paper boxes.....	+3.5	+9.4	-7	+5.8
Other paper products.....	+9.8	+16.8	+5.6	+5.4
Textiles.....	+1.1	+6.8	+10.2	+9.6
Hosiery and other knit goods.....	-2.6	-7	+5	+3.6
Clothing.....	-1.0	+7.7	-1.8	+10.3
Other textile products.....	-6.4	-14.7	+1.4	-7.9
Foods.....	-5	+3.7	+2	+4.3
Meat packing.....	-14.5	-15.1	-5.4	-9
Baking and confectionery.....	-8.8	-2.1	-7.1	+4.7
Milk products.....	+1.7	+5	-2.6	-1.4
Canning and preserving.....	-5.5	+1.8	-5.7	-8.6
Flour mills.....	-55.7	-50.3	-13.0	+3.9
Tobacco manufacturing.....	-9	+5.0	+45.4	+32.3
Other food products.....	+2.9	+12.1	-20.2	-15.7
Light and power.....	-4.1	-31.6	-5.5	+3.3
Printing and publishing.....	+6.7	+7.1	+13.8	+9.1
Laundrying, cleaning, and dyeing.....	+1.0	+3.6	+4.4	+8.3
Chemical (including soap, glue, and explosives).....	-6	+1.6	+4.1	+2.9
Construction:	+8.8	+11.1	+5.2	+13.0
Building.....	-6.3	-2.1	+2.1	+4.7
Highway.....	-9.2		+9	-14.1
Railroad.....	+1.1	+4.3	+3.8	+9
Marine, dredging, sewer digging.....	+4.7	+7	-33.3	-55.8
Communication:				
Steam railways.....	-9.9	-8.4	-3.9	-2.5
Electric railways.....	+9.2	+4.2	+8.7	+3.9
Express, telephone, and telegraph.....	-2.2	-1.9	-9.0	-8.8

PER CENT OF CHANGE IN NUMBER OF EMPLOYEES AND IN TOTAL AMOUNT OF PAY ROLL IN IDENTICAL ESTABLISHMENTS IN WISCONSIN INDUSTRIES FROM OCTOBER, 1924, AND SEPTEMBER, 1925, TO OCTOBER, 1925—Continued

Kind of employment	Per cent of increase (+) or decrease (-)			
	September to October, 1925		October, 1924, to October, 1925	
	Employment	Pay roll	Employment	Pay roll
<i>Manual—Continued</i>				
Wholesale trade.....	-6.1	+12.4	+3.4	+9.4
Hotels and restaurants.....	-3.4		-6.1	
<i>Nonmanual</i>				
Manufacturing, mines, and quarries.....	+5.5	+9.9	+6.3	+5.4
Construction.....	-7.7	-1.5	-11.8	-9.8
Communication.....	-7.7	-1.6	+2.9	+6.2
Wholesale trade.....	-2.8	+8.8	+4.4	+19.3
Retail trade—Sales force only.....	+2.3	+7.7	+5.8	+10.1
Miscellaneous professional services.....	+1.4	+16.2	+7.1	+9.6
Hotels and restaurants.....	-4.2		-10.5	

Inquiry into Working of English Unemployment Scheme

UNDER date of November 11, 1925, the Manchester Guardian states that the Minister of Labor has appointed a committee of inquiry "to consider, in the light of experience gained in the working of the unemployment insurance scheme, what changes in the scheme, if any, ought to be made."

The chairman of the committee is Lord Blanesburgh, a prominent Conservative, and the membership includes representatives of both employers and workers, among the latter being Miss Margaret Bondfield and Mr. Frank Hodges, both of whom were members of the late Labor Government. In commenting on the appointment of the committee, the Economist (London) in its issue for November 14, 1925, says:

The initiation of the inquiry is welcome on two grounds. Sufficient experience must by now have been collected to reveal abuses and shortcomings, and to suggest necessary revisions. Secondly, the committee will serve to dispel the popular fallacy, particularly persistent abroad, that the so-called "dole" is merely charitable relief by the State. Recent visitors to America, for instance, have found current there the idea that 1,200,000 British workers are merely living on State charity. In view of this, no harm will be done by the authoritative repetition of the fact that the word "dole" is a misnomer, and that the whole scheme of unemployment pay is a properly worked out insurance scheme, whose actuarial basis, it is true, has been from time to time strained by the incidence of unexpectedly large-scale unemployment.

INDUSTRIAL ACCIDENTS AND HYGIENE

Dangers in the Use and Handling of Radioactive Substances

THE recent report by Hoffman on "Radium (mesothorium) necrosis"¹ has led to the publication in the December 5, 1925, issue of the *Journal of the American Medical Association*² of an article by three investigators, giving their as yet unfinished observations on the danger of the accumulation of radioactive substances in the human body and their effect on the hematopoietic³ systems.

The Hoffman study, which was made from the statistician's standpoint, was based on a survey of 4 deaths and 8 living cases occurring among girls employed in painting the dials of watches and clocks with luminous paint, and the conclusions reached were that there was a distinct occupational poisoning caused by the habit of pointing in the mouth the tips of the brushes used in painting and that radioactive substances, notably mesothorium, were the cause of the necrosis.

The recent death of one of these patients gave the writers the opportunity of securing accurate clinical and pathological data for this study, in addition to which there are under their observation cases which range in severity from mild ones showing only slight necrosis of the jaw and without blood changes to serious ones in which there is profound anemia and extensive destruction of the upper and the lower jawbone.

In the fatal case [the authors say] we have demonstrated, by means of electrometers, gamma radiation from the body during life and measurable amounts of emanation in the expired air. In the organs after death, amounts of radioactive elements were found, sufficient to be determined quantitatively by alpha radiation and penetrative gamma rays, notably in the spleen, liver, and bones, which represent the largest part of the reticulo-endothelial system.

It will be several months before quantitative readings can be completed on these organs and the lesions produced in animals, but we are satisfied that they contain a mixture of mesothorium, with its decaying products, and radium, in what appears to be lethal quantities. In another case, in which there is a well marked anemia, we have shown emanation in the expired air in large and measurable quantities coming from actual deposits of mesothorium and radium in the body, the blood giving off emanation while passing through the lungs. In three other workers, who show at present (September 9, 1925) little or no clinical symptoms and are apparently healthy, we have demonstrated radioactivity in the expired air. In several pieces of necrotic bone removed during life from the lower jaw of a radium worker, we have demonstrated a considerable amount of alpha radiation. This girl died about three years ago of a supposed syphilitic osteomyelitis of the jaw, with profound anemia and sepsis. The dentist kept the pieces of bones because of their unusual size.

This report is published now as a warning that when long-lived radioactive substances are introduced into the body, either by way of the gastro-intestinal tract (as they were in these cases), or by way of intravenous injections for therapeutic effects (as is being advocated for the treatment of such conditions as gout, arthritis, arteriosclerosis, leukemia and Hodgkin's disease), death may follow a

¹See MONTHLY LABOR REVIEW, November, 1925, pp. 181-184.

²The *Journal of the American Medical Association*, December 5, 1925, pp. 1769-1776. "Some unrecognized dangers in the use and handling of radioactive substances. With special reference to the storage of insoluble products of radium and mesothorium in the reticulo-endothelial system," by Harrison S. Martland, M. D., Philip Conlon, M. D., and Joseph P. Knef, D. D. S.

³The word "hematopoietic" was coined by the authors to designate two distinct systems—the hematopoietic system, which governs the blood-making process and is situated in the adult mainly in the marrow, lymph nodes, and spleen, and the reticulo-endothelial system, situated mainly in the same organs, but separate from and adjacent to these centers, one of the chief functions of which is the destruction and absorption of foreign particles in the blood.

long time after, from the effects of constant irradiation on the blood-forming centers. Minute particles of the radioactive substances are phagocyted by the local and migratory histocytes of the reticulo-endothelial system and are deposited in the bones, spleen, and liver in sufficient amounts to produce, for a period of time, seemingly curative or stimulative reactions, to be followed later by exhaustion and destruction of the blood-producing centers.

Radioactive elements are among the most powerful known agents affecting the hematopoietic system. From the moment of introduction into the body by any channel, they act spontaneously and, according to the element and its quantity, irritate the blood-producing centers to various degrees. Small doses increase temporarily red and white cell production. After a shorter or longer time, small or larger doses cause partial or almost total destruction of leukocytes and a diminution in the erythrocytes, producing a severe anemia that simulates the pernicious anemias of regenerative and aplastic types.

The use of radioactive materials on watch dials for night visibility dates in this country from 1913. Since that time a large and important industry has been built up employing many hundred men and women in laboratories and plants either applying radioactive phosphorescent material to watches, clock dials, electrical appliances, compasses, and aeronautic instruments or producing such material.

Radium, mesothorium, or radiothorium are mixed with crystalline zinc to form the luminous material, the quantity of radioactive material varying according to the desired amount of luminosity the maximum amount of radium element or its equivalent being 1 mg. to 8 gm. of the zinc sulphide. While radium was used at first, mesothorium and radiothorium have been substituted for it because of greater luminosity and the fact that they are not so expensive. This is important from the standpoint of toxicity, as mesothorium in equilibrium with its radiothorium emits five alpha particles while radium emits only four. There is also greater velocity and penetration by the alpha particles of mesothorium and its decayed products and they are therefore physiologically more active. Zinc sulphide rendered luminous by activation with about 20 per cent radium and 80 per cent mesothorium was ingested by all the patients whose cases are included in this report.

All these workers had been almost constantly employed at painting dials for from 3 to 7 years and had painted from 250 to 300 watches a day. For several years, and until they were warned to stop, they had been accustomed to point the camel's-hair brushes with their lips. The number of times this was done might vary from 1 to 14 times for one dial. On the basis of once for each dial it was estimated that a worker would swallow 125 mg. of paint and on the basis of 14 times for a dial about 1.75 gm. daily, which would contain from 3 to 43 micrograms of radioactive substances according to the amount swallowed. Allowing for what would be eliminated by the body it is considered that during a period of 5 or 6 years, 1 mg. or more of radioactive elements would be deposited in the bones, spleen, and liver.

In the fatal case which came under the observation of the writers the patient, who was 35 years old, had worked as a dial painter from October, 1917, to March, 1925. In 1923, following instructions given her at that time, she stopped pointing her brushes, at which time she was well except for neuralgia-like pains in the left leg. These pains later became so severe that she was obliged to use a cane, and in March, 1925, she developed a condition simulating pyorrhea and gave up work as a painter although she was in fair

health until June (three weeks before death), when she noticed that she bruised easily. One week later her teeth became sore, the gums bled, and she was very weak. She was admitted to the hospital one week before her death, at which time she was acutely ill with a high temperature. There were marked lesions of the mouth and gums with bleeding and there was beginning necrosis of the soft palate, gums, and cheeks.

Electrometer tests were made while the patient was still living as the occupational history and the clinical and pathologic picture indicated that the cause of her illness was radioactivity. These tests were made to determine whether there was penetrative radiation from her body and emanation in the expired air and the results of both were positive for radioactivity. Electrometer tests after death, on viscera and bones, showed small but definite penetrative radioactivity in the liver, spleen, kidneys, heart, and marrow from some of the bones, while there was considerable radioactivity in the lower jaw and both femurs. The tests were made for both gamma and alpha rays, and showed positive gamma radiation to be present in the organs, while alpha radiation was most marked from the spleen, bone marrow, and the outer layer of bone, and the liver.

Röntgen-ray dental films were attached by metal clips to some of the bones and in six weeks' time there were exact shadowgrams of the metal clips, while a definite exposure of film with hazy shadowgrams was secured in 60 hours on a film attached to the lower jawbone.

While this case in certain respects resembled pernicious anemia the writer says:

As to the etiology, we feel that we have proved by the demonstration and measurement of radioactive substances in the body during life, in the expired air and in the organs after death, that the anemia in this case is dependent on the ingestion, long before, of radioactive paint, and that it is caused by the actual deposits in the spleen, bones, and liver of radium and mesothorium with their decayed products. For the foregoing reasons we have designated this anemia as a "rapid anemia of the pernicious type due to radioactivity." Radioactivity in the bones is very clearly shown by the exposure on the dental films.

A case of chronic anemia of the pernicious type with extensive necrosis of the lower jaw in a person still living was also under the observation of the writers. This case was that of a woman 24 years of age who had worked for seven years as a dial painter, during which time she pointed brushes with her lips. This patient, who was in the hospital, had a persistent progressive necrosis of the lower jaw beginning two years before. Her temperature, except for periodic rises, was usually kept nearly normal through the frequent use of mouth washes and expert dental care. There was, however, a spontaneous fracture of the jaw with necrotic perforation of the hard palate. The electrometer tests of the expired air of this patient showed positive radioactivity.

An account is also given of a woman aged 26 who had been employed both as a dial painter and as an instructor and who showed definite radioactivity although she was still in good physical condition. She had always used very good brushes and had not pointed them as frequently as was common among the other workers. The electrometer tests of her expired air, however, showed that there was emanation from both mesothorium and radium in measurable quantities, these tests being made long after she had given up work with

the radioactive substance. In view of this fact it is considered probable that although her present condition is good the active deposits of insoluble products of radium and mesothorium in her bones, spleen, and liver, which are constantly bombarding her blood forming centers, may eventually cause either an acute fatal anemia or a more chronic anemia with or without local lesions and bone necrosis.

In summing up the deleterious effects of exposure of the human body to radioactive elements there are four ways given in which there may be such exposure. Penetrative or external radiation may produce harmful effects as a result of overexposure or long-continued exposure by means of the Röntgen rays and radiation by radium and its allied products, many cases of fatal anemia among radium workers and radiologists having been recognized by clinicians as due to such exposure. The inhalation of dust containing radium or the inhalation of emanation is another exposure hazard which is connected with certain work in the radium industry, such as tubing and retubing of partly aged radium, repairing needles, plaques, and containers, the preparation of radium and mesothorium and their decaying products for the manufacture of luminous paint, etc. Death from anemia in which this mode of entry was the cause have been recorded. Swallowing radioactive substances, as in the industry under consideration, produces both anemia and local lesions in the form of bone necrosis, and the intravenous injection of radioactive substances which is sometimes done in the treatment of certain diseases results in an accumulation of these elements in the body.

The radioactive elements when introduced into the body emit "so-called positive, negative, and neutral (gamma) radiations of which positive charged alpha particles represent over 80 per cent of the total radium energy."

The conclusions reached by the writers in summing up the results of the experiments and the clinical study of these cases are that this is the first time these anemias have been actually proved to be due to the ingestion of radioactive elements and that the necrosis of the jaw, which forms an important lesion in this disease, is due to local irritative radiation caused by clinging particles of radioactive substances on the gums, teeth, and roof of the mouth. The increased virulence of bacteria when exposed to small amounts of radioactivity is said to be a subject which has not yet been sufficiently investigated. This is believed to be the first time that radioactivity has been demonstrated in the human body during life by means of electrometers, although the presence of radium, mesothorium, and their decayed products has been demonstrated in previous experiments in the organs after death. The importance of this means of determination of the presence of radioactive elements in the body is pointed out as it can be shown by this means months and years before clinical symptoms develop. Check tests on normal individuals have failed to show any radioactivity.

After these radioactive elements are once deposited in the body there is no treatment known by which they can be eliminated, changed, or neutralized. They decrease in amount in varying periods of time according to their individual characteristic decay, radium taking 1,750 years and mesothorium 6.7 years to reach one-half of its original activity.

Coke-Oven Accidents in the United States During 1924

A REPORT of the accidents at coke ovens during the calendar year 1924, issued by the United States Bureau of Mines (Technical Paper 388), shows both lower death and injury rates than in any other year on record. The fatality rate was 1.16 per thousand full-time workers and the injury rate was 79.54, as compared with rates of 1.76 and 101.18, respectively, in 1923. Next to 1924, the lowest accident rates which have been reported were those for 1915, when the fatality rate was 1.21 and the injury rate 90.78.

The accident reports are voluntarily furnished to the Bureau of Mines by operators of coke ovens throughout the country. According to these reports there were 20,451 men employed in the manufacture of coke who worked a total of 6,204,448 man shifts, the average number of work days per man being 303. There were 24 fatalities and 1,645 injuries which caused disability beyond the remainder of the day or shift on which the accident occurred. There was a decrease of 14 per cent in the number of employees in 1924 as compared with 1923; of 19 per cent in the number of man shifts; and of 6 per cent in the average workdays per man, while the number of deaths was 21 less, and the nonfatal injuries were 948 less than in 1923. The time lost from all fatal and nonfatal accidents at coke ovens amounted to about 3 per cent of the total number of man shifts worked during the year. There were 6,450 men employed at the beehive ovens, of whom 3 were killed and 457 injured, giving a fatality rate of 0.75 per thousand 300-day workers and a rate of 113.54 for nonfatal injuries; while at the by-product ovens there were 14,001 men employed and there were 21 fatalities and 1,188 injuries, which resulted in a fatality rate of 1.26 and an injury rate of 71.33 per thousand 300-day workers.

The following table shows the number and classifications of injuries for the eight-year period, 1917 to 1924:

NUMBER AND CLASSIFICATION OF INJURIES AT COKE OVENS OF THE UNITED STATES, 1917 TO 1924

Type of injury	Number of injuries							
	1917	1918	1919	1920	1921	1922	1923	1924
Fatal.....	76	73	53	49	17	29	45	24
Serious (time loss of over 14 days):								
Permanent disability—								
Total ¹	2	2	2	3	-----	1	5	-----
Partial ²	72	73	121	76	24	35	71	38
Others.....	735	969	790	722	318	387	625	431
Slight (time loss of 1 to 14 days).....	5,904	6,748	3,118	2,614	1,511	1,287	1,892	1,176
Total injuries.....	6,713	7,792	4,031	3,415	1,853	1,710	2,593	1,645
Total fatalities and injuries.....	6,789	7,865	4,084	3,464	1,870	1,739	2,638	1,669
Men employed.....	32,417	32,389	28,741	28,139	16,204	19,278	23,729	20,451

¹ Permanent total disability: Loss of both legs or arms, one leg and one arm, total loss of eyesight, paralysis or other condition permanently incapacitating a workman from doing any work of a gainful occupation.

² Permanent partial liability: Loss of one foot, leg, hand, eye, one or more fingers, one or more toes, any dislocation where ligaments are severed, or any other injury known in surgery to be permanent partial disability.

The accident rates in the following table are based on the number of 300-day workers employed. The table shows the number of men employed, the days of labor performed, the fatalities and injuries, and the rates per thousand 300-day workers for the calendar years 1917 to 1924.

NUMBER OF EMPLOYEES, DAYS OF LABOR PERFORMED, FATALITIES, AND INJURIES AT COKE OVENS IN THE UNITED STATES, 1917 TO 1924

Year	Average days active	Men employed		Days of labor performed	Number killed		Number injured	
		Actual number	Equivalent in 300-day workers		Total	Per 1,000 300-day workers	Total	Per 1,000 300-day workers
1917	329	32,417	35,595	10,678,429	76	2.14	6,713	188.59
1918	329	32,389	35,476	10,642,688	73	2.06	7,792	219.64
1919	289	28,741	27,674	8,302,059	53	1.92	4,031	145.66
1920	319	28,139	29,921	8,976,214	49	1.64	3,415	114.13
1921	257	16,204	13,868	4,160,298	17	1.23	1,853	133.62
1922	284	19,278	18,236	5,470,939	29	1.59	1,710	93.77
1923	324	23,729	25,627	7,688,160	45	1.76	2,593	101.18
1924	303	20,451	20,681	6,204,448	24	1.16	1,645	79.54

The principal causes of nonfatal injuries at all coke ovens during 1924 were falls of persons; burns; falling objects; cars, lorries, and motors; and hand tools, in the order named, while haulage equipment, coke-drawing machines, and falling objects caused the highest fatality rates. In the following table the number of fatalities and injuries occurring during the year ending December 31, 1924, and the rate per thousand 300-day workers are shown by causes.

NUMBER OF FATALITIES AND INJURIES AT COKE OVENS AND RATE PER ONE THOUSAND 300-DAY WORKERS, 1924, BY CAUSES

Cause	Killed		Injured	
	Number	Rate per 1,000 300-day workers	Number	Rate per 1,000 300-day workers
Cars, lorries, and motors	6	0.29	131	6.33
Railway cars and locomotives			27	1.31
Coke-drawing machines	5	.24	32	1.55
Electricity	1	.05	30	1.45
Falls of persons	2	.10	218	10.54
Hand tools			115	5.56
Suffocation from gases	1	.05	14	.68
Burns	1	.05	199	9.62
Gas explosions			12	.58
Dust explosions			7	.34
Falling objects	5	.24	189	9.14
Nails, splinters, etc.			28	1.35
Run of coal or coke			14	.68
Other causes	3	.14	629	30.41
Total	24	1.16	1,645	79.54

Dust Explosions in Industrial Plants¹

A SUMMARY, by Hylton R. Brown, of the investigations of the United States Bureau of Chemistry into the causes and methods of prevention of dust explosions in industrial plants is given in the September, 1925, issue of *Industrial and Engineering Chemistry* (p. 902). The investigations have shown, the writer says, "that practically all combustible dusts and some dusts not generally considered combustible will explode with violence under favorable conditions, when mixed with the proper proportion of air and ignited by a flame, spark, or other source of ignition." Although there is much experimental work yet to be done to show the exact conditions under which various dusts will or will not explode, it is certain that "dust from practically any material which will burn or be readily oxidized when fine enough and dry enough to form a cloud or be thrown into suspension in the air will explode if it comes in contact with a flame or spark sufficiently hot to ignite it." A temperature as low as 540° C. (1,004° F.), which is considerably below dull red heat, will ignite some dusts, while for some of the more explosive dusts an explosive mixture is formed by 7 milligrams of dust in a liter of air. There is no record of a spontaneous dust explosion, but a spark, flame, or other cause is necessary to ignite the dust.

The extent of the hazard of dust explosions, it is said, is not yet recognized by manufacturers, since there is often a false feeling of safety caused by the fact that in their experience no dust explosions have ever occurred in their particular industry. There are approximately 22,000 establishments in this country manufacturing dusty products or producing dusts in the process of manufacturing, and thousands of warehouses, transfer stations, etc., where such material is handled. During the past year dust explosions and the resulting fires caused the death of 45 persons, the injury of 28 others, and the destruction of about \$3,000,000 worth of property. These explosions occurred in starch and woodworking plants, leather-grinding mills, feed-mixing plants, and grain elevators, and in 1923 explosions were reported of lignone, dye, aluminium bronze, dried wood pulp, spice dust, paper dust, wood flour, powdered milk, cork dust, and hard-rubber dust.

A flame of any kind, including sparks from static electricity and the breaking of lighted electric lamps, may start an explosion whenever enough dust to form an explosive mixture is in the air. The plants in which steps should be taken to eliminate the dust-explosion hazard are classified in three groups: Plants handling dusty or powdered material in package form, those in which it is handled in loose form, and plants manufacturing or producing explosive dust.

In all these classes of industries general cleanliness throughout the plant is a requisite in the prevention of dust explosions, and dust should not be allowed to accumulate overhead or where a jar or concussion would throw the dust into suspension. Cleanliness is the principal precaution necessary in warehouses or shipping rooms where the material is handled in packages or bulk lots, and the chief danger

¹ See MONTHLY LABOR REVIEW, April, 1922, pp. 180, 181.

of dust in sufficient amounts to propagate a flame is from the accumulation of dust from packages which are accidentally broken open. In plants handling dust in loose form, as in packing, mixing, sifting, etc., there are more opportunities for dust clouds to be formed, as the machinery creates drafts which stir up the dust and tend to keep it in suspension. An electric spark or arc may occur in many places about an industrial plant, causing an explosion if there is sufficient dust present. In dusty places it is advisable to install electrical apparatus—motors, switches, etc.—in a separate dust-proof room. All electric lamps should be protected with heavy dust-proof globes and strong guards, and drop cords and extension lights should not be used. The danger from static electricity is shown by the large number of explosions and fires on threshing machines and in cotton gins. Charges of more than 50,000 volts of static electricity have been measured on threshing machines and on moving belts in industrial plants. Various methods of eliminating static electricity are used, but they are not always effective. If the charge is present on the machinery, grounding the frame may eliminate it and if it is present on moving equipment, brushes, combs, and wipers resting on the moving parts may be effective, while maintaining a high humidity around the equipment may remove the hazard.

Mechanical causes of dust explosions which may be largely eliminated by care in the maintenance and use of machinery are metallic sparks, friction fires, and hot bearings. While the open flame for lighting industrial plants has been generally superseded by electric lights, lanterns are often used when the power goes off or the plant is shut down for repairs, and the use of blow torches and metal-cutting or welding flames create a hazard when used in making repairs.

In plants in which the dust or powdered material is produced or manufactured, plant cleanliness is of even more importance than in those in which it is handled in loose form, and dust-collecting and dust-removing equipment of the best type is an absolute necessity, while every attempt must be made to remove the various sources of ignition. The high-speed grinding equipment used in these plants is a frequent source of fires and explosions through the production of metallic sparks. The entrance of foreign material into the grinding machine, which may strike sparks and ignite the dust within the machine, is difficult to control. Screens and separators will partially remove it, but in plants where grinding is the major part of the process it may be necessary to introduce an inert gas into the grinding machines to prevent the formation of an explosive mixture of dust and air. It has been shown by tests that it is impossible to produce an explosion in most of the dusts now considered explosive if the oxygen in the air in which the dust is carried in suspension has been reduced to 12 per cent. This requires replacing 21 per cent of the oxygen in the air with an inert gas such as nitrogen or carbon dioxide. A greater reduction is necessary in a few cases, as sulphur dust requires a reduction of the oxygen content to 8.5 per cent. A thorough study is, however, necessary in cases where the use of inert gas is considered essential to determine the amount of gas necessary to prevent explosions.

The methods suggested for the reduction or elimination of the explosion hazard in dusty industries are summed up as follows:

(1) Prevent the formation of dust clouds or the accumulation of dust in sufficient quantity to form a cloud, either by maintaining general plant cleanliness or by installing dust-collecting equipment.

(2) Eliminate all sources of ignition.

(3) Maintain an atmosphere of reduced oxygen content incapable of supporting a dust explosion where it is impossible either to prevent the formation of dust clouds or to eliminate the sources of ignition effectively.

Dust Hazard in the Abrasive Industry¹

THE results of a study of the effect of the inhalation of dust from artificial abrasive wheels are given in a recent issue of the *Journal of Industrial Hygiene*.

The use of artificial abrasives in industry has increased to such an extent in the past 10 years that the natural sandstone wheel which is known to cause silicosis is now used only in the manufacture of cutlery and axes and even in these industries is being gradually replaced by the artificial abrasive wheel. The extent of the use of artificial abrasives is shown by the fact that in an average year about 60,000,000 pounds of artificial grinding wheels are produced in this country. The artificial abrasives most used are aluminium oxide and silicon carbide, each having hard tough crystals which, when divided, are wedge shaped in form and have a cutting power almost as great as that of a diamond. Large quantities of dust are produced in the crushing and sizing of these crystals into the different sized grains and in the manufacture of grinding wheels. While dust-collection systems remove the greater part of the dust from about the machines, there is still a considerable amount floating in the air of the workrooms.

Reference is made by the writers to a study of the dust hazard in the abrasive industry by Winslow, Greenburg, and Greenburg, in 1919, by dust analysis, in which it was found that the inorganic dust in the air of abrasive factories included coke, crude aluminium hydroxide, a fused aluminium compound (aloxite or alundum), and carborundum (silicon carbide). The last two materials are extremely hard and both possess the property of fracturing in very irregular particles and there is every reason to suspect that such dusts should be very deleterious to health.

Although many studies have been made of the effect of silica dust in grinding with sandstone wheels or in mining, the only study of the effects of the use of artificial abrasive wheels previous to this one was an investigation made in England in 1923 by Dr. E. L. Middleton,² in which it was concluded that the inhalation of dust from artificial grinding wheels was not so dangerous as that from sandstone wheels.

The present study, which is clinical in character, represents 14 years' experience in the largest single abrasive and grinding wheel factory in the world. The average number of employees during this

¹ *Journal of Industrial Hygiene*, August, 1925, pp. 345-351. The dust hazard in the abrasive industry, by W. Irving Clark, M. D., and Edward B. Simmons, M. D.

² See MONTHLY LABOR REVIEW, November, 1924, pp. 210-212.

period has been 2,100, about one-fifth of whom have been exposed to the inhalation of large quantities of dust.

The departments in which the processes are very dusty are the abrasive department, where the lumps of abrasive are crushed into grain and sized; the shaving department, where the dry wheels, still in clay form, are shaped on a special type of potter's wheel; the truing department, where the vitrified wheels are cut to exact size on specially constructed lathes; and the clay department, which is the dustiest of all, where the clays which make up the bond in the wheels are weighed and mixed. In all these departments very complete dust-removal systems have been in operation for years, the amount of dust so collected daily being at present 12,000 pounds.

Complete physical examinations are given all applicants for employment, and employees working in dusty departments are re-examined as frequently as seems necessary. After 10 years' exposure to the inhalation of dust, employees are examined annually. In addition the factory health department studies their working conditions and every effort is made to reduce the dust hazard. The majority of the employees in the dusty departments are of Swedish descent and the next largest group is Italians.

Physical examinations and X-ray pictures of the chests of 79 men employed 10 years or more in the dusty departments showed that there were signs of silicosis in only one case and this was in the incipient stage. This worker was employed in the clay plant where there was no artificial abrasive dust but where an analysis of the clay showed that it contained 9 per cent of pure silica in the form of feldspar, so that this was probably a case of true early silicosis.

The pictures of the lungs of the workers exposed to artificial abrasive dust did not show any typical signs of silicosis, although in four cases there was evidence that the lungs were working hard to keep themselves clear of dust. The specialist who examined the pictures considered that if these were the lungs of granite workers, they would represent a perfectly safe risk for an indefinite period, and it was also his opinion that none of the men, with the exception of the man exposed to clay dust, would develop active symptoms of pneumoconiosis.

X-ray pictures of the chests of seven men at two plants of the company where the crude artificial abrasive is made, who had been exposed to the dust for periods of from 5½ to 18 years, showed no evidence of the presence of dust disease.

An analysis of the causes of all the deaths reported by the benefit association since 1892 showed that 6½ per cent were due to pulmonary tuberculosis; the rate for the city as a whole was 5 per cent. As babies and very young children were included in the latter figure, however, it seems that there is probably little difference in the death rates for the two groups. During the past 10 years 31 cases of pulmonary tuberculosis had occurred among the employees. Twenty cases occurred in the nondusty departments, where there was an average of 1,868 employees, and 11 in the dusty departments, where the number of employees averaged 332. While the percentage of cases was slightly higher in the dusty departments, the risk does not seem to be great, as the percentage of the total force developing tuberculosis each year during the 10-year period was only 0.014 per cent.

The following conclusions are reached by the writers as a result of the 14 years' observation and of the data presented in the paper:

1. In factories which provide proper methods of dust removal, the continuous inhalation of artificial abrasive dust, extending over many years, does not produce the symptoms or present the X-ray findings of pneumoconiosis.

2. The number of cases of pulmonary tuberculosis occurring in the artificial abrasive industry does not greatly exceed the number normally present in the community.

3. Workers who habitually use grinding wheels will run but slight risk of developing pneumoconiosis if they use artificial abrasive rather than sandstone wheels for all grinding operations, and if the machines upon which the artificial abrasive wheels are mounted are properly hooded and excessive dust removed by suction fans.

Health Hazards in the Use of Intermediate Dyes

THE Industrial Hygiene Bulletin, November, 1925, published by the New York State Department of Labor, contains an account by Carroll M. Salls of the extent to which paraphenylene diamine¹ is used as a dye intermediate and the dangers attending its use.

Paraphenylene diamine is known in the trade under the German name of "ursol black," the American-made product being sold as "universol black." It is still widely used as a hair dye, although for the past 10 years it has been reported as being displaced by less poisonous substitutes. Fifty thousand packages of hair dye per month have been distributed by one firm alone, each package containing an amount sufficient for two applications.

The total production of para per year in the United States for all uses is 350,000 pounds, valued at \$425,000. In regard to the toxic properties of the substance the following is quoted from a statement of the United States Public Health Service: "Paraphenylene diamine is an aniline derivative which by oxidation becomes black or brown. The poisonous qualities of this chemical are well known. A number of cases of poisoning from the use of this compound as a hair stain and even from wearing hose dyed with this chemical have been reported."

Efforts are being made by various organizations toward having legislation enacted against the use of paraphenylene diamine, and a bill has been drafted by the legal division of the American Medical Association to be presented to Congress, prohibiting its use in both fur and hair dyes. In the writer's opinion the prohibition should be limited to hair dyes, as he considers that it would impose unnecessary hardship on the fur industry since the foundation of the business of each fur dyer is the secret formula by which the color is produced. As it frequently takes years to develop a satisfactory formula, to change it would be disastrous and it is possible by thorough washing and drumming of dyed furs to remove the excess paraphenylene diamine and oxidation products and eliminate the danger of poisoning to wearers of the furs.

In the use of hair dyes, however, the situation is different, as the poisonous dye is rubbed on the living skin. Satisfactory substitutes also are known and several manufacturers are advertising nontoxic hair dyes. In these dyes the poisonous quality of the

¹ See MONTHLY LABOR REVIEW, February, 1919, p. 215; May, 1924, pp. 194, 195.

paraphenylene diamine is reduced or entirely eliminated by chemically combining with the amine compounds other compounds which do not affect its dyeing properties but which do prevent its being readily absorbed by the skin. Its poisonous effect is therefore greatly reduced and may be still further decreased by use of another amine less toxic than paraphenylene diamine.

While the application of these principles to the fur-dyeing industry is to be desired, it is considered that it should be done gradually by means of restrictions and not suddenly by prohibition, and that much could be accomplished by the refusal of fur merchants to accept dirty furs, thereby compelling manufacturers to put the product through a better drumming process. If the skins are not thoroughly drummed, this is shown by the fact that dirt can be shaken out of the furs when handled and chemical tests can be employed to show the presence or absence of poisonous substances. The large number of cases of fur dermatitis which occurred in London in 1922-23 caused much agitation and within the past year many cases of dermatitis in furriers have been reported to the New York State Department of Labor.

From the standpoint of the workmen, also, the development of substitutes for paraphenylene diamine is desirable, as the processes of dyeing, dressing, cutting, making up into garments, and merchandising all bring the workers into contact with the dye or the dyed fur. According to one authority, asthma and eczema are the diseases found most frequently among fur and hide workers who come in contact with dyes containing paraphenylene diamine and there is an occasional case of acute dermatitis with swelling of the neck and head and loss of hair, followed in rare cases by death. After once having been poisoned there is a tendency to become hypersensitive to the poison so that even the finished products (dyed furs) can not be handled. The most hazardous working conditions occur during the drying of the dyed pelts and when they are removed from the drums in which they have been treated with sawdust or sand. In the latter case the operation is accompanied by clouds of dust containing paraphenylene diamine and its oxidation products.

Until satisfactory substitutes for paraphenylene diamine are found, the writer recommends that in the dyeing process as weak solutions as practicable should be used; that a mordant which helps to develop and fix the dye should be used first when the dip process is employed, and when the brush process is used the brushed skin should be given from 12 to 24 hours to develop the dye. The dyed skins should be washed thoroughly with running water, preferably in a paddle, and the washed and dried skins should be thoroughly drummed in a revolving drum containing sawdust or clean sand for several hours.

Effects of Ammonia Gas and Safe Limit of Gas in the Atmosphere of Work Places

IN RESPONSE to an inquiry received by the Bureau of Labor Statistics relative to the effects of ammonia gas on persons coming in contact with it and the safe limit of the gas in the atmosphere of the work place, the following information which was compiled in

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reply is published for the benefit of the readers of the MONTHLY LABOR REVIEW:

Ammonia, NH_3 , a colorless gas of sharply penetrating odor [enters the body] in gaseous form through the organs of respiration. [It is] seldom pure, [being] mostly in combination with other gases. Immediate effect [is] on the conjunctiva and the cornea.

A proportion of more than 0.15 per cent of ammonia in the air immediately causes an irritable condition of the mucous membranes. Chronic bronchial catarrhs are especially liable to follow long-continued inhalation of small quantities of the gas diffused in the air. From these are to be discriminated the acute conditions of transient illness: Intense irritation of the respiratory organs; violent sneezing; lachrymation, redness of the eyes, inflammation of the cornea and of the conjunctiva; increased secretion of saliva; burning in the pharynx, and a sense of constriction in the larynx; paroxysmal cough, with secretion of tenacious, viscid, even bloody, mucus; embarrassment of respiration, attacks of suffocation; vomiting of serous masses; ammoniacal odor of the perspiration; retention of urine, which may last many hours and even two or three days; acute inflammation of the respiratory organs, and scattered areas of inflammation in the lungs, in severe cases, a fatal outcome. Protracted breathing of small quantities is apt to cause chronic bronchial catarrh.¹

In *Industrial Poisoning in the United States*, by Dr. Alice Hamilton, which has recently been published, there is the following description of cases of industrial poisoning from ammonia and a statement as to percentage of ammonia vapors in the air which can be tolerated:

Industrial poisoning from ammonia is always accidental, the result of a sudden escape of ammonia in gaseous or liquid form, usually from an artificial ice apparatus. I have the history of an engineer who was working in an ice plant, repairing the engine, when a valve stem blew out and the place was at once filled with ammonia vapors so strong that he was overcome and hurried to a hospital unconscious. His mouth and fauces were red and with a glazed appearance, his tongue dry and his breath distinctly ammoniacal. He was continually belching, but his lungs were clear and he recovered the following day and was discharged. In severer cases, edema of the lungs is likely to develop and the case follows the same course as that of poisoning by caustic acids.

Fairbrother, of East St. Louis, described an accident which resulted in the poisoning of four men by fumes of ammonia. They were constructing an ice machine in a brewery and a large vat broke, allowing liquid ammonia to spread over the floor, filling the room with its vapor. It was about three minutes before the men could be released and then one of them was found comatose, with a heart beat scarcely perceptible and he died in 15 minutes. His body was drenched in ammonia and his face and hands already blistered and tongue and pharynx denuded of mucous membrane. The second was in a condition very much like that of chloroform excitement, unable to stand, in wild delirium, with marked disturbance of heart beat and respiration. He was given morphine but died in two hours. The third was conscious and could walk alone. He was put to bed, complaining of occasional difficulty in breathing and preferring to lie propped up on pillows, but he could swallow easily and talk. About five hours later his dyspnea suddenly increased and after a few gasping breaths he died.

The fourth had suffered a compound fracture in the accident and sloughing necessitated amputation. At the time of writing, three months later, he was convalescing but all that time he had suffered from bronchial irritation with continual coughing, frequent hemoptysis, and partial paralysis of the right side. The cause of death in the three other cases was given as: "Heart failure, resulting from bronchial congestion, which was caused by inhalation of ammonia gas."

Ronzani tested ammonia vapors in the same way as he had tested hydrofluoric acid. He found that long inhalation of as little as 0.1 per 1,000 parts of air does no harm, but if the proportion is raised to as much as 0.5 per 1,000 there may be a loss of agglutinins and bactericidal substances in the blood, after prolonged inhalation. Lehmann could tolerate 0.33 per 1,000 and he thought 0.5 per 1,000 below the danger limit, but Ronzani dissents, so far as long-continued exposure is concerned. He finds at 0.5 per 1,000 more or less marked disturbance of

¹ U. S. Bureau of Labor Statistics Bul. 100: List of industrial poisons, p. 739, Washington, 1912.

general nutrition, irritation of the respiratory passages, changes in the blood, anemia, and a loss of resistance to infection by the anthrax bacillus, by the tubercle bacillus and by the diplococcus of Frankel. Lehmann found that dogs could increase their tolerance to ammonia fumes to five times as much as they had stood in the beginning.

Occupational Disease Occurring in a Buffer Working on Britannia Metal

AN INQUIRY was recently received by the Bureau of Labor Statistics in regard to the possibility of a fatigue neurosis developing in the occupation of buffing. In the case in question a neuritis developed which it was contended was due to the fatigue of the occupation, complicated possibly by the effects of Britannia metal on which the employee worked.

While the effects of fatigue have been studied in various occupations and industries, no references could be found to the specific operation of buffing. The general effects of the present-day division of labor and the speed with which operations are performed are shown, however, in the following quotation from *Industrial Health*, by Kober and Hayhurst (pp. 751, 752):

Even where diminution of output is not present and where specific diseases can not be traced directly to the fatigue of labor it is undoubted that industrial overwork often occurs and puts the worker into a physical condition, at present difficult to recognize by any specific test, wherein his physiological mechanism is in a state of depression and ready to fall a prey to specific maladies. Treves speaks of this as not presenting "a well-defined morbid picture; but it is a slow deviation, often obscured by its very slowness, and predisposing to illness of any nature; it is the borderland of illness."

A pronounced feature of modern industrialism is the great division of labor among the workers and the limitation of the task of each to a specific procedure. While certain kinds of work still require the expenditure of much muscular force by the worker, the introduction of machinery has tended in general to diminish muscular effort. It has, however, been replaced by a new element which is no less fatiguing, namely, speed. * * *

* * * A worker doing one thing does nothing else; that is, his main activities are limited to a small part of his body, to a restricted neuromuscular mechanism, which undergoes a rapid rhythmic exercise. In some cases this exercise becomes hardly more than a series of exactly similar unconscious reflex actions; in others it demands the aid of an acutely attentive consciousness. The danger lies in the pace becoming so rapid that there is little opportunity, such as usually exists with the rhythmically beating heart, for recuperation between successive discharges of energy. At the end of the day's work, therefore, the physiological mechanism involved is too often near exhaustion and even the rest of the body may suffer likewise.

Antimony which forms 8 to 10 per cent of Britannia metal seems to be the dangerous constituent of this metal, the other elements of the alloy being copper and tin. Fatigue, muscular pains, and neuralgia of the extremities have been among the effects noted in the use of this and other alloys containing antimony. The following extracts from works on industrial diseases show the composition and the effects of the antimony in the manufacture of these alloys and also in the remelting of old and scrap metal;

Antimony.—This brittle silver-white metal is largely used as an alloy in type metal; 60 per cent lead, 25 per cent antimony, 15 per cent tin. Hard lead: 3 per cent antimony, 97 per cent lead. Britannia metal: Antimony 8-10 per cent, copper 0-3 per cent, tin 90-92 per cent. In the manufacture of these

alloys, and likewise in the remelting of old, and scrap metal, vapors of antimony or antimony oxide are evolved, the significance of which has remained somewhat obscure, although first pointed out by Lohmeyer, cited by Lehmann, who in a footnote suggests the possibility that some of the disturbances attributed to these vapors may be due to arsenic.

On the other hand, Erben considers that industrial antimony poisoning occurs among workmen in smelting antimony alloys and in making tartar emetic, through inhalation of fumes of oxide of antimony. Rambousek refers to a workman in Hamburg engaged in pulverizing pure antimony, who was attacked with vomiting lasting several days and in another case the inspector noted nose-bleeding and vomiting as following on the crushing of antimony ore.

It was generally held that the chief danger from antimony alloys was lead, until Schrumph and Zabel found among the younger operatives in a type foundry very few cases of lead poisoning, but a goodly number presented the following clinical picture: "A remarkable facial expression, complaints of nervousness, irritability, sleeplessness, fatigue, dizziness, headache, both frontal and cerebellar, muscular pain, neuralgia in the extremities, nausea, loss of appetite, gastrointestinal disturbances, and constipation. Examination of the blood, apart from lower blood pressure, revealed a diminished leukocyte count and a notable eosinophilia. Antimony was found by the Marsh test in the fecal discharges. The symptoms disappeared after suspension of work for 2 to 3 weeks. The changes in the blood were also brought about by feeding rabbits with antimony sulphide and the oxide."

P. Boveri fed rabbits metallic antimony suspended in oil in doses from 0.005-0.055 grams every other day for a period of 30, 60, and 90 days, without apparent bad effects. Larger doses produced diarrhea, with a progressive cachexia and death. (*Industrial Health*, by Kober and Hayhurst, pp. 583, 584.)

In the preparation of antimony products toxic vapors may be evolved, as they are, also, in the use of some of these products in manufactures, particularly the vapor of the trioxide (Sb_2O_3) and antimonious acid.

The various preparations are used in burnishing the rifle barrels and steel ware (antimony chloride), making type and stereotype metal alloys, hardening lead for ammunition, making Britannia ware and white metal, making fireworks, anilin dyes, vulcanizing and making red rubber, for which latter the pentasulphide is used. Antimonial preparations are further employed as mordants in cotton dyeing and textile printing. Cases of chronic antimony poisoning have been observed also among workers in chemical industries and paint makers who are exposed to dust from the antimonial salts.

Symptoms.—The symptoms are both acute and chronic. Locally the antimony compounds give rise to dermatitis and pruritus, especially where the skin is perspiring. Inhaled as dust and in vapor, they cause acute symptoms such as rhinitis, inflammation of the pharynx, bronchitis, gastric disorder, and colic, sometimes with diarrhea. In serious cases of poisoning there are circulatory disturbances such as vertigo, palpitation, faintness, and feeble heart action. Albuminuria is common.

Schrumph and Zabel, of Strassburg, have shown, both experimentally with animals and chemically, that much of the chronic poisoning among typesetters is not due to lead, but to antimony. Type is often faced with a mixture of lead, 70 to 80 per cent, antimony 15 to 20 per cent, and tin 5 per cent. As the tin is inert, the cause of the poisoning must lie between the two other metals. In two patients these experimenters recovered antimony from the stools, and a number of typesetters were found to lack important symptoms of lead poisoning, such as granular basophilia, leukocytosis, albuminuria, biliuria, and increased blood pressure.

The symptoms presented, however, were typical of chronic antimony poisoning as follows: Frontal and occipital headache, vertigo, oppression in the chest, peripheral neuralgic and muscular pains, gastric disorder, constipation, insomnia, general nervousness, irritability, muscular fatigue, and sexual weakness. Blood examination exhibited only moderate anemia, leukopenia, and an eosinophilia of 10 to 25 per cent. The urine appeared normal. Recovery usually took place upon a milk diet and laxatives, with regulated rest, exercise, and fresh air. (*The Occupational Diseases*, by W. Gilman Thompson, pp. 161, 162.)

WORKMEN'S COMPENSATION AND SOCIAL INSURANCE

Workmen's Compensation Insurance

THE authors of a recent volume on workmen's compensation insurance¹ have undertaken to furnish a hand book covering the history and principles of workmen's compensation and the subject of insurance in this field, covering employers' liability generally. The book is in three parts, the first discussing injuries and their prevention, the second, methods of indemnification for industrial injuries, and the third, workmen's compensation and employers' liability insurance. There are also 23 appendixes, a fairly extensive list of references, and an index.

The method used is largely that of illustration, classes of injuries, types of accidents, and analyses of considerable numbers of cases furnishing the basis for such deductions as are attempted. Modes of prevention, likewise illustrated by example, and agencies that work in the field are also considered.

A discussion of the common law of employers' liability, with a brief note on legislation, opens the section devoted to methods of indemnification. Naturally the main portion of this section is devoted to the subject of workmen's compensation, showing the historical growth of the movement and the judicial tests to which it was subjected. Types and provisions of laws are then noted, including coverage, compulsory or elective application, the problems of maritime jurisdiction and interstate commerce, occupational diseases, and in brief practically the entire list of problems commonly met in the enactment and administration of compensation laws. The subject of malingering receives brief but suggestive attention.

If any criticism is to be made of the treatment of the foregoing sections, one item would be the predominant references to New York decisions and rulings in a volume that is presumably of national scope in its general discussion of the subject; however, the wealth of material and the convenience of access are at least partial justification of the practice.

The authoritative position of the authors in regard to the actuarial aspects of workmen's compensation insurance gives the greatest interest to the third section of the work, in which the problems and methods of insurance organization, rating, rate making, policy coverage, operative costs, distribution of losses, and collective insurance are considered. Here, again, examples and illustrations are used to such an extent that anyone interested in the subject, even without technical information, would be able to discover the principles on which insurance is based, and the methods of developing rates, merit

¹ Michelbacher, G. F., and Nial, Thomas M.: *Workmen's Compensation Insurance, Including Employer's Liability Insurance*. New York, McGraw-Hill Book Co. (Inc.), 1925. xi, 503 pp.

rating, and the various other aspects of insurance. Considerable space is given to the question of the disposition of "shock" losses, or the results of accidents causing a number of deaths or serious injuries.

The appendixes cover a wide range, presenting an American accident table, illustrations of machine guards, data as to safety contrivances, typical schedules, classifications, and instructions for their preparation, the constitution of the National Council on Compensation Insurance, a universal standard workmen's compensation policy form, illustrative manual pages showing rates for various classifications, etc. None of this is in itself, of course, original matter but is illustrative of various aspects of the question considered in the body of the work. Taken altogether the volume presents in moderate compass a very complete compendium, covering a wide range of subjects relating to the central topic of workmen's compensation insurance.

Report of South Dakota Industrial Commissioner

THE Industrial Commissioner of South Dakota has issued the eighth annual report of operations under the compensation law of that State, covering the year ending June 30, 1925. This is the concluding report of the administration under the Immigration Department, which has heretofore administered the law through deputies. Since July 1, 1925, an industrial commissioner appointed directly by the governor has had charge of the administration of the act.

Perhaps no State purporting to administer the law other than through the courts has such a restricted compensation administration as South Dakota. It "maintains its department so far with the commissioner and one stenographer, with a small sum for additional clerk hire at times of rush." As a result of this system the 4,535 accidents reported during the year ending June 30, 1924, have cost \$4,642.29, "or just a shade over \$1.20 for each claim." It is recognized that earlier settlements might in many cases be secured if an assistant were provided to make investigations and help in the administration of the act, but with the restricted appropriations such an addition to the working force is impossible.

The law was amended in 1923 so as to allow farmers to secure insurance under the compensation act. This was a direct reversal of the original status of the law, which excluded farmers, but farming is being increasingly included. The movement originated with the desire of threshers to protect themselves under the compensation system, and it is now possible for a farmer to include himself as well as his workmen under the law.

A brief table gives the number of accidents in different employments, the largest number, 491, appearing among packing-plant workers. Highway and bridge construction comes next with 357; garage and auto workers, 327; laborers, 258; threshers, 257; transfer and truck men, 202; farm laborers, 172, etc.

There were 22 deaths, 4 of which were in mining, while elevators were responsible for 3, and falls for a like number. The maximum benefit in case of death is \$3,000, though in one case the employer

voluntarily made an allowance of \$5,000 in a lump sum. The commissioner recommends that the maximum be changed from \$3,000 to \$5,000, the existing limit being below the recognized standards. However, the earlier urgency for advancing the weekly maximum from \$15 is said to have somewhat disappeared in view of the smaller number of employees receiving wages in excess of \$30 per week. The percentage of compensation allowed by the State law is 55. No other recommendations than that for an increased death allowance were offered by way of amendment to the law.

New Accident Insurance Legislation of Finland ¹

A NEW law on workmen's accident insurance was enacted in Finland July 17, 1925, effective January 1, 1926.

Coverage

THE law specifies that all persons (including seamen) who, for compensation or to learn a trade or occupation, have agreed to perform manual labor under another person's charge or direction shall be insured by the employer or the commune against bodily injury resulting from accidents while at work. These provisions do not apply to an employer's children, grandchildren, parents, or grandparents living with him, nor to workers who are employed for less than six successive days (excluding Sundays and holidays) by an employer who has no other workers on the same kind of work subject to insurance legislation. Insurance under the act is permitted to the employer for himself, his family, and other workers not compulsorily covered. The State is not compelled to insure under this act, but every manual worker who is injured in the employ of the State must be paid compensation from the State funds in accordance with the provisions of this act.

Definitions

THE new law defines accidents at work as accidents occurring to workers while at work or otherwise in the course of employment on the premises and also those occurring off the premises while engaged in the employer's business or on the way to or from the place of work or while attempting to protect the employer's property or (in connection with the work) human lives. Injuries inflicted intentionally by the injured party on himself or sustained when engaged in criminal acts are not compensable. Compensation may be reduced or denied when the employee disregards regulations or instructions posted on the premises.

An occupational disease contracted in the handling or preparation of certain substances—a list of which is to be prepared by the State Council—shall be considered a bodily injury the result of an accident and be compensable. An employer under this act is defined as the party for whom the work is being done, and he is held responsible, even for insurance premiums, if a subcontractor can not pay.

¹ Finland. Socialministeriet. Social Tidskrift, No. 9, 1925. Helsingfors, 1925, pp. 640-658.

The term "dependents" under this act shall apply to spouse, children, and any relatives whom the injured worker is obliged to support, including minor or invalid brothers and sisters.

Benefits

MEDICAL treatment.—Medical treatment is furnished from the time the accident occurs until recovery, but not for over one year. It includes the necessary care prescribed by a physician, either in a hospital or otherwise, medicine and bandages, transportation to a doctor, the first supply of special bandages and any other appliances such as crutches, artificial limbs, etc., and a renewal of such supplies if the economic status of the injured person requires it.

The injured person must comply with the directions of the physician, except in the case of an operation which might endanger his life. A patient refusing medical treatment and intentionally retarding his recovery may be deprived of his right to pension.

Benefits other than medical treatment are not granted for disability lasting less than three days.

Temporary disability.—In case of temporary total disability, benefits equal to two-thirds of the injured person's average wages, but not more than 30 marks¹ nor less than 5 marks per day, shall be paid for a period not exceeding one year, beginning the day after the accident. If the injured person is not married and has no dependents, his benefits shall equal one-half of his average daily wages, but shall not be over 25 marks nor less than 4 marks.

In case of partial disability, benefits are in proportion to disability, but no benefits are granted for less than one-fifth decreased earning power.

When the disability necessitates care by another person, benefits for the period of such disability shall be increased to four-fifths of the average daily wages, but shall not exceed 40 marks nor be less than 10 marks. If an employer has voluntarily paid wages during a period of disability he is entitled to a refund from the compensation fund.

The injured person may, instead of such benefits, receive treatment and hospitalization, in which case his wife is entitled to an allowance of two-fifths and each child under 17 years of age to an allowance of one-fifth of the above benefits, the combined allowances, however, not to exceed four-fifths of such benefits. In case there are no wife and children, other dependents are entitled to an allowance not to exceed two-thirds of such benefits.

Permanent disability.—In case of permanent disability in which the earning power is reduced one-tenth or more, pensions are paid from the time temporary disability benefits cease, the amount paid in case of total disability being two-thirds of the annual earnings in case there are dependents and one-half if there are no dependents. In case the disability is not total the pension is correspondingly reduced. If the injured person is helpless and requires the care of another person the amount of the payments shall be increased to an amount not exceeding his yearly wages.

¹ Mark at par=19.3 cents, exchange rate varies.

Pensions are computed on annual earnings. On earnings under 3,000 marks a minimum of 3,000 marks is used as the base; from 3,000 to 7,200 marks, annual earnings are used; from 7,200 to a maximum of 24,000 marks the computation is based on 7,200 marks plus one-third of the excess earnings above that amount. If the earnings can not be ascertained for a part of the year, they are fixed at the current remuneration for that kind of work in the locality. Pensions not exceeding 300 marks may be commuted to a lump sum.

Death.—In case of death, funeral benefits of one-sixth of the deceased worker's annual earnings, but not less than 500 marks, are to be paid, and other allowances as follows: To the surviving spouse, until remarriage, an annual allowance amounting to one-third of the annual earnings; to each child under 17 years, one-sixth of such earnings if one parent survives or one-fourth if both are dead (these benefits are payable until the age of 17 years is reached, but they may be extended to 18 years in case of a child in vocational training); the sum of all the above not to exceed two-thirds of the annual earnings; in the event of neither wife nor children surviving, to other dependents, an allowance of one-half of the annual earnings.

A widow is not entitled to a pension if her marriage to the deceased worker took place after the occurrence of the accident which resulted in death. If a widow receiving a pension remarries, she is entitled to a lump-sum settlement equivalent to two years' pension.

Other Provisions

ACCIDENTS must be reported immediately. If claim is not made within a year the right to compensation is lost.

Temporary disability benefits and allowances to the family are payable at least once a month and pensions at four regular intervals during the year except when the pension is less than 500 marks.

Employees receiving pensions from State funds under any other act are paid compensation under the accident insurance act in such amount as the accident insurance pension exceeds the other pension.

Employers must report workers under them subject to insurance and report where they are insured and if not insured furnish necessary data for the group (commune) insurance.

Accident insurance under this law may be written by a State insurance institution if such is founded and private insurance companies authorized by the State for this purpose.

Application of Social Insurance Laws in France in 1922

ASUMMARY of the annual report of the social-insurance organizations of France for the year 1922 is given in the Bulletin du Ministère du Travail et de l'Hygiène (Paris), July-September, 1925 (pp. 281-288).

This report, which is the latest one issued, covers old-age and invalidity relief, maternity allowances, and family allowances. For the first time since the war, the statistics for all the 87 Departments of France included within the former boundaries have been assembled, but figures for Alsace and Lorraine are not used, as the

social-insurance institutions there still differ from those in the rest of France. At the close of 1922 there were 575,855 persons receiving old-age and invalidity relief, as compared with 644,461 in 1912, the last pre-war year reported. The majority of those pensioned received assistance in their homes and only 62,837 received hospitalization or were placed in the care of private families.

There has been an appreciable increase in the amounts of the allowances, 45 per cent of the pensioners now receiving more than 15 francs¹ per month, in addition to the temporary increase of 10 francs per month paid by the State since 1918, while before the war but 35 per cent of those pensioned received as much as this. The total amount paid out in 1912 for monthly allowances, hospitalization, administration of the insurance funds, and other expenses was 106,280,000 francs, and in 1922, including the extra bonus paid by the State, the amount paid for these items was 260,954,000 francs. The average cost for persons receiving hospital care was four times as great in 1922 as in 1912, while the average allowance of those receiving assistance at home was hardly doubled.

The costs of the old-age and invalidity pensions are divided among the State, the Departments, the communes, and the insurance institutions. Before the war less than half of these costs were borne by the State; in 1920 the State contributions amounted to 61.4 per cent, and in 1922 to 57.7 per cent of the total amount expended.

During 1922, 337,939 women received maternity allowances. In more than three-fourths of the cases this allowance was paid for a period exceeding six weeks, and more than one-third of those assisted received 1.50 francs or more per day. The total cost of this form of insurance, including nursing bonuses, was 20,547,000 francs, approximately half of which was paid by the State and the rest by the Departments and communes.

Bonuses to large families were paid to 209,155 families at the close of 1922. The number of families receiving this allowance in 1920 was 236,521 and the reduction in the number was considered to be due, in part at least, to the lowered birth rate. About 40 per cent of these families had 4 children, while about 60 per cent of the widows had 2 children to care for and 60 per cent of the widowers had 3 children. The minimum allowance is 5 francs per month, the maximum allowance 7.50 francs, and the average annual payment in 1922 amounted to about 70 francs per family. The total costs of the allowances and administration of the funds amounted to 27,170,000 francs in 1922, of which about 55 per cent was paid by the State and the remainder by the Departments and communes.

Amendment of German Workmen's Accident Insurance Law

THE law governing German workmen's accident insurance has recently been extensively amended—first, by an order of May 12, 1925, of the Minister of Labor which extended such insurance to all important industrial diseases, and second, by a law enacted July 15, 1925, which made essential changes and improve-

¹ Franc at par=19.3 cents; exchange rate varies.

ments in the entire accident insurance system. Brief summaries of the contents of the ministerial order and of the new law are given below.

Extension of Accident Insurance to Industrial Diseases

UNTIL recently under the German accident insurance law, compensation, as a rule, was not paid for industrial diseases. An accident is a sudden occurrence, and in making accident compensation awards the German boards generally demanded that the injury should be due to a sudden occurrence, and not to influences operating over a long period as is the case in most industrial diseases. Victims of industrial diseases therefore had a claim only to the benefits of sickness insurance which are much lower than those of accident insurance.

The workmen's insurance code (*Reichsversicherungsordnung*), of which the accident insurance law forms part, merely authorized the Federal Council (*Bundesrat*) to extend accident insurance to certain industrial diseases. The new German constitution transferred this authority from the Federal Council to the Federal Government, and the latter has recently made use of this authority.

On May 12, 1925, the Minister of Labor issued an order¹ extending accident insurance to the following industrial diseases: Diseases caused by lead or its compounds; phosphorus; mercury or its compounds; arsenic or its compounds; benzol or its homologues, nitro and amido compounds of the aromatic series; carbon disulphide; skin cancer caused by soot, paraffin, tar, anthracene, pitch, and related substances; cataract of glassworkers; diseases caused by Röntgen rays and other radioactive rays; hookworm of miners; and the so-called "Schneeberg" cancer of lungs found in ore miners in the district of Schneeberg (Free State of Saxony).

The ministerial order limits only in a general way the compensable industrial diseases, but on August 6, 1925, the minister of labor issued instructions describing them more in detail.² The list of diseases fails to mention anthrax and other infectious cattle diseases, glanders, actinomycosis (lumpy jaw), caisson disease, nystagmus, infectious diseases such as syphilis of glassblowers, and poisonings caused by sewer gases, all of which were formerly considered accidents by the boards of awards.

The ministerial order provides that only those establishments in which workers are regularly exposed to the influence of the poisonous substances enumerated in the list, and glass works, establishments using Röntgen or other radioactive rays, and mines are subject to insurance against industrial diseases. Compensation is to be granted only if the disease was contracted through occupational employment in an establishment subject to insurance against the disease.

In applying to industrial diseases the provisions of the workmen's insurance code on accident insurance, sickness and death caused by such a disease are to be compensated for in the same way as if caused by accident. The beginning of the sickness is to be considered as the point of time at which the accident occurred.

The order further provides that, if it is feared that an industrial disease may develop, recur, or become worse if the insured person

¹ Germany. Ministry of Labor. *Reichsarbeitsblatt*, Berlin, June 24, 1925, pp. 262-264.

² *Idem*, Aug. 8, 1925, pp. 326, 327.

continues to work in an establishment subject to insurance against such disease, the insurance carrier may grant him compensation not exceeding half the amount of the full benefit for as long as he does not accept employment in such an establishment. In addition he shall be paid compensation for disability.

The insurance office in the district in which an establishment is situated shall have charge of the investigation of all cases of sickness from an industrial disease occurring in such establishment. It shall have the sick person examined by a suitable physician, and may also itself make an investigation. A physician treating an insured person for an industrial disease must immediately notify the insurance office of the case, under penalty of a fine.

The order permits appeals in all cases in which there is a dispute as to whether a disease is an industrial disease within the meaning of the order.

Law Amending Workmen's Accident Insurance Law

ON JULY 14, 1925, the Reichstag passed a law³ amending numerous provisions of that part of the workmen's insurance code⁴ relating to accident insurance. The new law relates chiefly to insurance benefits, making important changes in this respect. The fundamental idea governing the entire law is that more attention shall in the future be given to those accident insurance activities which aim at accident prevention, putting them ahead of compensation for injuries. It considers accident prevention the principal duty of the insurance carriers. If, however, an insured person has been injured in an accident the restoration of his earning capacity shall first be attempted with all possible means, money compensation being granted only after such restoration has been found to be impossible.

The following is a brief summary of the more important provisions of the new law.

Accident prevention.—Trade accident insurance associations (the carriers of workmen's accident insurance) must see that accidents are prevented in so far as this is made possible by the development of production methods and of medical science and the existing economic conditions, and that in case of accident injured persons are granted effective first aid. The regulations as to prevention of accidents may impose on members new obligations as to first aid in case of accident and on injured persons as to their conduct. (The provision as to first aid is entirely new.)

The original law obligated the accident associations to appoint, upon the demand of the National Insurance Office, technical supervisory officials in sufficient numbers to supervise the carrying out of the regulations as to prevention of accidents. Under the new law the National Insurance Office may demand that these supervisory officials furnish proof of a certain training and that they shall not be dismissed except for good reason. These officials are to report to the National Insurance Office on the carrying out of the provisions as to accident prevention and first-aid measures, and shall also, on

³ Germany. Ministry of Labor. Reichsarbeitsblatt, Berlin, Aug. 8, 1925, pp. 328-340.

⁴ A full translation of the workmen's insurance code is to be found in Bulletin No. 96 of the United States Bureau of Labor, Washington, September, 1911, pp. 501-774.

request, give information thereon to the State factory inspectors. The new law also increases the amount of the fines for violation of the accident-prevention regulations.

Restoration of earning capacity of injured persons.—Under the original law the benefits of accident insurance did not become operative until the beginning of the fourteenth week after the accident. During this waiting time of 13 weeks the insured person was entitled only to the benefits of sickness insurance unless the accident association voluntarily assumed his curative treatment at an earlier date.

Under the new law the accident associations must assume the medical treatment of an injured person immediately after the accident. This gives to every person injured in an industrial accident, without regard to whether or not insured against sickness, the right to various benefits, such as medical treatment, occupational retraining, nursing, etc., and makes the accident-insurance carrier responsible from the beginning for the curative treatment. The insurance carrier is charged with the duty of using all suitable means for restoring the health and earning capacity of the injured person and for preventing a change for the worse in his condition.

The territory covered by most of the accident associations is very large, however, some of them covering all of Germany, and they do not have as many local institutions as the sick funds, which are largely organized locally, so that the accident association offices are generally remote from the place of the accident and thus not always able to give immediate relief. In most instances therefore the accident associations will now, as before, have to make use of the institutions of the sick funds. Since most of the persons insured against accident have also claims on the sick funds, in case of an accident they will naturally apply first to the sick fund for aid.

The relation between the interested parties, the injured person, the sick fund, and the accident association, under the new law is as follows: The curative treatment under accident insurance takes precedence over that under sickness insurance. The injured person has a claim to the greater benefits of accident insurance. He retains his claim to treatment by a sick fund, but this treatment assumes the character of a provisional benefit. The sick fund must grant its own benefits, but its obligation to continue such benefits ceases as soon as the accident-insurance carrier becomes responsible. The latter may now, as before, make use of a sick fund in administering the curative treatment, but the sick fund becomes merely the agent of accident-insurance carrier and has a claim for refund of its expenditures. The new law requires the sick funds, for suitable compensation, to assist the accident associations in every way in the carrying out of accident insurance. This cooperation is to be governed by agreements and by orders to be issued by the Minister of Labor and the National Insurance Office.

The curative treatment granted to injured persons now consists, in medical treatment, which includes physician's services, medicines, therapeutical appliances and other aids necessary for the success of the treatment or to alleviate the results of the injury, and nursing care, the latter being a new provision. Nursing care is to be granted as long as the injured person is so helpless that such care is necessary, and may consist either in the furnishing of a nurse, or, if the

injured person prefers to be attended by a member of his family, in an allowance of from 20 to 75 marks per month.

The accident association may in place of medical treatment grant free treatment, free sustenance, and care in a sanatorium and in place of nursing care, free sustenance and care in a suitable institution. This requires, however, the consent of the injured person if he has a household of his own or is a member of the household of his family. His consent is not required if the physician prescribes treatment or care that can not be given at the injured person's home, if the disease is infectious, if the injured person has repeatedly disobeyed the orders of his physician or violated the regulations on curative treatment, or if his condition or conduct necessitates continuous observation.

The accident association may regulate the conduct of injured persons and their supervision through a committee consisting of an equal number of directors of the association and of representatives of the insured persons if it has the approval of the National Insurance Office.

In addition to curative treatment and nursing care, the new law grants an entirely new benefit, that of occupational retraining (*Berufsfürsorge*). The insurance carrier must provide training in his old or a similar trade with a view to restoring or increasing the earning capacity of the injured person which has been reduced through the effects of the accident or train him for an entirely new trade. The insurance carrier shall also assist him in obtaining employment. Refusal of the injured person to submit to occupational retraining shall be no reason for reducing his compensation.

Pecuniary benefits.—The regulation of pecuniary benefits was the real cause for the enactment of the new law, it becoming necessary to rescind the numerous orders issued during the inflation period which granted increases in the pecuniary benefits, the original amounts having become practically worthless owing to the depreciation of the German mark. The new provisions, taken as a whole, increase the pecuniary benefits considerably.

The pecuniary benefit paid to an injured person is to consist now, as before, if the injured person is totally disabled, of an annual benefit equal to two-thirds of his annual earnings (the full benefit), and if he is partially disabled, of a part of the full benefit corresponding to his loss of earning capacity, to be paid during the period of the disablement. The injured person has no claim to pecuniary benefits if his disability does not exceed 13 weeks. If an injured person is in receipt of compensation equal to 50 per cent or over of the full benefit he is entitled to an additional 10 per cent of the compensation awarded him for each of his legitimate children under 15 years of age. This allowance may be continued in the case of children, who owing to physical or mental disability are unable to earn their living, as long as their disability continues and the injured person supports them, and in the case of a child who has not finished his vocational training when he becomes 15 years old until he becomes 18 years of age, as long as such training is unfinished and the injured person supports such child. The total annual compensation of an injured person may not, however, exceed his annual earnings.

In the matter of children's allowances the following children shall be considered legitimate children: (1) The illegitimate children of

an injured woman; (2) the illegitimate children of an injured man, if his paternity has been established; (3) children who have been legitimated; (4) adopted children; and (5) stepchildren and grandchildren who have been supported by the injured person before the accident. If it can be proved that a father fails to support his legitimate or illegitimate children the allowances for such children shall be paid directly to the person providing for their support.

Pecuniary accident benefits to injured persons who are insured against sickness are payable beginning with the date on which the sickness insurance benefits stops, but at the latest with the beginning of the twenty-seventh week after the accident. In the case of all other injured persons the benefits are payable beginning with the day after the accident. Until the expiration of the twenty-sixth week after the accident the accident association may pay to the insured person a pecuniary sick benefit in place of the pecuniary accident benefit.

During the period of his treatment in a sanatorium or other institution the injured person has no claim to a pecuniary sick benefit or accident benefit, but the new law grants him a daily allowance for small expenses which during a year equals one-twentieth of his annual earnings. During such period the accident association also pays an allowance to his family equal to the pecuniary benefit which they would receive in case of his death. A wife who has married the injured person after the accident is also entitled to this allowance during the first year of her marriage.

The new law discontinues the former provision increasing the sick benefit to two-thirds of the basic wage during the period from the fifth to and including the thirteenth week after the accident, and the claims to institutional care and sickness insurance benefits.

The new law contains several new provisions regarding survivors' benefits. The widow of the insured person receives one-fifth of the latter's annual earnings which is increased to two-fifths if through disease or other infirmity she loses at least half her earning capacity, to begin when the loss of earning capacity has existed longer than three months, and to continue throughout its duration. On remarriage the widow receives a lump-sum settlement amounting to three-fifths of the injured person's annual earnings. The widower's benefit is correspondingly increased.

The children of a fatally injured person now receive as before, each one-fifth of the injured person's annual earnings until they become 15 years old and beyond that age under the same conditions as are fixed by the law for children's allowances.

The maximum amount of all survivors' benefits combined is by the new law increased from three-fifths to four-fifths of the annual earnings.

Under the new law the widow of a seriously injured person who has no claim to a widow's benefit because her husband did not die from the effects of an accident receives a lump-sum settlement equal to two-fifths of the annual earnings of her husband.

Computation of annual earnings.—The new law makes several changes favorable to insured persons in the method of computing their annual earnings. Heretofore earnings in excess of 1,800 marks

per year were computable at only one-third of the excess amount. This limitation of the computable earnings worked great hardship upon miners, whose wages, owing to the great accident risk, are higher than those of other workers, as it reduced them when they met with an accident, and it was still more unfair in the case of numerous high salaried technical employees. While the new law still holds to the principle that it is not the purpose of social accident insurance to pay to the highest salaried technical employees a pecuniary accident benefit corresponding to their full earnings, it introduces for all branches of accident insurance the same maximum limit for computable annual earnings that was formerly in force in the marine accident insurance, namely 8,400 marks. The result is that now all manual workers and the great majority of the technical salaried employees receive accident compensation computed on the basis of their full earnings.

It was also considered unfair that injured persons who suffered an accident while they still were minors should during their entire life draw compensation computed on the basis of their obviously low earnings at the time of the accident. Only in those cases in which compensation was computed on the basis of the usual local wage or of average rates (agricultural workers, seamen) was it possible for them under the old law to be awarded a higher compensation when they became 21 years of age. The new law makes it possible for injured juvenile persons to obtain increased compensation after they become 21 years of age, and under certain circumstances their compensation may even be increased several times.

The new law also provides for an improved method in computing the annual earnings of seasonal workers and of those insured persons who in pursuance of the order on unemployment relief are temporarily employed at emergency relief works and while so employed meet with an accident.

Finally the new law makes fundamental changes in the provisions regulating the computation of annual earnings in agricultural accident insurance. The computation of compensation for accidents suffered by technical salaried employees is in the future to be governed by the same provisions as in industrial accident insurance.

Compensation of agricultural manual workers shall now, as heretofore, be computed on the basis of average wage rates. Differentiation between artisans and other agricultural workers ceases. While hitherto in the determination of uniform average earnings only sex and age were taken into consideration, wage groups are now to be formed, which in addition to sex and age shall consider the various kinds of employment, and may also take into consideration local differences in wage rates and the size of the family of injured workers. Artisans are also to be included in these groups. The law further authorizes in the case of certain groups of agricultural workers, the computation of the annual earnings on the basis not of average wage rates but of the individual earnings of the workers.

The computable annual earnings of agricultural workers are no longer to be determined by the superior insurance office but by an equipartisan committee which is to be formed for each insurance carrier.

Revaluation of old compensation awards.—As has already been mentioned, the real reason for the enactment of the new law was the necessity of doing away with the system of supplements to old compensation awards. Beginning with July 1, 1925, the present law abrogates all the numerous administrative orders relating to such supplements and revalues the old compensation awards in accordance with new detailed provisions. In this revaluation the law differentiates between accidents which occurred before the war and those which occurred at a later date.

The revaluation of awards made for accidents which occurred prior to July 1, 1914, is to be effected by multiplying the annual earnings of the injured person determined when the original award was made by a specified coefficient. This coefficient is: 1.65 for the years 1885 to 1890; 1.60 for 1891 to 1895; 1.45 for 1896 and 1897; 1.35 for 1898 and 1899; 1.25 for 1900 to 1904; 1.15 for 1905 and 1906; 1.10 for 1907 to 1909; and 1.00 for 1910 to 1914.

Awards for accidents which occurred after July 1, 1914, but before July 1, 1924, are to be revalued by basing them on average annual earnings newly determined by a special equipartisan committee for each insurance carrier, with a nonpartisan chairman, on the basis of the average annual earnings from July, 1924, to June, 1925, made by the various kinds of insured persons covered by the insurance carrier in question. For this purpose the insured persons may be grouped by occupations and local districts, and the wage rates fixed by collective agreements shall be taken into consideration in determining their average earnings.

In place of the above two methods of revaluation of old awards (made before July 1, 1924) the insurance carriers may employ a third method. This method consists in basing the revaluation on the average annual earnings at the going into effect of the present law of insured persons who are not disabled and who perform the same kind of work in the establishment in which the accident for which the compensation is to be revalued has occurred.

In the revaluation of awards for accidents which occurred between July 1, 1924, and June 30, 1925, the annual earnings of the injured person shall be computed by multiplying the number of working days usual in the establishment within a year by the average daily wage received by the insured person after June 30, 1924, but before the accident.

The procedure prescribed for the revaluation of old awards made on the basis of the individual earnings of the insured person or on that of determined average rates of earnings, (in the case of salaried employees in agricultural establishments, agricultural manual workers, seamen, etc.) is much simpler. In such cases the provisions of the Workmen's Insurance Code shall be applicable but the usual local wage rate on July 1, 1925, or the individual average annual earnings, or the specially determined average annual earnings shall be used as basis.

Lump-sum settlements.—The new law allows the continuance of all annuities awarded for slight injuries—i. e., those amounting to less than 20 per cent of the full benefit—but makes lump-sum settlements possible if the injured person gives his consent and if the annuity awarded does not exceed one-fourth of the full benefit. In the case of annuities amounting to less than one-tenth of the full benefit the

consent of the injured person will not be required, provided two years have elapsed since the accident. The lump sum paid in such cases shall equal three times the annuity. In all other cases the lump sum is to be the present value of the annuity.

The new law further provides that insured persons accepting a lump-sum settlement shall not lose their claim to curative treatment or occupational retraining care and that their claim to compensation shall revive if, subsequently to the settlement, their disability grows essentially worse, i. e., if during a period in excess of one month the earning capacity of the injured person has further decreased by more than 10 per cent.

Insurance carriers may also grant lump-sum settlements to all injured Germans who have been awarded compensation and who leave Germany for permanent sojourn in foreign parts.

Insurance of employers and their families.—It has already been mentioned that in the future the trade accident insurance associations must grant curative treatment and pecuniary benefits from the date of the accident to all persons whether or not insured against sickness. Since in accident associations covering small-scale industries and agriculture a large part of the insured persons are employers and their relatives who are not insured against sickness this obligation would greatly increase the burdens of the accident associations. The new law provides, therefore, that the by-laws of accident associations may provide that insured employers and their relatives who are not insured against sickness shall not have a claim for curative treatment, occupational retraining, and pecuniary benefits until 13 weeks have elapsed after the accident. In accidents which presumably will cause the loss for more than a year of at least half the earning capacity of the injured persons, however, such associations shall be required to grant curative treatment beginning with the date of the accident.

Extension of the scope of accident insurance.—The new law provides that employment in an establishment subject to insurance shall cover the journey to and from the working place and the care, maintenance, and replacement of the working tools owned by the insured if undertaken in connection with his employment in the insured establishment.

The law also authorizes the Federal Government to extend agricultural and maritime accident insurance to cover the compensation of industrial diseases.

Distribution of costs among accident associations and sick funds.—Hitherto during the waiting time of 13 weeks the costs were as a rule borne by the sick fund. The benefits accruing to insured persons after the expiration of the waiting time were distributed among accident associations and sick funds in accordance with complicated provisions. Under the new law the waiting time no longer enters into consideration in the distribution of the costs of accident insurance. The new law provides, however, that the costs of light accidents shall now, as heretofore, be borne by the sick funds. In providing for the distribution of the costs the law differentiates between pecuniary and other benefits.

If the claim to pecuniary sickness insurance benefits ceases before the expiration of the eighth week after the accident, the costs for curative treatment up to the termination of the pecuniary sick benefits are to be borne by the sick fund in so far as they do not

exceed the amount of the regular sick-fund benefits. All other expenditures for curative treatment are to be borne by the accident association. Thus, if the claim to pecuniary sick benefits terminates before the end of the eighth week the accident association has to bear that part of the costs of the curative treatment up to the termination of the pecuniary sick benefit by which the accident benefits exceed the sick benefits, and after the pecuniary sick benefit terminates it has to bear all the costs of the curative treatment. If the claim to pecuniary sick benefit does not terminate after the expiration of the eighth week, the accident association has to bear all the costs of the curative treatment and the sick fund none. The effect of this new regulation is that the sick fund bears only the costs of slight accidents. In addition the regulation acts as an incentive to the accident associations to make the curative treatment as rapid and efficient as possible, as, if the accident association restores the working capacity of the injured person before the end of eight weeks, it is able to shift all the costs of the curative treatment upon the sick fund.

The costs of pecuniary benefits are borne by the sick fund during the first eight weeks only, and subsequently by the accident association. The new law provides, however, that the pecuniary benefits to be borne by the sick fund are not to exceed the amount of the regular sick fund benefits and the part of the costs of pecuniary benefits which the accident association is required to bear has also been limited.

Contributions.—The new law authorizes accident associations to charge interest to employers, communes, and communal unions who fail to pay their contributions promptly or to repay advances. They may also provide minimum contributions in their by-laws.

Statistics.—Under the new law not only the accident insurance carriers but all workmen's insurance carriers are required to furnish to the National Insurance Office such information as the latter requires for its statistical, actuarial, and accounting work.

Supervision.—In the matter of accident prevention and first aid the law provides for supervision by the insurance authorities of the extent and suitability of the measures taken by the accident association.

When new law is effective.—The new law went into effect on July 17, 1925, the day of its promulgation, but its provisions on pecuniary benefits were retroactive to July 1, 1925. The provisions on other benefits will not go into effect until January 1, 1926, as supplementary administrative orders are yet to be issued and the insurance carriers also need some time to adjust themselves to their new tasks. For the present they have to perform the enormous task of revaluing from 700,000 to 800,000 old compensation awards, which will take weeks to complete. The former provisions on waiting time also remain in force until January 1, 1926.

The burdens which the new law imposes on industry and agriculture are considerable. Better accident prevention and systematic and suitable curative treatment are, however, expected to bring about a decrease in serious accidents and cases of disability and thus ultimately to reduce the expenditures for accident compensation and preserve the working forces.

LABOR LAWS AND COURT DECISIONS

The Courts, the Legislatures, and Labor

THE United States Bureau of Labor Statistics has for many years published bulletins stating what laws have been enacted with regard to labor, and others reviewing the attitude of the courts toward such laws. The latest addition (Bul. No. 391) to the latter list summarizes decisions rendered during the years 1923 and 1924 by the Federal and higher State courts. This is the most comprehensive number of the series yet published, presenting some 450 cases, covering numerous phases of the legal problems of employers and workmen. Thus, more than 100 points involved in workmen's compensation laws and their administration are discussed, some of them in several cases; the activities, responsibilities, and status of labor organizations are noted under some 40 different topics; questions of constitutionality are considered in more than 30 cases, and so on, practically throughout the field.

May a city select barber shops as a special object of restriction as to work time? Or may it require bakery employees to submit to medical examinations? Did the Supreme Court in the Adkins case lay down a rule as to minimum wage laws which is binding as to the State laws on this subject? May an employee contract to accept his wages at a time different from that prescribed by statute? May a newspaper be compelled to publish the names of recalcitrant employers under a State board order? What is lawful picketing? An "outlaw strike"? An "irreparable injury" under the Clayton Act? When will the courts intervene to set aside rules of a labor organization? What is the jurisdiction of the Railroad Labor Board? Does restriction of manufacture constitute an interference with interstate commerce? May a labor organization compel an employer to pay in one city the rates current in another, because the latter is his home? What are the rights of alien beneficiaries under compensation laws? Does the right to an award for a specific injury survive to the dependents in case of the death of injured workman? Does an award to a widow, dying during the benefit period, inure to the benefit of an heir? When are stevedores, ship carpenters, etc., entitled to compensation, and when relegated to admiralty? What is the effect of the law giving to seamen the same rights of recovery as are given railroad employees by the Federal liability statute? These and many other questions are answered, sometimes diversely, by the courts rendering decisions on the points indicated as set forth in Bulletin No. 391 of the Bureau of Labor Statistics, just from the press. As its introduction concludes: "The bulletin [is] one of interest to the workingman whose legal problems are given consideration, and to every student of the industrial situation in its judicial phases."

Liability of Labor Organization for Interfering with Employment

TO WHAT extent a labor organization can engage in activities that prevent the employment of an individual, and the proper procedure of the injured person in seeking to recover damages were questions before the Supreme Court of Colorado in a recent case (*Order of Railway Conductors v. Jones*, 239 Pac. 882). R. F. Jones had been a conductor employed on the Denver & Interurban Railroad, and was party to a collective agreement or "schedule and roster" by means of which the status of the various employees and their employers was fixed. It is not clear from the report whether Jones was ever a member of the Order of Railway Conductors, nor is any reason given why the organization undertook, as indicated by the evidence, to "eliminate" him from the provisions of the agreement. The undertaking was successful, however, with the effect that Jones was unable to secure any employment other than on a branch line during four months of the year. On account of the damages suffered from the aggression of the union and its officials and agents, suit was brought in the district court of Boulder County, with a verdict and decree for \$50,000 damages—\$30,000 actual and \$20,000 exemplary. On this finding against the union and its officers and agents a writ of error was procured, followed by a reversal and the granting of a new trial.

It was in evidence that the defendants had, by means of persuasion, threats, coercion, and intimidation, procured the results complained of. Their principal defense was justification, claiming that they had never interfered with his opportunities for employment "except when such employment was in violation of the rights of other employees of the same class as plaintiff under seniority rights fixed by a contract with the railway company to which plaintiff was a party." The court admitted the soundness of this contention, if correct; but correspondence of the officers of the union and a resolution adopted by it indicated a deliberate plan to "eliminate" the plaintiff from any rights under the agreement, one letter reporting success in getting his name "stricken from the conductor's roster of the Fort Collins division." If the defendants had made their attacks for the purpose of maintaining rights of their own which were equal or superior to those of the plaintiff, there would be sufficient justification for the course which they took; but the matter of the construction of the contract had been by agreement referred to an arbitrator, whose decision, awarding the plaintiff superiority, showed that they possessed no "equal or superior rights," so that there was no justification in their attempt to enforce their adverse construction of the contract. For such gratuitous and unjustifiable interference with the plaintiff's right to free contract, liability would lie; nor would it be a defense that his employment was at the will of the employer, since "an employee has a right to the free exercise of such will."

It was agreed that the action should be regarded as one in equity, and one of the grounds of alleged error was the claim that the court below had tried the case by jury as a law case, but decided it by decree with an injunction as an equity case. It appears that the defendants claimed the cause was in equity, and that the plaintiff consented to try it as such, but that a jury was then called and

evidence taken, the purpose of the jury being "to assist and advise the court," although its findings were not binding upon it. Since the distinctions between actions at law and suits in equity had been abolished by statute in Colorado, no ground for error appeared in the proceedings in this respect. "For the purpose of their verdict they [the jury] were the sole judges; what the court might do with the verdict was immaterial to them, and the court did ultimately determine the facts."

However, the supreme court ruled that the claim of the plaintiff for damages was based on tort and not on any equitable ground, and that damages are not recoverable in equity, though equitable relief may be added to damages even for tort.

There was a question as to the nature of the instructions with regard to motive. The point was not quite clear, but apparently it was required that the jury should find malice as a motive on the part of the defendants. As to this the supreme court said, "We think that motive is irrelevant to the question of defendant's liability, and that their desire to injure him and purpose to do so are also irrelevant." Interfering with employment to his injury without justification created liability, whether their purpose was good or evil; whereas if they had the right to do what they did they were not liable, "even if their motive is hate and their purpose to injure him;" but this was not to be understood as saying that the matter of malice or purpose to injure "would not be relevant as tending to show that the defendants did what they are charged with doing or as relating to exemplary damages."

Reversal was necessary in order to correct certain errors as to damages allowed for unlawful acts committed more than six years before the commencement of the suit, and because matters of damage were submitted to the jury which were not properly the subject of damages; but the principal features of the case as decided by the court below—i. e., the question of liability and that of form of procedure—were sustained.

Service of Process on Labor Organizations

A CCEPTING the principle of suability of unincorporated labor organizations, how may they be brought into court? This is the sole question that was passed upon by the United States District Court, Eastern District of Kentucky, in a case recently before it (*Christian v. International Association of Machinists et al.*, 7 Fed. (2d) 481). Charles Christian undertook to sue eight labor organizations to recover damages for the loss of employment by reason of an alleged conspiracy in restraint of interstate trade and commerce. The action was brought under the terms of the Federal antitrust law, frequently referred to as the Sherman Act, and it was by reason of this action under a Federal statute that the Federal court had jurisdiction, the frequently used basis of diversity of citizenship not being necessary in such a case.

Christian had secured the service of writs of summons on certain individuals assumed by him to be representative of the various defendant organizations. These organizations were with a single

exception international labor unions, with locals in the district where the action was brought. Service had been made on persons described as the "local chairman and a member" of the representative bodies in most cases, on "its agent" as to one, and on the president of the one local organization, System Federation No. 41, which was a subordinate of the Railway Employees' Department of the American Federation of Labor. The judge recognized the decision of the Supreme Court in the Coronado case (259 U. S. 344, 42 Sup. Ct. 570) as deciding affirmatively the question whether or not such organizations could properly be sued; but it found against the plaintiff, Christian, on the question as to the effectiveness of service on merely local officers of subordinate organizations. He rejected the contention that the members were members only of the local unions and not of the international, which is made up only of local unions, holding that members of the locals were "also in fact members of the international union." However, an official of the local merely is in no sense representative of the international any more "than a stockholder in a corporation is a representative thereof." No service of process on one member could subject another member to a personal judgment, nor could any law be constitutionally enacted containing such a provision. To bring an organization into court a properly representative person, service on whom would give a reasonable inference that the fact would be brought home to the union which he represents, is necessary. In the Coronado case it was said that certain unions were before the court "properly served by processes on their principal officers." Since such officers had not been served except in the single instance of service on the president of System Federation No. 41, this was the only organization actually brought into court by the steps taken. As to the other defendants, therefore, the writs must be quashed. Of course, on such a procedure nothing as to the merits of the case was developed, the only question, as already stated, being the method of serving process to secure jurisdiction of the parties.

Basis for Computing Wage Bonus

WHETHER losses can be figured to offset profits in different months in computing a promised wage bonus was the question that was before the Supreme Court of Wisconsin in a recent case (*Girman v. Hampel*, 205 N. W. 393). The plaintiff, *Girman*, was employed by the defendant, *Hampel*, as manager of his meat market on a weekly salary, plus 15 per cent of the monthly operating profits of the business. At the end of two years the weekly salary had been paid, and a part of the bonus based on profits, but *Girman* claimed a balance of some \$500 in excess of *Hampel's* allowance. In answering suit for the recovery of this balance, it was claimed that the amount of the bonus had not been fixed, and that its payment was left entirely to the judgment and good will of the employer. There was also a contention that, as there were losses during certain months, the final settlement should be based on the net profits after the losses for these months had been deducted. It did not appear that this practice had been carried out in connection with

the plaintiff's predecessor; nor was there anything in the agreement or promise made stipulating any such condition. On the other hand, at the end of about one and one-half years' employment, a statement of the balance then due was given the plaintiff without any deduction for the loss occurring in one of the months covered. There was also a promise to pay this sum.

The court below had found in favor of the plaintiff for the balance as determined without making any deduction for the unprofitable months, holding that, as the promise was to pay a percentage of the monthly profits, this was the only basis for computing the amount. The supreme court on appeal, affirmed this judgment, finding that the practice of furnishing monthly statements was in effect a monthly determination of the amount of the bonus due. If there were months of no profits no bonus would be payable, but neither would there be a liability on the part of the employee to reimburse the employer out of the bonus for the profitable months.

Constitutionality of Statute Fixing Hours of Labor on Public Works: Wyoming

THE question indicated in the above title hardly seems an open one since the decision by the Supreme Court in *Atkin v. Kansas* (1903), 191 U. S. 207, 24 Sup. Ct. 124, sustaining the power of State legislatures to regulate the conditions of employment on public works. However, the Supreme Court of Wyoming found the statute on that subject enacted by the legislature in 1913 (secs. 4308, 4309, C. S. 1920) so defectively drawn as to be invalid (*State v. A. H. Read Co.*, 240 Pac. 208).

The act in question was in two sections, the first limiting the hours of service of laborers, workmen, or mechanics on public works of the State or its municipalities to eight hours per day. No further provision is contained in this section; i. e., there is no prohibition on longer service or the requirement of further labor than that indicated by the term, "eight hours in any one calendar day." The second section declares it a misdemeanor punishable by fine or imprisonment for any person "to violate any of the provisions of section 4308."

A contracting company engaged in street paving, the expense to be met by assessments on property especially benefited thereby, employed a workman ten hours instead of the eight prescribed by the law. It was brought before the district court of Laramie County which submitted questions on constitutional points to the supreme court of the State. This court held that the legislature had power to fix the hours of labor on public works, and that such action did not violate either the State constitution or the fourteenth amendment to the Federal Constitution, there being no denial of due process or equal protection of the laws; also, the work was of a nature defined as a public work even though paid for in whole or in part by assessments on private owners. However, since the statute defined no criminal offense, such as making it unlawful for any employer to permit or require longer hours of work, the penal provision was too indefinite and uncertain to afford a basis for the enforcement of the punish-

ments named in the second section; nor could the courts supply necessary words to relieve the uncertainty or to give form to a presumed intention of the legislature. The discussion was quite extensive, many authorities being cited, but the conclusion was that the statute was, in its existing form, "void and unenforceable as a penal statute because of the indefiniteness and uncertainty of its penal provisions."

Labor Legislation of Chile

Workmen's Compensation Law

ON MAY 9, 1925, the new workmen's compensation law of Chile (No. 4,055) was published in the *Diario Oficial* of that Republic, having been passed on September 8, 1924. The most important provisions of this new legislation, which supersedes the previous law (No. 3,170) of December 27, 1916, are given below.

Employments Covered

The law covers employees and workers in the following industries or occupations, provided that not less than five are employed: (1) Nitrate fields, salt works, quarries, mines, factories, foundries, and workshops; (2) establishments manufacturing or using explosive, inflammable, unhealthful, or poisonous materials; (3) transportation enterprises whether by land, air, sea, river, lake, or canal, and loading and unloading undertakings; (4) the construction, repair, maintenance, and service of railway lines, buildings, harbors, roads, bridges, canals, drainage systems, and other works of a similar nature; (5) the installation, repair, and maintenance of electrical equipment and of telegraph and telephone systems; (6) river and sea fisheries; (7) agriculture, forestry, stock breeding, and in general all factories, business undertakings, and workshops. The State and the municipalities shall be considered as employers for the purposes of this law.

Injuries Covered

Compensation must be paid for industrial accidents arising out of or in course of the employment. The liability of the employer or contractor in charge of work for another does not preclude the subsidiary liability of the proprietor. Injuries due to force majeure or those caused intentionally by the worker himself are not compensable.

Occupational diseases are also compensable if caused directly by the exercise of the employment. The President of the Republic shall specify in special regulations the occupational diseases which are compensable, and such regulations may be revised every three years.

Compensation Benefits

The compensation scale is based upon the earnings of the injured employee, not less than 600 nor more than 3,000 pesos,¹ during the year preceding the accident.

¹ Peso at par=36.5 cents; exchange rate varies.

Death.—If the industrial accident causes death the employer shall pay in addition to funeral expenses, which may not exceed 200 pesos, compensation to the specified relatives and dependents of the deceased as follows: (1) To the surviving spouse, provided the marriage took place before the accident, a life annuity equal to 20 per cent of the yearly wage of the deceased. A widower is entitled to the annuity only if unable to work. Upon the remarriage of the widow her allowance is transferred to the children. (2) To the legitimate or illegitimate children under 16 years of age, until they reach that age, a joint annuity equal to 40 per cent of the deceased parent's yearly wage if a spouse survives who is entitled to an annuity, and 60 per cent if not. The annuity is to be divided equally among the children, and in no case may a child receive more than 20 per cent of the deceased parent's wage. (3) In the absence of children, to the legitimate or illegitimate ascendants and descendants dependent upon the deceased or who in accordance with the law are entitled to a claim for living expenses; a life annuity in case of the former and a temporary allowance in case of the latter until they become 16 years of age. Individual allowances may not exceed 10 per cent nor their sum total 30 per cent of the annual wage. Should more than three ascendants and descendants appear, the compensation will be divided equally among them. (4) Failing the above-mentioned relatives, to other persons dependent upon the victim on the date of the accident, a life annuity if unable to work, or a temporary allowance payable until they reach the age of 16 years. The sum of these allowances may not exceed 20 per cent of the wage nor 10 per cent for any one person. The allowances are to be paid in monthly installments in advance.

Permanent total disability.—An employee who is permanently and totally disabled shall receive a life annuity equivalent to 60 per cent of his yearly wages. The regulations of this law are to determine the injuries which produce disability and to contain a schedule of specified permanent partial disabilities.

Permanent partial disability.—In case of permanent partial disability the injured worker receives an indemnity not exceeding two years' wages.

Temporary disability.—Employers are required to pay employees who are temporarily disabled half of their wages from the day on which the accident occurred until they are able to resume work. If disability lasts longer than one year, benefits for either permanent total or permanent partial disability are to be paid, according to the nature of the case. Accidents causing serious mutilation, though not permanent disability, entitle the worker to compensation not to exceed one year's wages.

Medical benefit.—Every employer, even if having less than five employees, shall furnish medical and pharmaceutical attention until, according to a medical report, the employee is able to resume work or is declared permanently disabled. If proper medical attention can not be given at the plant, the employer shall take the injured worker to the nearest town, hospital, or place where he can receive proper treatment, including surgical attention if necessary. If the worker chooses the doctor, the liability of the employer is limited to the amount fixed by the judge, depending on the nature and

circumstances of the accident. An employer is liable for hospital expenses up to 4 pesos a day.

Security of Payment

Employers may insure their risks with a mutual association, a Chilean insurance company, or other institution which meets certain conditions in regard to organization and safety. This releases the employer from all liability, providing the amount to be paid to the worker is not less than that accorded him by this law. Employers who do not insure their workers as above must provide adequate security for the payment of compensation for which they are liable and contribute to the creation of a guaranty fund out of which is to be paid any compensation for which insolvent employers or insurers are liable.

Neither the rights conferred by this law on employees nor the benefits paid under it may be renounced, surrendered, or attached, and in general any agreement contrary to this law will be considered void.

Accident Reporting

Within five days after the accident employers or their representatives are required to report to the civil judge of the locality where the accident occurred each case which causes death or disability. In reporting the accident the following items are to be included: The names and addresses of the employer of the injured person and of the witnesses of the accident, as well as the age, wage, and civil status of the worker; the time, place, and circumstances under which the accident occurred; and the nature of the injuries. If the report is not properly made, the employer will incur a fine of from 50 to 200 pesos. A similar report may be made by the injured worker or any person in the locality.

Administration and Procedure

Upon being informed of the accident the civil judge will proceed immediately to the place where the accident occurred and investigate the case as regards the following points: (a) The cause, nature, and circumstances of the accident; (b) the names of the employer and the injured person; (c) the nature of the injuries; (d) the names of the persons entitled to compensation and the date and place of their birth; (e) the earnings of the injured person; (f) name and address of the company with which the employer is insured. When he has completed his investigation he will summon the interested parties or their representatives to a hearing, at which he will attempt to bring about an amicable settlement and to settle definitely the compensation award. Appeals against decisions of the judges in workmen's compensation cases will have preference over all other cases and the appearance of the parties will not be necessary. The law empowers the employer, the injured worker, or other persons in receipt of compensation granted by a judgment or by conciliation to claim a revision of the compensation on the grounds of aggravation or improvement in the condition of the injured person, or of his death as the result of the accident. Such action must be brought within two years of the date of the accident.

A judicial investigation of the case will not be necessary if the disability is of a temporary character or if the injured person has submitted a medical certificate or has taken no steps to allow the judge to make the investigation.

Irrespective of the liability of the employer, the injured employee or his heirs retain the right of action against any third party causing the accident; this may be brought by the employer at his own expense and in the name of the worker or his heirs, if they do not initiate the same within 90 days after the accident.

Labor Contract Law

LAW No. 4,053, which the Chilean Congress passed on September 8, 1924, and its regulative decree published in the *Diario Oficial* on May 12, 1925, cover labor contracts. The law does not, however, cover agricultural or domestic labor, nor work performed in commercial or industrial establishments having less than 10 workers or employing only the members of one family under the direction of one of them.

Contracts may be made orally or in writing. The employer is required even in oral contracts, however, to give each worker a written statement duly signed by him or his authorized representative, in which the following items must appear: (1) The kind of service to be rendered; (2) the wages the worker is to receive, as well as the minimum wage; (3) the manner and date of payment of wages; (4) the manner of determining the wage, whether by unit of time or of work; (5) the duration of the contract. This statement shall be visaed by an official appointed by the chief of the labor bureau and must be delivered to the worker not later than 24 hours after he begins work.

The written contract shall be made in duplicate, one copy to be retained by the employer and the other to be given to the worker immediately after signing both copies and must contain the same information as required for the declaration in oral contracts. If a worker uses his own tools and implements a statement to this effect, enumerating the tools used, must be contained in the written contract. Contracts for special technical services must always be in writing.

A collective contract must be a written agreement between an employer or an association of employers and an association of workers, with the object of establishing certain general conditions of labor and wages, either for one company or a group of companies or industries. Its provisions become obligatory and an integral part of all individual contracts made during its life. The trade-union or workers' organization is directly responsible for the obligations undertaken by each one of the laborers belonging to it; and likewise it has the authority to exercise the rights corresponding to them. The collective contract is binding on all employers agreeing to it, whether personally or through representatives; also on all member workers except those who within 15 days notify the association of their intention to withdraw. The collective contract applies also to those who join the organizations after the agreement has been made.

Contracts may be terminated under the following conditions: (1) Upon the conclusion of the work for which the contract was made;

(2) at the end of the contract period; (3) upon the death of the worker; (4) on account of force majeure; (5) on account of the dishonesty, assault, gross abuse or immoral conduct of either party; (6) because of the laborer's deliberate damage to the employer's machinery, tools, etc.; (7) on account of the employer's or worker's actions or omissions affecting the health or safety of the workers or the safety of the building; (8) when either of the parties fails to comply with his obligations; (9) upon the laborer failing to work for two or more consecutive days without a justified cause; (10) on account of the worker abandoning his job; and (11) upon the petition of either of the parties, with six days' notice. If the employer wishes to end the contract he must pay the laborer an indemnity equal to six days' wages and in addition the worker's fare and transportation of his family if his work necessitated a change of residence.

On the expiration of all individual labor contracts, whether oral or written, and regardless of the reasons for the termination, employers upon the request of the laborers are required to give them a certificate containing the following data: (a) The original date of the contract; (b) termination date of same; (c) reason for the termination; and (d) nature of the work rendered.

The legal maximum duration of the labor contract is one year except contracts for services requiring special technical knowledge which may be made for periods of five years. If, after the expiration of the contract, the worker continues to render service with his employer's knowledge the contract is considered to be automatically renewed. For the written renewal of a contract a signed declaration of both parties, stating their willingness in this respect, shall be sufficient.

Hours of labor and of rest.—The Chilean law establishes the 8-hour day and 48-hour week, but if employers and workers agree to establish a half-day's rest each week, the limit of 8 hours may be exceeded in order to make up the weekly total of 48 hours. Workers may agree to work not more than 10 hours a day if they so desire, providing their wages are increased accordingly. The workday shall not be continuous but shall be broken by rest periods, the total duration of which must not be less than one hour.

Wages.—All wages must be paid in legal tender, during working hours, at the place of employment. Pay periods must not exceed one week for those working by the day, nor two weeks for those working on a time basis. Those on a fixed wage shall be paid monthly and pieceworkers are to be paid each week in proportion to the work done. Employers may not reduce or retain the wages for fines, value of water, medicines, medical attention, house rent, use of tools, or other loans in merchandise or money, except for intentional damage to the place of work, instruments, or working material. Wages of men and women shall be the same for the same kind of work. The law gives minors and married women the right to receive their pay directly and to administer it as they please.

The married woman can, furthermore, receive up to 50 per cent of the wages earned by her husband, provided he has been declared a drunkard by judicial findings. The same right will be enjoyed by a mother with regard to the wages earned by her minor children. A commission composed of employers and workers will fix annually the minimum wage, which can not be less than two-thirds nor more

than three-quarters of the normal wage paid for the same kind of work to laborers having the same qualifications in the locality in which it is performed.

Shop rules.—Shop rules are to be posted in conspicuous places on the premises of all factories, workshops, and other labor centers. These rules shall contain a statement of the wage rates for the different classes of work, the hour of beginning and of stopping work, and the time allotted for rest periods.

Employment of women and children.—Women, irrespective of age, may not be employed in mining or other underground work, nor in other occupations which require great physical strength. During 40 days before and 20 days after childbirth women shall be entitled to a complete rest, and shall retain their positions.

Young persons over 14 and under 18 years must have the written authorization of the father, mother, or grandfather to undertake a labor contract, and even then may not be employed on work unsuited to their age, or for more than 8 hours a day. Minors between the ages of 12 and 14 years who have completed the schooling required may be admitted to such work as is suitable to their age, provided they have the authorization of their parents. Only with the authorization of the governor may children under 14 years be employed in public performances in theaters, circuses, cabarets, or any other place of entertainment.

The law prohibits the employment on night work of children of either sex under 16 years of age. Night work is defined as that done between 7 p. m. and 6 a. m. from May 1 to September 30, and from 8 p. m. to 5 a. m. during the other months. Those over 16 and under 18 years of age may not work at night in employments prejudicial to their health or morality. Among the dangerous and unhealthful occupations in which young persons under 18 years of age are forbidden are the following: All underground work, industries manufacturing or using inflammable materials, the cleaning of motors or transmission apparatus while in motion, and work which requires excessive physical exertion.

If minors under 18 years of age have not completed the requirements for primary instruction their employers must allow them two hours a day to attend school, provided it is within one kilometer of the establishment in which they work. If there are 20 or more minors employed in the establishment and no school exists in the specified area, the company must establish a school for them, in which they will be given instruction in primary subjects and elementary information about the industry in which they are engaged.

Employers must supply free to the father or guardian of each minor under 18 years of age a notebook containing the minor's name, sex, age, birthplace, and residence, as well as the working hours, wages paid, and meal and rest hours.

Labor Office.—The name of the Labor Office (*Oficina del Trabajo*) is changed to General Labor Bureau (*Dirección General del Trabajo*). This bureau, which forms part of the Ministry of the Interior, is described and an enumeration of its duties are given in this law.

Penalties.—Violations of this law are punishable by fines ranging from 50 to 500 pesos. Those who fail to pay the fines within 10 days are to be imprisoned for a term of from five to ten days.

HOUSING

House Rents in Argentina, 1920 and 1925

A REPORT from the American consul at Rosario, Argentina, dated October 5, 1925, contains the results of an investigation, made recently by the Ministry of the Interior, of rents for dwellings of the working and middle classes in Argentina in 1925 as compared with those in 1920.

The following table gives the average monthly rents for unfurnished apartments with 1, 3, and 4 rooms in 1920 and in 1925 for seven cities of Argentina:

AVERAGE MONTHLY RENT IN SPECIFIED CITIES OF ARGENTINA, 1920 AND 1925
[Exchange rate of peso was 40 cents on Oct. 5, 1925]

City	Average monthly rentals of apartments with—					
	1 room		3 rooms		4 rooms	
	1920		1925			
	<i>Pesos</i>	<i>Pesos</i>	<i>Pesos</i>	<i>Pesos</i>	<i>Pesos</i>	<i>Pesos</i>
Cordoba.....	15	50	65	20	70	85
Corrientes.....	15	60	100	20	80	110
Rosario.....	15	60	80	30	100	150
San Juan.....	10	55	65	15	65	80
Santa Fe.....	18	50	70	35	95	150
Santiago del Estero.....	10	45	50	25	80	90
Tucuman.....	20	60	80	30	80	100

Building Societies in Great Britain

PART 5 of the report of the Chief Registrar of Friendly Societies for 1924 is devoted to a discussion of the progress of building societies in England, Wales, and Scotland, based on their annual reports for the year 1923. The business of the societies showed a very great increase during that year.

Membership was nearly 900,000; advances amounted to over £32,000,000,¹ and mortgage assets reached nearly £99,000,000, the total assets being nearly £125,000,000. Preliminary figures for 1924 indicate a further expansion during that year.

A survey of the number of registered building societies since 1914 shows that there has been a decrease from 1,542 in that year to 1,171 in 1923, but along with this falling off there has been a marked increase in membership, receipts, and advances made. In other words, the tendency to-day is toward fewer and larger societies than was formerly the case. The following table shows the increase in certain particulars since 1891:

¹ Pound at par=\$4.8665; exchange rate varies.

MEMBERSHIP, RECEIPTS, AND ADVANCES OF BUILDING SOCIETIES IN GREAT BRITAIN, 1891 TO 1923

Year	Mem- bership	Receipts	Advances
1891	639, 196	£19, 029, 286	
1910	627, 581	42, 410, 594	£9, 291, 571
1914	627, 240	22, 891, 773	8, 761, 950
1920	747, 589	48, 072, 341	25, 094, 961
1921	789, 052	47, 146, 705	19, 673, 408
1922	826, 032	52, 628, 709	22, 707, 799
1923	895, 524	61, 574, 528	32, 015, 720

The effect of the scarcity of housing is clearly shown in the figures for 1920, while the collapse of the postwar boom is reflected in the marked fall in advances in 1921. Since then the recovery has been rapid.

It is difficult to compare the cost of managing the societies now and in pre-war years, since the growth in membership, the larger number of advances made, and the heavier turnover of business have all tended to increase the work, and therefore the cost, of running the business. A study of costs, however, reflects favorably on the management.

If related either to the membership or the number of properties mortgaged the cost of management shows an increase of about one-third as compared with the years immediately before the war, but in relation to the balance outstanding on mortgage the rate of increase is reduced by half. Taking a general view the figures show that the management of building societies, as a whole, is conducted in a very economical manner.

Practically one-third of the membership consists of so-called "advanced" members—i. e., members to whom loans have been made on mortgages. "This proportion remains the same as in 1915."

Well over a quarter of a million persons are now purchasing properties through building societies and their average of indebtedness to their societies (for principal only) is £341, or £21 more than in the preceding year, and £40 more than in 1915. A record has been compiled of the amounts advanced by building societies for 23 years and in this period more than £250,000,000 has been lent to members.

Progress of State-Aided Housing in England

THE English magazine, *Garden Cities and Town Planning*, in its issue for November gives figures as to the number of houses authorized under the different housing acts, bringing the data up to October, 1925:

HOUSES AUTHORIZED UNDER ACTS OF 1919, 1923, AND 1924, AS OF OCTOBER, 1925

Act	Number of houses authorized		
	To be erected by local authorities	To be erected by private enterprise	Total
Under act of 1919			174, 540
Under act of 1923	56, 034	181, 139	237, 173
Under act of 1924	83, 226	1, 946	85, 172
Total	139, 260	183, 085	496, 885

Practically all the houses approved under the 1919 act are completed, but those authorized under the two later acts range all the way from plans to completed dwellings. Definite arrangements have been made for the construction of 248,545 houses, of which 182,871 are under the 1923 act and 65,674 under the 1924 act; 70,461 are in course of construction and 122,719 have been completed.

During the month of September, 1925, contracts were made by local authorities covering the construction of 4,547 nonparlor houses at an average cost of £437,¹ and 2,003 parlor houses at an average cost of £500.

¹ Pound at par=\$4.8665; exchange rate varies.

WORKER'S EDUCATION AND TRAINING

Ontario Workers Educational Association¹

THE Workers' Educational Association of Ontario, which is supported by the University of Toronto, was formed in 1918 to extend to laboring men and women the privilege of securing "a higher or 'cultural' education of the university type." The association is approved by the Dominion Trades and Labor Council and other workers' organizations but regulates its own procedure and activities.

The enrollment of the association at its last session included 1,113 students among the branch schools at Brantford, Galt, Hamilton, Ottawa, Scarboro' Bluffs, Toronto, and Windsor. Additional branches will be established at other centers in Ontario, provided 20 or more prospective students be organized for each center. There will be two sections for the coming sessions: (1) A year's course for introductory classes, to which only working men and women will be admitted, and (2) a three-year course for tutorial classes with no restriction in regard to students. The directors believe that any one who takes the one-year introductory course will be able to follow the three-year course for the tutorial classes with members from all walks of life.

The subjects to be studied cover a comprehensive field, among them being economics (including the causes underlying the determination of prices, wages, interest, rent and profit, the conditions leading to the present large-scale industrial production and its distribution), industrial psychology, sociology, civics, Canadian and British history, English literature, journalism, the drama, and public speaking.

Workers' Education in Sweden²

AT THE annual meeting of the executive committee of the Swedish Workers' Educational Association, held September 30, 1925, the report submitted for the period July 1, 1924, to June 30, 1925, showed that the Workers' Educational Association (*Arbetarnes Bildningsförbund*) during 1924-25 had 2,005 active study circles with 25,496 members; 560 new circles were formed. Lecture courses numbered 305, and 1,544 lectures were given, the cost being 64,893 kronor.³

¹ Labor Gazette, Ottawa, November, 1925, p. 1058.

² Landsorganisationen i Sverige. Fackföreningsrörelsen No. 41, 1925, pp. 356, 357.

³ Krona at par=26.8 cents; exchange rate varies.

THE NEGRO IN INDUSTRY

The Negro: A Selected Bibliography

COMPILED BY HELEN LOUISE PIER AND MARY LOUISA SPALDING¹

The Negro in Industry

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¹ This bibliography was prepared in connection with the course given by the Library School of the University of Wisconsin. The first section, "The negro in industry," was prepared by Miss Pier, and the second section, "The health of the negro," by Miss Spalding.

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An article on the changing status of the negro laborer. Brings out the effects of the World War, the negro worker's new view, negro migration, cooperative racial-labor conferences, abolition of negro child labor, the negro as a source of surplus labor, and the new basis of capital and labor.

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KELLOGG, PAUL U. (Ed.)

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An article based on a survey of 75 of the largest industrial employers of the greater Cleveland district. Discusses the characteristics and possibilities of negro labor. Gives table showing per cent of colored employees and per cent of total turnover due to colored workers in 15 Cleveland plants.

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Report. Washington, 1918. 503 pp.

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- SCARBOROUGH, W. S.
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- UNITED STATES. *Department of Agriculture.*
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- WASHINGTON, B. T.
 The negro as a farmer.
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- Rural negro and the South.
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- CHEYNEY, A. S.
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- CLARK, JESSIE, and McDougald, Mrs. G. E.
 New day for the colored woman worker: A study of colored women in industry in New York City. [New York], 1919. 39 pp.
 Discusses the coming of the colored woman into industry in New York City, problems, her general and industrial background, the types of work she is doing, conditions under which she is working, wages, collective bargaining, and the colored woman as a permanent factor in industry. Gives tables of industries, hours of work, and wages.
- CONSUMERS' LEAGUE OF EASTERN PENNSYLVANIA.
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- IRVIN, H. B.
 Conditions in industry as they affect negro women.
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- McDOUGALD, E. J.
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 The Work of Colored Women. New York, National board of the Y. W. C. A., 1919. 136 pp.

UNITED STATES. *Department of Labor. Children's Bureau.*

Child labor on Maryland truck farms, by Alice Channing. Washington, 1923. 52 pp. (Bureau publication No. 123.)

Child labor and the work of mothers on Norfolk truck farms. Washington, 1924. iv, 27 pp. (Bureau publication No. 130.)

Welfare of children in cotton-growing areas of Texas. Washington, 1924. 83 pp. (Bureau publication No. 134.)

Women's Bureau.

Negro women in industry. Washington, 1922. 65 pp. (*Its Bulletin* No. 20.)

An investigation of negro women in industry before and after the war. Gives information on occupations, wages, hours, and conditions of employment. Reviewed in *MONTHLY LABOR REVIEW*, July, 1922, pp. 116-118.

Women in Alabama industries. Washington, 1924. 86 pp. (*Its Bulletin* No. 34.)

Gives material on hours, wages, and working conditions. Includes comparative tables.

Women in Georgia industries. Washington, 1922. 89 pp. (*Its Bulletin* No. 22.)

A study of hours, wages, and working conditions. Contains information on the negro woman, giving comparative tables.

Women in Maryland industries. Washington, 1922. 96 pp. (*Its Bulletin* No. 24.)

Includes information on the negro woman worker, giving comparative tables.

Women in Missouri industries. Washington, 1924. 127 pp. (*Its Bulletin* No. 35.)

Part 3 deals particularly with the negro woman worker. Includes comparative tables.

Domestic workers and their employment relations, by M. V. Robinson. Washington, 1924. 87 pp. (*Its Bulletin* No. 39.)

Organized Labor

ATTITUDE OF NATIONAL ASSOCIATION FOR ADVANCEMENT OF COLORED PEOPLE IN REGARD TO ORGANIZED LABOR.

MONTHLY LABOR REVIEW, September, 1924, pp. 176, 177.

A brief statement of the relation of the negro and the labor unions. Quotes open letter of the conference to the American Federation of Labor and other groups of organized labor.

JONES, E. K.

Negro in industry.

(*In National Conference of Social Work. Proceedings*, 1919, pp. 438-442.)

Brings out the need of negro membership in the trade-unions.

LEE, B. F.

Negro organizations.

Annals of the American Academy of Political and Social Science, September, 1913, pp. 129-137.

MOORE, F. R.

Letting him into the labor union.

World Outlook, October, 1919, p. 28.

NEGRO ENTERS THE LABOR UNION.

Literary Digest, June 28, 1919, p. 12.

An editorial on the vote of the American Federation of Labor to open its doors unconditionally to the negro, and the economic advantages this would give to the negro.

NEGROES AND ORGANIZED LABOR.

Survey, February 9, 1918, pp. 527, 528.

A brief discussion on admitting negroes into the unions.

WASHINGTON, B. T.

Negro and the labor unions.

Atlantic Monthly, June, 1913, pp. 756-767.

Contains quotations from letters of various leaders of labor organizations concerning the negro and the labor unions.

WOLFE, F. E.

Admission to American trade-unions.

(*In Johns Hopkins University Studies in Historical and Political Science*, 1912, pp. 566-588.)

Migration

- ANOTHER NEGRO EXODUS TO THE NORTH.
Literary Digest, February 17, 1923, p. 18.
- BAKER, R. S.
The negro goes north.
World's Work, July, 1917, pp. 314-319.
Ascribes negro migration primarily to war conditions. States briefly the effect on the South and attempts to stem the tide. Describes types of negro migrants and discusses some of the resulting problems.
- BODDY, J. M.
Getting at the true causes of the migration of negro labor from the South.
Economic World, March 9, 1918, p. 335.
- BRANSON, E. C., AND OTHERS.
Migration.
(In University Commission on Southern Race Questions. Minutes, 1917, pp. 48, 49.)
A letter pointing out the problem of negro migration.
- BRAWLEY, BENJAMIN.
Social History of the American Negro. New York, The Macmillan Co., 1921.
The negro in the new age, pp. 341-371. Discussion of migration and its effects and resulting problems.
- DAVIS, P. O.
Negro exodus and southern agriculture.
American Review of Reviews, October, 1923, pp. 401-407.
Attributes negro migration chiefly to economic causes.
- DONALD, H. H.
Negro migration of 1916-1918.
Journal of Negro History, October, 1921, pp. 383-498.
Presents the most salient facts pertaining to the movement in its entirety. Describes previous movements, volume, destination, composition, and causes and effects.
- ECONOMIC CAUSES OF THE NEGRO EXODUS.
Literary Digest, August 18, 1923, pp. 14, 15.
- EDENS, B. M.
When labor is cheap.
Survey, September 8, 1917, p. 511.
A letter discussing the adjustment and readjustment of the negro migrant. Gives southern point of view.
- EPSTEIN, ABRAHAM.
Negro migrant in Pittsburgh. University of Pittsburgh, 1918. 74 pp.
A discussion of the general conditions among the negro migrants in Pittsburgh. Gives comparative tables on occupations and wages received in the North and in the South.
- EXODUS IN AMERICA.
Living Age, October 6, 1917, pp. 57-60.
Attributes the northward movement largely to the labor shortage caused by war conditions.
- EXODUS IN AMERICA.
New Statesman, July 28, 1917, pp. 393-395.
Discusses the causes of the migration in 1917.
- EXTENSIVE MIGRATION OF NEGRO LABOR FROM THE SOUTHERN STATES.
Economic World, October 28, 1916, pp. 549, 550.
- FISHER, ISAAC.
Negro migration, an opportunity for biracial statemanship in the South.
(In National Conference of Social Work. Proceedings, 1924, pp. 75-82.)
A paper discussing a few of the causes and effects of negro migration.
- FORTSON, BLANTON, and PICKENS, WILLIAM.
Negro migrations: A debate.
Forum, November, 1924, pp. 593-607.
Two articles presenting opposing views: Northward to extinction, by Blanton Fortson; and Migrating to fuller life, by William Pickens.
- HARRIS, A. L.
Negro migration to the North.
Current History Magazine of the New York Times, September, 1924, pp. 921-925.
A general discussion of negro migration to the North, with particular emphasis on the urbanization of the negro population.

- HARTT, R. L.
When the negro comes north.
World's Work, May-July, 1924.
See index for paging.
A series of articles on the causes and effects of migration, extent, and future results.
- HAYNES, G. E.
Migration of negroes into northern cities.
(*In National Conference of Social Work. Proceedings*, 1917, pp. 494-497.)
A survey of the economic causes of negro migration.
- Negro migration, its effect on family and community life in the North.
(*In National Conference of Social Work. Proceedings*, 1924, pp. 62-75.)
A discussion of the causes and effects on the North of negro migration, types of communities from which the negro migrant comes, and types of the negro migrants.
- Negroes move north.
Survey, May 4, 1918, pp. 115-122; January 4, 1919, pp. 455-461.
The first article discusses the causes of the migration, and the second article is chiefly concerned with the effects.
- HILL, J. A.
Recent northward migration of the negro.
MONTHLY LABOR REVIEW, March, 1924, pp. 1-14.
Shows the shifting center of negro population from the time of the Civil War down to present-day movements. Gives information also on occupations of negroes in the North, and of negro women in domestic service. Based on census figures.
- HILL, T. A.
Why southern negroes don't go south.
Survey, November 29, 1919, pp. 183-185.
- HORWILL, H. W.
Negro exodus.
Contemporary Review, September, 1918, pp. 299-305.
Discusses causes for the exodus and describes race riots.
- JOHNSON, G. B.
Negro migration and its consequences.
Journal of Social Forces, March, 1924, pp. 404-408.
- LABOR ASPECTS OF THE NEGRO MIGRATION.
Chicago City Club Bulletin, October 31, 1917, pp. 242, 243.
A short article on migration, briefly mentioning race riots and problems.
- LEONARD, OSCAR, and WASHINGTON, F. B.
Welcoming southern negroes: East St. Louis and Detroit—a contrast.
Survey, July 14, 1917, pp. 331-335.
Discusses the economic and political causes of the East St. Louis riot and describes the work of the Detroit League on Urban Conditions and other organizations for the betterment of the negro.
- LURE OF THE NORTH FOR NEGROES.
Survey, April 7, 1917, pp. 27, 28.
States some of the immediate results of the migration of negroes to Philadelphia, and the way various committees are working to better conditions.
- LYONS, A.
Moving day from Dixie.
World Outlook, October, 1918, pp. 18, 19.
- MACLEAN, A. M.
Where color lines are drawn.
Survey, July 1, 1922, pp. 453, 454.
- MCKENZIE, H. B.
South, the cotton, and the negro: Reply to H. Snyder.
North American Review, April, 1924, pp. 486-495.
- MIGRATION OF NEGROES TO NORTHERN INDUSTRIAL CENTERS.
MONTHLY LABOR REVIEW, January, 1921, pp. 201-203.
Contains table showing white and negro population in certain northern industrial centers in 1910 and 1920, giving per cent which each race formed of the total population and the per cent of increase.
- MOFFAT, ADELENE.
New problems caused by the importation of colored labor into the North.
(*In National Federation of Settlements. Proceedings*, 1918, pp. 18-20.)

MOSES, KINGSLEY.

The negro comes north.

Forum, August, 1917, pp. 181-190.

Discusses the economic causes of the negro migration and the resulting problems of negroes flocking to the North.

MOSSELL, S. T.

Standard of living among 100 negro migrant families in Philadelphia.

Annals of the American Academy of Political and Social Science, November, 1921, pp. 173-218.

Gives a detailed statement of the migration to Philadelphia during the years 1916, 1917, and 1919. Occupations, incomes, and sources of incomes of migrant families in Philadelphia are analyzed in tabular form.

MOTON, R. R.

Migration of negroes from the southern to the northern States and its economic effects.

Economic World, May 19, 1923, pp. 688-691.

NATIONAL LEAGUE ON URBAN CONDITIONS AMONG NEGROES.

Conference on negro migration, 1917.

NEGRO MIGRANT IN PITTSBURGH.

MONTHLY LABOR REVIEW, February, 1918, pp. 155-157.

NEGRO MIGRANTS IN PHILADELPHIA IN 1923.

MONTHLY LABOR REVIEW, November, 1924, pp. 54, 55.

NEGRO MIGRATION.

MONTHLY LABOR REVIEW, June, 1923, pp. 34, 35.

NEGRO MIGRATION.

New Republic, July 1, 1916, pp. 213, 214.

NEGRO MIGRATION AS THE SOUTH SEES IT.

Survey, August 11, 1917, p. 428.

A short discussion of the causes of negro migration. Includes various excerpts from speeches on race relations given at the Southern Sociological Congress held at Asheville.

NEGRO MIGRATION IN 1923.

MONTHLY LABOR REVIEW, April, 1924, pp. 64-66.

Contains table giving per cent of negro population in each State. Shows also the increase for skilled and unskilled labor.

NEGRO MIGRATIONS.

Forum, December, 1924, pp. 853-857.

A symposium summarizing or quoting opinions of various prominent men and women on migration after the debate by Judge Blanton Fortson and William Pickens in a previous issue of the Forum.

NEGRO MIGRATIONS AND MIGRANTS.

MONTHLY LABOR REVIEW, January, 1922, pp. 42-48.

A summary of the negro in industry based on articles by T. J. Woolter and S. T. Mossell.

NEGRO MOVING NORTH.

Literary Digest, October 7, 1916, pp. 877, 878.

An editorial discussing the beginnings of the negro migration and touching on possible effects.

NEW OXODUS.

Outlook, May 16, 1923, p. 878.

States causes of the continued migration and its economic effects on the South.

NEW NEGRO MIGRATION.

Survey, February 26, 1921, p. 752.

A short description of the negro movement northward to the industrial centers two years after the end of the war.

PENDLETON, H. B.

Cotton pickers in northern cities.

Survey, February 17, 1917, pp. 569-571.

A study of negro migration and employment, and resulting conditions.

REASONS WHY NEGROES GO NORTH.

Survey, June 2, 1917, pp. 226, 227.

Includes map giving the approximate trend and volume of negro migration from the South during the year 1916-17.

ROSE, J. C.

Movements of negro population as shown by census of 1910.

American Economic Review, June, 1914, pp. 281-292.

- SAUNDERS, W. O.
Why Jim Crow is flying.
Collier's, December 8, 1923, pp. 15, 16.
- SCHIEFFELIN, W. J.
Harmful rush of negro workers to the North.
New York Times Magazine, June 3, 1917, p. 7.
- SCOTT, E. J.
Negro Migration During the War. New York, Oxford University Press, 1920. 189 pp.
Brief introduction gives a description of previous migrations of the negro. Main portion of the book discusses causes and effects of the movement, efforts to check it, the northern situation, public opinion, and remedies for relief by national organizations.
- SCROGGS, W. O.
Interstate migration of negro population.
Journal of Political Economy, December, 1917, pp. 1034-1043
- SHAFFER, E. T. H.
A new south: The negro migration.
Atlantic Monthly, September, 1923, pp. 403-409.
- SNYDER, HOWARD.
Negro migration and the cotton crop.
North American Review, January, 1924, pp. 21-29.
- SOUTH CALLING NEGROES BACK.
Literary Digest, June 23, 1917, p. 1914.
- SOUTHERN NEGROES MOVING NORTH.
World's Work, June, 1917, p. 135.
- STONE, P. H.
Negro migration.
Outlook, August 1, 1917, pp. 520, 521.
The view of a graduate of Hampton Normal and Agricultural Institute on northern migration. Emphasizes the possibilities of the South.
- TAYLOR, A. A.
Movement of negroes from the east to the Gulf States from 1830 to 1850.
Journal of Negro History, October, 1923, pp. 367-383.
Discusses the movement and its causes. Reproduces from the census reports tables showing the concentration of migration upon selected areas.
- UNITED STATES. *Department of Labor.*
Annual report, 1917-18, pp. 109-113. Washington, 1918.
Tells of the establishment and organization of the Division of Negro Economics in the Department of Labor and includes a brief report on negro migration in 1916-17.
- Inclusion of negro workers into northern industries. Press release, 1923. (Mimeographed.)
- *Division of Negro Economics.*
Negro migration in 1916-17; reports by R. H. Leavell, T. R. Snavely, T. J. Woolfer, W. T. B. Williams, and Francis D. Tyson, with an introduction by J. H. Dillard. Washington, 1919. 158 pp.
Reports on negro migration in general and from Mississippi, Alabama, North Carolina, and Georgia. Gives material on the causes of migration, and economic conditions of the negro in industry.
- VAN DE GRAAFF, A. S.
Redistribution of the American negro. Tuscaloosa, Ala., 1921. 15 pp.
Quoted in American Review of Reviews, January, 1922, pp. 95, 96.
- WALDROND, E. D.
The negro comes north.
New Republic, July 18, 1923, pp. 200, 201.
A brief summary of the causes of negro migration.
- Negro exodus from the South.
Current History of the New York Times, September, 1923, pp. 942-944.
A brief article outlining the causes of the 1916-17 movement. Gives statistics on the increase of negro migrants by cities and by States.
- WASHINGTON, F. B.
Program of work for the assimilation of negro immigrants in northern cities.
(In National Conference of Social Work. Proceedings, 1917, pp. 497-503.)
Includes an article on Migration of negroes into northern cities, by George E. Haynes. Outlines the program of the Detroit League on Urban Conditions among Negroes for the assimilation of negro immigrants in northern cities. Includes a discussion by conference members.

WHY THE NEGROES GO NORTH.

Literary Digest, May 19, 1923, pp. 13, 14.

WOODSON, C. G.

Century of Negro Migration. Washington, Association for the Study of Negro Life and History, 1918. vii, 221 pp.

Traces the history of negro migration down to the exodus during the World War. Includes maps, diagrams, bibliography, and an index.

— Negro in Our History. Washington, Associated Publishers (Inc.), 1922. 393 pp.

See index under Migration of the negroes to the North.

Discusses briefly migration and its causes. Contains a reproduction, from the United States Bureau of the Census, of a map of the United States showing percentage of negro population in the United States in 1910, by counties.

WOOFER, T. J.

Negro Migration: Changes in rural organization and population of the cotton belt. New York, W. D. Gray, 1920. 195 pp.

Describes land tenure and organization of farm life in the cotton belt, and how this organization results in movements of the population. One chapter is devoted to city migration and another to summing up the effects of migration. Bibliography given.

— The negro on a strike.

Journal of Social Forces, November, 1923, pp. 84-88.

The Health of the Negro

General References

AERY, W. A.

Better health and better homes for negroes by negroes.

Survey, May 15, 1915, vol. 34, pp. 158, 159.

An article on what the negro has done in cleaning up his community, combating tuberculosis, and instituting cleanliness. Various agencies helping in this work are the schools, negro physicians, and negro insurance companies.

ALLEN, L. C.

Negro health problem.

American Journal of Public Health, 1915, vol. 5, pp. 194-203.

BERMAN, H. S.

An experience of eighteen months' association and close observation in the negro's mental, physical, and moral activities compared to that of whites.

Journal of the Michigan Medical Society, June, 1920, vol. 19, pp. 241-245.

BOYLE, E. M.

A comparative physical study of the negro.

Journal of the National Medical Association, 1912, vol. 4, pp. 124-130.

DOUGLAS, S. W.

Difficulties and superstitions encountered in practice among negroes.

Journal of the Arkansas Medical Society, January, 1922, vol. 18, pp. 155-158.

DOWLING, OSCAR.

The negro as a health factor.

Texas State Journal of Medicine, January, 1916, vol. 2, p. 470.

GRAVES, M. L.

The negro, a menace to the health of the white race.

Southern Medical Journal, 1916, vol. 9, pp. 407-413.

HAYNES, G. E.

Negro migration—its effect on family and community life in the north.

(In National Conference of Social Work. Proceedings, 1924. Chicago, 1924, pp. 62-75.)

A large part of the article is devoted to causes of the migration, its extent and permanence, types of negroes who come, and the communities from which they come and to which they go. The material on housing, health, and the death rate is excellent.

JACKSON, A. B.

Health question of the man next door.

New York Medical Journal, May 17, 1919, vol. 109, pp. 847-851.

— The need of health education among negroes.

Opportunity, August, 1924, vol. 2, pp. 235-237.

The question of the health of the negro is a national one and affects the white man as seriously it does the black man

- JOHNSTON, V. D.
A new estimate of negro health.
Opportunity, September, 1923, vol. 1, p. 27.
A review of the first statistical bulletin published by the North Carolina Mutual Life Insurance Co.
- JONES, T. J.
Negro population in the United States.
Annals of the American Academy of Political and Social Science, September, 1913, vol. 49, pp. 1-9.
Gives increase in the negro population between 1900 and 1910. Charts. Tables.
- KENNEY, J. A.
Health problems of the negroes.
Annals of the American Academy of Political and Social Science, March, 1911, vol. 37, No. 2, pp. 110-120.
Shows what the negro is doing to raise the standards of health among his own people, including the organizing of societies, lectures, individual work, and the establishment of hospitals.
The same article is found in *Journal of the National Medical Association*, 1911, vol. 3, pp. 127-135.
- MARTIN, A. E.
Our Negro Population. Kansas City, Franklin Hudson Publishing Co., 1913.
"Health and morals," pp. 107-125. Based on a sociological study of 23,566 negroes in Kansas City, Mo. Includes mortality statistics, causes for the high death rate, birth statistics, and moral conditions. Tables.
- NICHOLS, F. O.
Aim and scope of social hygiene.
Opportunity, April, 1923, vol. 1, pp. 8-10.
Shows how the negro is following the instinct of self-preservation through education, environment, legislation, recreation, and protective social and medical measures.
- PHYSIQUE OF NEGRO WOMEN.
Opportunity, May, 1923, vol. 1, p. 22.
An editorial on the physical condition and comparative development of the colored woman teachers of West Virginia.
- ROMAN, C. V.
Negro health problems.
University of Cincinnati Medical Bulletin, 1920-1922, vol. 1, pp. 53-55.
- SNYDER, J. R.
Problem of the negro child.
Southern Medical Journal, January, 1923, vol. 16, pp. 8-11.
- TAYLOR, J. M.
The negro and his health problems.
Medical Record, 1912, vol. 82, pp. 513-515.
- UNITED STATES. *Department of Labor. Division of Negro Economics.*
Negro migration in 1916-17. Washington, 1919, pp. 143-145.
In the section on health of the migrants tells of the introduction by employers of physical examinations of negro applicants, and gives the death rate for negroes in Pittsburgh during the first seven months of 1917 as 55 per cent higher than the birth rate, while for the city population as a whole the number of deaths was 30 per cent less than the number of births.
- WILSON, ROBERT.
Real effects of civilization upon the negro.
Journal of Sociologic Medicine, February, 1918, vol. 19, pp. 19-38.
- The Negro in the City
- BRUNNER, W. F.
A southern health officer on the negro health problem in cities.
Survey, April 17, 1915, vol. 34, p. 67.
Plea of a health officer in Savannah, Ga., that the white man give the negro a fair deal. The author believes the high rate of crime and of death from tuberculosis among negroes to be due to overcrowding in cities.
- JOHNSON, J. W.
The making of Harlem.
Survey, March 1, 1925, vol. 53, pp. 635-639.
A history and description of Harlem, New York. An article interesting for reading rather than for study.

JONES, E. K.

The negro's struggle for health.

Opportunity, June, 1923, vol. 1, pp. 4-8.

The negro in Africa and during slavery was comparatively healthy. With the movement to the cities tuberculosis and rickets made great inroads on the race. His problem thus has been to learn "to live in the city." But the general physical condition of the negro is improving, and the race will increase in population. Many statistics.

The same article will be found in Proceedings of the National Conference of Social Work, 1923, pp. 68-72; also in Hospital Social Service, September, 1923, vol. 8, pp. 126-136.

LANDIS, H. R. M.

Negro health problem in cities.

Ohio State Medical Journal, March, 1916, vol. 12, pp. 173-175.

LANE, W. D.

Ambushed in the city.

Survey, March 1, 1925, vol. 53, pp. 692-694.

An article about Harlem, New York, containing information on high rents, overcrowding, bad drug stores, "hooch," quack doctors, and the death rate and diseases of the negro.

NATIONAL LEAGUE ON URBAN CONDITIONS AMONG NEGROES.

Report, 1912-13; Announcement, 1913-14. (*In its Bulletin*, November, 1913, vol. 3, pp. 1-30.)

O'KELLY, H. S.

Sanitary Conditions Among the Negroes of Athens, Ga. University of Georgia, 1918.

Contains the reports of the city bacteriologist, the sanitary inspector, and the secretary of the board of health, besides material on housing and mortality.

Housing

BRECKINRIDGE, S. P.

Color line in the housing problem.

Survey, February 1, 1913, vol. 29, pp. 575, 576.

Describes the high rents, insanitary quarters, and immoral neighborhood which the negro renter faces.

CHICAGO COMMISSION ON RACE RELATIONS.

The negro housing problem.

(*In The Negro in Chicago*. Chicago, University of Chicago Press, 1922, pp. 152-230.)

Valuable material on overcrowding and insanitary conditions.

CHILD, B. G.

The negroes of Lynchburg, Virginia. Charlottesville, Va., 1923. (Phelps-Stokes fellowship papers. University of Virginia.)

"The economic status of the Lynchburg negroes," pp. 39-57. Excellent material on overcrowding, water supply and plumbing, mortality, infant mortality, and health.

COMSTOCK, A. P.

Chicago housing conditions: The problem of the negro.

American Journal of Sociology, September, 1912, vol. 18, pp. 241-257.

Result of a house-to-house canvass in seven blocks of Chicago's black belt. Information on housing, sanitary conditions, lighting, and rents. Map. Tables.

DYCKOFF, E. F.

A negro city in New York.

Outlook, December 23, 1914, vol. 108, pp. 949-954.

Reviews housing from an economic and social point of view.

The same article appears in the Papers of the American Negro Academy for 1915.

EPSTEIN, ABRAHAM.

The Negro Migrant in Pittsburgh. Pittsburgh, 1918.

General conditions among negro migrants in Pittsburgh, pp. 7-18. Report based on the result of over 500 answers to questionnaires, and visits and study of almost every negro quarter in the city. Special stress is laid on high rents and the number of persons per room. Tables. Graphs.

GILBERT, J. W.

City housing of negroes in relation to health.

(*In Southern Sociological Congress*. The New Chivalry—Health. [Nashville], 1915, pp. 405-411.)

Takes up the subject of bad housing in relation to disease. Home ownership tends to improve health and lower the death rate. A plea for better living conditions for the negro from the viewpoints of health, economics, and public conscience.

HAYNES, G. E.

Conditions among negroes in the city.

Annals of the American Academy of Political and Social Science, September, 1913, vol. 49, pp. 105-119.

Shows migration and segregation of negroes in cities with the attending evils of bad housing and bad morals.

The same or a similar article appears in the Southern Sociological Congress. Battling for Social Settlement. Nashville, 1914, pp. 120-131.

HOUSING PROBLEM OF WASHINGTON.

Outlook, April 25, 1914, vol. 106, pp. 877, 878.

Editorial on the high death rate in Washington, D. C., which is attributed to the crowding of negroes in alleys.

JONES, E. D.

Urban conditions in Harlem.

Outlook, March 10, 1915, vol. 109, p. 597.

A letter pointing out several inaccuracies in the article "A negro city in New York," by E. F. Dyckoff, which appeared in the Outlook, December 23, 1914, vol. 108, pp. 949-954.

LEASE OF NEW LIFE IN NEGRO COUNTRY HOMES.

Survey, August 30, 1913, vol. 30, pp. 657, 658.

Shows the improvement in negro homes as a result of the schools of Macon County, Ala., where the gospel of the toothbrush and soap and water has made itself felt. Investigation was made by Tuskegee Institute. For the work taught in the school see Survey, March, 1913, vol. 29, p. 837.

MANLY, A. L.

Where negroes live in Philadelphia.

Opportunity, May, 1923, vol. 1, pp. 10-15.

Based on the reports of the survey of the Whittier Center and the Philadelphia Housing Commission, 1921. The report contains descriptions of overcrowding, taking in of lodgers, insanitary living conditions, and high rents.

MARTIN, A. E.

Our Negro Population. Kansas City, Franklin Hudson Publishing Co., 1913.

"The housing conditions," pp. 86-107. The result of a sociological study of the negroes of Kansas City, Mo., covering 23,566 negroes. Contains information on overcrowding, high rents, lack of sanitary conveniences, and cleanliness. Table.

MISSOURI. *Negro Industrial Commission.*

Housing conditions among negroes in Kansas City.

(In its Semiannual report, January 1-July 1, 1921, pp. 18-33.)

Investigations and reports founded upon the work of the Community Service Urban League of Kansas City, Mo. Tables. Diagrams.

Biennial report, 1921-1922. Jefferson City, [1922?]. 84 pp.

Contains much information on poor housing as well as on other subjects.

Reviewed in MONTHLY LABOR REVIEW, June, 1923, pp. 35-37.

MODEL HOUSING AS A COLLEGE COURSE.

Survey, September 13, 1913, vol. 30, pp. 715-717.

Plan of Paine College, Augusta, Ga., to build small houses to be rented at low rates and yet yield 10 per cent gross on the investment. Good housing and living as taught in the settlement and practically applied would become a part of the school curriculum.

MOSSELL, S. T.

Standard of living among one hundred negro migrant families in Philadelphia.

Philadelphia, 1921. 50 pp.

Founded on the negro migrations of 1916, 1917, 1918. The article is concerned primarily with occupations, budgets, and economics. The material on housing and food is excellent.

NATIONAL LEAGUE ON URBAN CONDITIONS AMONG NEGROES.

Housing conditions among negroes in Harlem, New York City. (Its Bulletin, January, 1915, vol. 4, 29 pp.)

Report of an investigation made through the housing bureau of the league. Four conclusions: The negro attempts to maintain a higher standard of living than his economic opportunities allow; municipal indifference is shown toward negro districts; good and bad elements of negro population are mixed indiscriminately in tenement houses; and high rents and the lodger evil and the size of the house are interrelated.

NEGRO HOUSING STUDY.

Buffalo Foundation Forum, May, 1921, pp. 8-11.

NEGRO MIGRANTS IN PHILADELPHIA IN 1923.

MONTHLY LABOR REVIEW, November, 1924, pp. 54, 55.

Based on the 1923 annual report of the Philadelphia Housing Association. Some remarks on overcrowding with the usual resulting sickness, especially the smallpox increase of 1923.

NEGRO MIGRATIONS AND MIGRANTS.

MONTHLY LABOR REVIEW, January, 1922, pp. 42-48.

Based on two studies, Negro migration: Changes in rural organization and population of the cotton belt, by T. J. Wootter, and The standard of living among one hundred negro migrant families in Philadelphia, by S. T. Mossell. The summary of the first study is mostly economic, but a brief survey of housing and the agencies needful to remedy conditions is given in the second summary.

NEGROES OF BUFFALO, THE.

Survey, October 22, 1921, vol. 47, p. 118.

A short but excellent article on negro housing in Buffalo, N. Y. Based on the records of 429 families, and differing from most surveys in that no great overcrowding was found and conditions were better than had been expected.

NEWMAN, B. J.

The housing of negro migrants in Pennsylvania.

Opportunity, February, 1924, vol. 2, pp. 46, 47.

An address given before the Pennsylvania Board of Health on overcrowding and high rents.

PARK, R. E.

Negro home life and standards of living.

Annals of the American Academy of Political and Social Science, September, 1913, vol. 49, pp. 147-163.

The negro farmer, and his requirements for happiness, as well as the negro artisan and professional man, are considered. Much of the article considers the economic point of view, but the sociologic student will find much of interest also, especially the table of a month's ration for one farmer.

PENDLETON, H. B.

Cotton pickers in northern cities.

Survey, February 17, 1917, vol. 37, pp. 569-571.

An article on the negro migration to the north, the bad housing conditions awaiting the negro migrant, and the resulting pneumonia and sickness.

PHILADELPHIA HOUSING COMMISSION.

The Housing of the City Negro, by B. J. Newman. Philadelphia, [1915?].

Based on a survey of 1,158 negro homes made by the Whittier Center for the Philadelphia Housing Commission. Detailed information on sanitary arrangements with table of same. A section is devoted to the lodger evil. The conclusion is that negro housing does not differ from the housing of any other race. The blame for conditions found is put chiefly upon the city itself. The need to take care of the single lodger and the necessity of having good houses to be rented at low rates are shown.

REED, RUTH.

The negro women of Gainesville, Georgia. Athens, Ga., 1921. 61 pp.

Deals with all phases of the negro woman question, but has much to say on living conditions and health.

TRAWICK, A. M.

Lack of proper home life among negroes.

(In Southern Sociological Congress. Battling for Social Betterment. Nashville, 1914, pp. 111-120.)

The author is interested chiefly in the negro who lives in the alley or back yard. He pictures the lack for both children and adults of everything that makes a dwelling a home. The article is extremely interesting, but contains few facts.

UNITED STATES. Department of Labor. Division of Negro Economics.

Negro migration in 1916-17. Washington, 1919.

Descriptions of the labor camps of the different railroads and corporations, and community housing in cities, pp. 145-149.

Living conditions in the North, pp. 22-24.

— Women's Bureau.

Negro women in industry, by E. L. Shields. Washington, 1922. (Its Bul. No. 20.)

"Virginia home study," pp. 55-65. Survey based on visits to 85 homes of negro women, giving hours of work, living conditions, age at beginning work, and home responsibilities resulting in overwork.

WHAT CAN BE DONE TO IMPROVE THE LIVING CONDITIONS OF BALTIMORE'S NEGRO POPULATION?

Baltimore Municipal Journal, March 16, 1917, vol. 5, p. 1.

WOOTTER, T. J.

The negroes of Athens, Georgia. Athens, Ga., The University, 1913. 62 pp.

First few pages contain information on overcrowding, water supply, sanitary conditions, filth, and exploitation of the negro.

Public Health

- AERY, W. A.
Public health work of the Negro Organization Society.
Survey, November, 1913, vol. 31, p. 110.
- BARDIN, JAMES.
Some public health aspects of race relationships in the South.
(In Lectures and addresses on the negro in the South. Charlottesville, Va., 1915, pp. 70-83. (Phelps-Stokes fellowship papers. University of Virginia.)
Written on the assumption that the negro race is inferior, antisocial, and lacking in adaptability. Nevertheless, what the writer has to say on diseases, including insanity, tuberculosis, and syphilis, and the resulting economic waste is excellent. Though he believes the negro race to be doomed to degeneracy he believes the white man to be responsible for the negro's health, which at present is a menace to the whole country.
- BOND, JAMES.
Work of the United States Public Health Service with negroes.
Opportunity, February, 1923, vol. 1, pp. 12, 13.
Gives some interesting figures of the United States Public Health Service, with information about the agencies through which the work is conducted.
- DACEY, P. M.
Colored child welfare stations in Kansas City.
Child Health Magazine, September, 1924, vol. 5, pp. 381-383.
- DOWLING, OSCAR.
The negro and public health.
(In Southern Sociological Congress. The Call of the New South. Nashville, 1912, pp. 212-216.)
An address by the president of the Board of Health of Louisiana. Traces the poor health of the negro to his poverty, irresponsibility, and lack of social conscience, and offers some practical advice for bettering affairs.
- DOYLE, A.
Rural nursing among negroes.
Public Health Nurse, December, 1920, vol. 12, pp. 981-985.
- ESHLEMAN, F., and DANNENBERG, M. L.
Tuberculosis training for colored student nurses.
Public Health Nurse, June, 1923, vol. 15, pp. 301-303.
- FISCHER, W. A., and BREED, D. E.
Negro health week in Texas.
Survey, October 16, 1920, vol. 45, pp. 100, 101.
Gives the program for the negro health week in Texas, showing the eagerness of all classes of negroes to help. Some statistics.
- GRAVES, M. L.
Practical remedial measures for the improvement of hygienic conditions of the negroes in the South.
American Journal of Public Health, 1915, vol. 5, pp. 212-217.
- HEALTH OF THE NEGRO.
Survey, July 19, 1919, vol. 42, pp. 596, 597.
An editorial on a symposium held in Cincinnati to consider the health of the negro. Much is said about the high death rate of negroes in Cincinnati, and a plan for a community health center as proposed by the city health officer is given.
- JACKSON, A. B.
The need of health education among negroes.
(In National Conference of Social Work. Proceedings, 1924, pp. 266-270.)
An explanation of the need of health work among negroes and a plea for the same. An interesting account of the negro's fitness as shown by the draft. The result of health questionnaires sent to colored colleges on health examinations for entrance will be of value to the sociological student.
- JONES, E. K.
Life saving by negroes.
Survey, June 12, 1920, vol. 44, p. 381.
Four paragraphs on the various means used by New York, Pittsburgh, and Atlanta in conducting negro health campaigns.
- JONES, S. B.
Fifty years of negro public health.
Annals of the American Academy of Political and Social Science, September, 1913, vol. 49, pp. 138-146.
Traces health of the negro from the days of slavery to the date of the article. Civilization is having a deteriorating effect upon the negro, but there are agencies counteracting its effect; many problems, however, remain to be solved.

- KENNEY, J. A.
How Tuskegee Institute is promoting better health conditions in the South.
Modern Medicine, 1919, vol. 1, pp. 627-630.
- LEE, L.
The negro as a problem in public health charity.
American Journal of Public Health, 1915, vol. 5, pp. 207-211.
- MARRINER, J. L.
Public health nurses of the negro race in Alabama; their place in the public health program of the State.
Public Health Nurse, June, 1923, vol. 15, pp. 304-307.
- MEYERS, S. B.
The negro problem as it appears to a public health nurse.
American Journal of Nursing, 1918-19, vol. 19, pp. 278-281.
- NEW YORK CITY. *Department of Health*.
Health campaign among negroes. *Weekly Bulletin*, April 7, 1917, vol. 6, p. 105.
- NICHOLS, F. O.
Opportunities and problems of public health nursing among negroes.
Public Health Nurse, March, 1924, vol. 16, pp. 121-123.
- Some public health problems of the negro.
Social Hygiene, January, 1921, vol. 7, pp. 41-47.
Morals and health are closely interwoven. The colored man's religion, because of its emotionalism, is often not practical. Venereal diseases are more frequent among the negroes than among the white people. The cause of this state of affairs lies in the home life of the negro and the public school. Among educated negroes children are few. Health embraces spiritual and moral, as well as physical aims, and the colored race is an inviting field for the forces of social betterment.
- UNITED STATES. *Treasury Department. Public Health Service*.
National negro health week.
See the *Public Health Reports* for the various years. The article is practically the same for the different years, consisting of a list of diseases to which the negro is susceptible and their remedies. In the report for March 18, 1921, pp. 559-561, the daily program for health week is given. Also issued in reprints.
- WERTENBAKER, C. P.
My experiences in organizing negro antituberculosis leagues.
(*In Southern Sociological Congress. The Call of the New South. Nashville, 1912, pp. 216-220.*)
A brief history of the founding of the first State antituberculosis league in Savannah, Ga. what it aimed to do, and what was actually accomplished.
- WOOFER, T. J.
Organization of rural negroes for public health work.
(*In National Conference of Social Work. Proceedings, 1923, pp. 72-75.*)
Difficulties in public health work among negroes are ignorance of the negro and lack of organizations for spreading the health message. Agencies which should help in the work are farm and demonstration agents, rural teachers, the southern employer, and the colored county nurse.

Recreation

- FOX, GENEVIEVE.
Norfolk considers its colored citizens.
The Playground, February, 1923, vol. 16, pp. 540, 541.
An article on a \$5,000 fund voted by Norfolk, Va., for a community health and recreation center. The center includes a clinic operated by colored physicians, and treating an average of 300 cases per month.
- JARVIS, WALTER.
Indianapolis provides for its colored citizens.
The Playground, February, 1923, vol. 16, pp. 541, 542.
A description of Douglass Park, with the various kinds of apparatus and swimming pool, which it contains.
- SETTLE, T. S.
Recreation for colored citizens, needs and methods.
The Playground, January, 1925, vol. 18, pp. 597, 598.
- TRAWICK, A. M.
The play life of boys and girls.
(*In Southern Sociological Congress. Democracy in Earnest. Nashville, 1918, pp. 354-362.*)
Tells what the various cities are doing as to games and playgrounds, but shows the great need remaining.

Diseases

- ATLANTA FIGHTS THE WHITE PLAGUE.**
 Opportunity, May, 1923, vol. 1, pp. 20, 21.
 A description of the fight against tuberculosis waged through 14 of the public schools in Atlanta, Ga.
- BOAS, E. P.**
 Relative prevalence of syphilis among negroes and whites.
 Social Hygiene, September, 1915, vol. 1, pp. 610-616.
 Statistics of syphilis are very hard to gather and unreliable, but figures for various forms of syphilis in negroes and comparison with the same for white people are given, as they indicate the relative incidence of the disease in the two races. From hospital and army statistics it appears that syphilis is two and a half times as frequent in negroes as in whites. Accurate statistics as to venereal diseases are, however, lacking.
- BURRELL, W. P.**
 Colored Anti-Tuberculosis League, Richmond branch.
 Hampton Bulletin, September, 1910, vol. 6, pp. 51-57.
 Tells of the work done by the league, including the various agencies assisting in the work.
- CARTER, H. G.**
 Tuberculosis among the negroes.
 (In National Tuberculosis Association. Transactions, 1920. New York, 1921, pp. 226-233.)
 Tuberculosis is a disease of civilization, eradicated by a high standard of living. The negro is especially susceptible to the disease, but the negro of mixed blood shows greater resistance to the malady than the pure negro. A large part of the article is concerned with tuberculosis from the medical viewpoint, but the discussion which follows the article will be of interest to everyone.
- COLORED ANTI-TUBERCULOSIS LEAGUE OF VIRGINIA.**
 First annual report, by G. J. Bowens.
 Hampton Bulletin, September, 1910, vol. 6, pp. 63-66.
 A history of the founding of the league, including also a history of the Antituberculosis League of Portsmouth, Va.
- DRAKE, W. A.**
 Crusade against the white plague in Norfolk, Va.
 Hampton Bulletin, September, 1910, vol. 6, pp. 57-62.
 Description of the antituberculosis work in Norfolk, including the registration law and the clinic in Norfolk exclusively for colored people. The league is a white organization, but aids in fighting tuberculosis among negroes.
- ESHLEMAN, F., and DANNENBERG, M. L.**
 Tuberculosis training for colored student nurses.
 Public Health Nurse, June, 1923, vol. 15, pp. 301-303.
- GARVIN, C. H.**
 Negro health.
 Opportunity, November, 1924, vol. 2, pp. 341, 342.
 A discussion of the diseases to which the negro is susceptible. Optimistic as to the future.
- GRANDY, C. R.**
 Racial characteristics as the cause of the large death rate from tuberculosis among negroes.
 (In National Tuberculosis Association. Transactions, 1923-1924. New York, pp. 203-206.)
 The result of six years' observation during which time the records of colored people were kept separately from those of white people. The same work relatively was done for both races, but the improvement in the white race was greater than in the colored race. Large death rate among negroes felt to be due to a racial lack of resistance, due to short contact with the disease, rather than to bodily weakness or manner of living.
- HAMPTON NORMAL AND AGRICULTURAL INSTITUTE.**
 Antituberculosis league, Portsmouth, Va.
 (In Hampton Bulletin, October, 1912, vol. 8, p. 59.)
 Gives report of the league for the year ending June 30, 1912, including such information as number of cases treated and homes visited.
- HESS, A. F., and UNGER, L. J.**
 Diet of the negro mother in New York City.
 Journal of the American Medical Association, March 30, 1918, vol. 70, p. 900.
 An article interesting on the whole only to the medical student. Conclusion is that prevalence of rickets among negroes may be due to a change from a vegetable diet in Africa to a meat diet in America.

HUBBARD, G. W.

The prevalence of contagious and infectious diseases among negroes, and the necessity of preventative measures.

(In Southern Sociological Congress. *The Human Way*. Nashville, 1913, pp. 55-61.)

Written by the dean of Meharry Medical College. Traces the prevalence of disease among negroes to ignorance, poverty, environment, the migration to the city, and superstition. A section of two pages of practical remedies is given.

HUBBARD, KATE.

Are there any blind black babies?

Survey, April 15, 1924, vol. 52, pp. 91-93.

Result of inquiries among physicians in the State of Mississippi. Only 30 cases of blindness were reported by the whole State, and practically no negro children were blind as a result of preventable infection at birth.

KELLER, R. L.

Syphilis and tuberculosis in the negro race.

Texas State Journal of Medicine, January, 1924, pp. 495-498.

LANDIS, H. R. M.

The clinic for negroes at the Henry Phipps Institute.

(In National Tuberculosis Association. *Transactions*, 1921, pp. 429-438.)

An account of the hiring of a colored nurse and doctor in the Whittier Center, Philadelphia, and of the handling of syphilis patients and undernursed children. According to the article the system may come to be regarded as a model in places having a concentrated colored population. A discussion follows the article, and in this discussion the work of clinics in Norfolk, Va., Newark, N. J., and other cities is given. Table.

— Tuberculosis problem of the negro.

Virginia Medical Monthly, January, 1923, vol. 49, pp. 561-566.

LOVE, A. C., and DAVENPORT, C. B.

A comparison of white and colored troops in respect to incidence of disease.

(In National Academy of Sciences. *Proceedings*, 1919. Washington, 1919, vol. 5, pp. 58-67.)

A report by members of the Sanitary Corps, United States Army, based upon analysis of over 15,000 colored soldiers admitted on sick report. Covers diseases more common to the black man than to the white man—those due to lack of acquired immunity, and to lack of natural resistance, and venereal diseases—and diseases less common to the black man. Concludes that the negro is more susceptible to diseases of the lungs and pleura but less susceptible to diseases of the skin, mouth, and throat. Over six pages of tables.

Brief reviews of this article are given in *Journal of the American Medical Association*, May 17, 1919, vol. 72, pp. 1468-1469, and *Literary Digest*, June 14, 1919, vol. 61, p. 23.

NEGRO PHYSICIANS OF BALTIMORE.

Opportunity, May, 1923, vol. 1, p. 21.

Shows the increase since 1882 among negroes in employing fully qualified negro physicians.

NEW YORK CITY. *Department of Health*.

Illness census of the city of New York, by S. W. Wynne.

(In *its Monthly Bulletin*, January, 1918, pp. 1-17.)

Result of a survey by the health department in New York City, February, 1917, of two of the most populous districts. Statistics of population, by age groups, amount, cause, and duration of illness, class of treatment, degree of incapacity, the feeding of infants, and a discussion of remedies. Tables.

NEW YORK CITY TUBERCULOSIS ASSOCIATION.

Tuberculosis among the colored people in New York City. (*Its Bulletin*, September-October, 1921.)

An abstract of this bulletin, with table of statistics from 1910 to 1920, will be found in the *American Review of Tuberculosis*, December, 1921, vol. 5, p. 214.

RICKETS AND THE RACE.

Opportunity, May, 1923, vol. 1, p. 2.

An editorial on the causes and prevalence of rickets among negroes.

SLOAN, M. F.

Urgent need of hospital facilities for tuberculous negro.

Southern Medical Journal, August, 1917, vol. 10, p. 654.

SPINGARN, A. B.

Venereal diseases among negroes.

Annals of the American Academy of Political and Social Science. *Proceedings*, 1919, pp. 299-312.

Treats of venereal diseases as they affect colored troops. Shows how the disease should be combated and the danger of allowing conditions to remain as they are.

THOMPSEN, LLOYD, and KINGERY, L. B.
 Syphilis in the negro.

American Journal of Syphilis, July, 1919, vol. 3, p. 384.

An editorial on an observation by Dr. H. B. Jacobs that while the death rate of negroes in Baltimore exceeds that of whites, tuberculosis seems to be confined to certain districts. Where there is overcrowding there is tuberculosis regardless of race.

TUBERCULOSIS AND ENVIRONMENT.

Opportunity, March, 1924, vol. 2, p. 68.

An editorial on an observation by Dr. H. B. Jacobs that while the death rate of negroes in Baltimore exceeds that of whites, tuberculosis seems to be confined to certain districts. Where there is overcrowding there is tuberculosis regardless of race.

UNITED STATES. Department of Labor. Division of Negro Economics.

Negro migration in 1916-17. Washington, 1919.

Pellagra as an index to hunger wages, pp. 26, 27. Shows that increases in pellagra coincide with business depression and poor crops.

Treasury Department. Public Health Service.

Anti-venereal-disease and sex-hygiene program for colored populations, by R. C. Brown. Public Health Reports. Reprint No. 542, pp. 1587-1593.

Report of the United States Surgeon General, 1918, showed venereal diseases to be more than twice as prevalent among negroes as among whites. Remedies offered include a community "clean-up," establishment of laws, education, and the help of the trained social worker. Map.

WERTENBAKER, C. B.

My experience in organizing negro antituberculosis leagues.

(In Southern Sociological Congress. The Call of the New South. Nashville, 1912, pp. 216-220.)

A brief history of the founding of the first State antituberculosis league at Savannah, Ga.; what it aimed to do, and what was actually accomplished.

WHERE NEGROES ARE IMMUNE.

Literary Digest, February 18, 1922, vol. 72, p. 62.

The negro is comparatively immune from measles, scarlet fever, diphtheria, and diseases having definite skin manifestations, and his metabolism is much better than that of the white man.

WILLIAMS, F. C.

Health work among negroes in North Carolina. North Carolina Tuberculosis Association Sanatorium.

Economic Waste

BARDIN, JAMES.

Some public health aspects of race relationships in the South.

(In Lectures and addresses on the negro in the South. Charlottesville, 1915, pp. 70-83. (Phelps-Stokes fellowship papers. University of Virginia.))

Information on diseases, including insanity, tuberculosis, and syphilis. The writer believes the white man to be responsible for the negro's health, which at present is a menace to everyone.

NEGRO YEAR BOOK. Tuskegee, Ala., Negro Year Book Publishing Co.

See the various yearbooks for graphs on the waste to the country through the sickness of negroes.

WORK, M. N.

The South and the health of negroes.

(In Southern Sociological Congress. The New Chivalry—Health. Nashville, 1915, pp. 412-421.)

A very interesting article showing the economic waste to the country through sickness and preventable deaths. The author has translated the facts into figures and comparisons.

WRIGHT, R. R.

Health the basis of racial prosperity.

(In Southern Sociological Congress. The New Chivalry—Health. Nashville, 1915, pp. 437-446.)

Discusses how prosperity rests upon health, the inferiority of the negro in comparison with the white man in this regard, and the economic waste to the country as a whole because of sickness among negroes. Many figures.

Mortality

ABBOTT, GRACE.

Methods by which children's health may be improved.

Opportunity, January, 1924, vol. 2, pp. 10, 11.

A comparison between colored and white infant mortality, with some discussion of causes.

BEALES, L. V.

Negro enumeration of 1920; a reply to Dr. Kelly Miller.

Scientific Monthly, 1922, vol. 14, pp. 352-360.

BROADENING THE LIFE SPAN OF THE AMERICAN NEGRO.

Metropolitan Life Statistics Bulletin, September, 1923, pp. 1-3.

DUBLIN, L. I.

Effect of health education on negro mortality.

Opportunity, August, 1924, vol. 2, p. 232.

Facts presented are based on the 2,000,000 negroes insured in the Metropolitan Life Insurance Co. Gives decrease in death rate, with specific reference to certain diseases.

— The effect of health education on negro mortality as shown by the Metropolitan Life Insurance Co.'s figures.

(*In* National Conference of Social Work. Proceedings, 1924, pp. 274-279.)

Evidently the full article from which the above is taken. In health the negroes are only a generation behind the white people. The mortality increases and decreases for different diseases are given, with some comment on causes, and the difference for various cities and districts noted.

— Mortality Statistics of Insured Wage-Earners and their Families. Metropolitan Life Insurance Co., 1919.

Scattered data on negro mortality are given throughout the book, and tables and charts, which are numerous, generally give figures for colored people. Invaluable for a comparison of the two races.

— Recent Changes in Negro Mortality. Metropolitan Life Insurance Co., 1924.

Facts presented are based on almost 2,000,000 negro men, women, and children of all ages. Gives statistics for specific diseases and increase or decrease.

— Recent improvement in the negro's mortality.

Opportunity, April, 1923, vol. 1, pp. 5-8.

The death rate of the negro has been decreasing for every age of life. Discussion of the different diseases to which the negro is susceptible, and their bearing upon the death rate. Based upon a 1920 address of Dr. Dublin.

— Reduction in Mortality Among Colored Policyholders. Metropolitan Life Insurance Co., 1920.

— Some observations on the mortality of negroes in America.

Economic World, September 13, 1924, vol. 28, pp. 384-386.

EPSTEIN, ABRAHAM.

The negro migrant in Pittsburgh. Pittsburgh, 1918.

Health study, pp. 54-64. Contains material gathered from the city health department, and records of hospitals and coroners' offices. Covers mortality, morbidity, births, infant mortality, and remedial measures for infant mortality taken by the New York Bureau of Child Hygiene.

HILL, J. A.

Recent northward migration of the negro.

MONTHLY LABOR REVIEW, March, 1924, pp. 1-14.

Discusses the death rate of negroes in the north as compared with the birth rate. Statistics from 1914 to 1919 are given.

JONES, E. K.

Problems of the colored child.

Annals of the American Academy of Political and Social Science, November, 1921, vol. 98, pp. 142-147.

Contains about a page on infant mortality, with quotations of figures from the Metropolitan Life Insurance Co.

MILLER, KELLY.

Eugenics of the negro race.

Scientific Monthly, July, 1917, vol. 5, pp. 57-59.

Study of the number of children in the families of 55 colored teachers in Howard University. Upper class of the race dying out unless reinforced from below.

MINTON, H. M.

The part the negro is playing in the reduction of mortality.

Hospital Social Service, July, 1924, vol. 10, pp. 10, 11.

NEGRO RACE NOT DYING OUT.

Literary Digest, November 17, 1923, vol. 79, p. 25.

Gives the increase in the life span of both men and women between 1911-1912 and 1922. Change of residence from south to north has had little effect on these figures.

NEGRO'S HEALTH.

Survey, January 29, 1921, vol. 45, pp. 637, 638.

Article is chiefly an excerpt from speech by W. D. Hill of the North Carolina insurance Co. Discusses the high death rate of negroes, and suggests remedies, mostly suitable, however, for insurance companies.

RILEY, B. F.

Causes of unusual mortality among negroes.

(*In* Southern Sociological Congress. The New Chivalry—Health. Nashville, 1915, pp. 385-392.)

Among the causes given are venereal diseases, stimulants, poor housing, and infant mortality. The article is mainly a plea for the negro.

ROMAN, C. V.

Vitality of the negroes; comparison of death rate with that of whites.
Journal of the National Medical Association, 1910, vol. 2, p. 180.

ROSS, MARY.

Health hazards of being a negro.
Survey, September 15, 1923, vol. 50, pp. 617-619.

Discussion of whether the negro can survive in America. Death rate, however, is declining, and the diseases from which he suffers are due to the handicaps our social organization has placed upon him, and can be conquered by education and improved living conditions.

The same article can be found in *World's Work*, December, 1923, vol. 47, pp. 131, 132.

STATISTICS OF MORTALITY, BIRTH, AND SICKNESS.

(In *Negro Year Book, 1921-22*. Tuskegee, Ala., Negro Year Book Publishing Co., pp. 361-367.)

Gives causes, cost of sickness of negroes, and comparison with statistics of the white population. Tables.

TANNENBAUM, FRANK.

Darker Phases of the South. G. P. Putnam's Sons, 1924.

Pp. 148-185. See pp. 164, 165 on fear of the whites of being outbred by negroes.

TRASK, J. W.

Significance of the mortality rates of the colored population of the United States.

American Journal of Public Health, March, 1916, vol. 6, pp. 254-264.

According to the author, while the death rate of the colored population is greater than the death rate of whites, it is not greater than that of many European cities and countries, and on the whole not discouraging. Tables.

UNITED STATES. *Department of Commerce. Bureau of the Census.*

Negroes of the United States. Washington, 1915. (*Its Bulletin No. 129.*)

Mortality, pp. 43-46, 194-203. Gives statistics for 1910 of deaths of negroes, with city, cause, and effect of home ownership on the death rate. A comparison of the death rate and causes with that of the white races is made. On pp. 194-203 statistics of mortality in 1900 and 1910 are given by States.

——— Negro population, 1790-1915. Washington, 1918.

See chapters on fertility and mortality, which contain valuable data on all phases of these subjects.

WHY NEGRO BABIES DIE.

Opportunity, July, 1923, vol. 1, pp. 195, 196.

Editorial on the comparative statistics of different racial groups. Many figures.

Intelligence

BOND, H. M.

What the Army intelligence tests measured.
Opportunity, July, 1924, vol. 2, pp. 197-202.

Contents that Army or other tests, because of their limitations, are unreliable in estimating the intelligence of the negro.

DERRICK, S. M.

A comparative study of the intelligence of 75 colored college students by the Stanford revision of the Binet-Simon scale.

Journal of Applied Psychology, December, 1920, vol. 4, pp. 316-329.

Study made at the University of South Carolina. Purpose of the paper is to make a comparison of two groups of students, white and colored, in regard to intelligence, correlation of mental ability with school success and with environment, and differences in specific mental traits. Bibliography.

FERGUSON, G. O.

Intelligence of negroes at Camp Lee, Virginia.

School and Society, June 14, 1919, vol. 9, pp. 721-726.

These tests were made on troops from Pennsylvania, Virginia, and West Virginia, but the results were fairly typical of the whole army. A general description of the tests and results of the same. A great difference in the score between white and colored literates, and little difference in the mechanical test for illiterates.

——— Mental status of the American negro.

Scientific Monthly, June, 1921, vol. 12, pp. 533-543.

GATEWOOD, E. L.

Teachers' estimates of negroes and whites.

School and Society, January 18, 1919, vol. 9, pp. 90, 91.

Based on examination of 88 children in a special school for backward and incorrigible children. Each teacher was asked to give her estimate of the child's ability when he entered the school and at the end of the term or when he left the school. These results were then compared with the results of individual diagnoses obtained by the Yerkes-Bridges point scale. A brief but technical article.

GREGG, J. E.

Comparison of races.

Scientific Monthly, March, 1925, vol. 20, pp. 248-254.

An article on the fallacy of mental tests as an index to the intelligence of a race, as no race is probably superior, though races are superior and inferior in various qualities. The comparisons of grades of Hampton students, including honor students, according to skin color are interesting.

INTELLIGENCE OF NEGROES AS COMPARED WITH WHITES.

Current Opinion, November, 1921, vol. 71, pp. 640, 641.

The defective morality and instability of the negro is due to his lack of mentality, which will never equal that of the white man. In his own field, however, the concrete, the practical, and the tangible, he is superior to his white brother.

JOHNSON, C. S.

Mental measurements of negro groups.

Opportunity, February, 1923, vol. 1, pp. 21-25.

An attempt to show the unreliability of the tests of Dr. M. J. Mayo in New York City, 1913, and the army tests in proving the mental inferiority of the negro.

LONG, H. H.

Race and mental tests.

Opportunity, March, 1923, vol. 1, pp. 22, 28.

Admits that there is a difference between people in mentality and that tests are useful, but objects to the far-reaching generalizations drawn from intelligence tests. Author believes that we must either admit mysterious alteration in the biological heredity of races or concede that environment is a sufficient cause for progress. Tables.

MAYO, W. J.

Mental capacity of the American negro.

Archives of Psychology, November, 1913, No. 28.

Divided into six parts: Measurement of racial differences; data and methods; comparative ages and time of attendance at school; comparative scholastic efficiency; educational significance of the data; and conclusion. The conclusion is that the average mental ability of the white man is higher than that of the negro, but not a great deal higher; and that mental variability in the white race is somewhat more pronounced than in the colored race.

Also published in book form.

MORSE, JOSIAH.

Comparison of white and colored children measured by the Binet scale of intelligence.

Popular Science Monthly, January, 1914, vol. 84, pp. 75-79.

Minute description of mental tests made on the school children of Columbia, S. C., with the conclusion that negro children are younger mentally and different from white children.

ODUM, H. W.

Negro children in the public schools of Philadelphia.

Annals of the American Academy of Political and Social Science, September, 1913, vol. 49, pp. 186-208.

Study made by the Philadelphia Bureau of Municipal Research in the public schools of the city, including all elementary schools, during the months from September, 1910, to January, 1911, and subsequently. Gives figures on retardation of negroes as compared with whites, ability in different studies, grades, tests of general intelligence, and tests of mental processes. The conclusion is that the fundamental differences of the negro's mind must be taken into consideration in any school system.

PRESSEY, S. L., and TETER, G. F.

A comparison of colored and white children by means of a group scale of intelligence.

Journal of Applied Psychology, September, 1919, vol. 3, pp. 277-282.

Tests included all children from the third through the twelfth grades in two schools for colored children with a study of the age-grade placement of these children. Ten tests of 20 items each given. The paper discusses the following questions: How do colored children compare with white, grade for grade and age for age? and do colored children show a distinctive make-up of abilities? The conclusion is that colored children rate below white children and are different in their abilities.

PLYLE, W. H.

Mind of the negro child.

School and Society, March 6, 1915, vol. 1, pp. 357-360.

Tests based on examination of over 400 children in the public schools of Columbia, Mexico, and Moberly, Mo. In general the mentality of negroes rated about two-thirds that of whites. Note made of differences in mentality for sex, age, and social position. Excellent tables. Graphs.

SOUTHERN NEGRO IN CLEVELAND INDUSTRIES, THE.

Monthly Labor Review, July, 1924, pp. 41-44.

A discussion based on an inquiry among 75 employers in the Greater Cleveland district, published by the Union Trust Co. of Cleveland, Ohio, and reprinted in The Economic World of May 3, 1924, as to whether the negro is limited in his capabilities as a workman. The conclusion is that the negro has not failed in any class of work in which he has been given a fair trial.

STORMZAND, M. J.

Intelligence tests and eugenics.

Journal of Applied Sociology, June-July, 1922.

STRONG, A. C.

White and colored children as measured by the Binet-Simon scale of intelligence.

Pedagogical Seminary, December, 1913, vol. 20, pp. 485-515.

Tests made on over 200 white and over 100 colored children by the University of South Carolina, using the 1911 revision of the scale. A large part of the article is devoted to a description of the tests, and a discussion of their reliability. Conclusion is that colored children are younger mentally than white children. Tables.

SUNNE, DAGNE.

Comparison of white and negro children in verbal and nonverbal tests.

School and Society, April 19, 1924, vol. 19, pp. 469-472.

Based on a survey of white and colored children, started in 1915, and first reported in Journal of Applied Psychology, March, 1917, vol. 1, pp. 71-83. Tests made according to the national intelligence tests and Meyer's mental measure. Tables.

THORNDIKE, E. L.

Intelligence scores of colored pupils in high schools.

School and Society, November 10, 1923, vol. 18, pp. 569, 570.

Comparative measurements of colored and white pupils in the high schools of a large city of the North Central Division. Examinations made by a composite standard educational test. Table.

Psychology

BARDIN, JAMES.

The psychological factor in southern race problems.

Popular Science Monthly, October, 1913, vol. 83, pp. 368-374.

The negro's peculiar mental characteristics will never be those of the white man, and all progress will be made as a negro. He should thus be studied as a negro and not as a potential white man.

FERGUSON, G. O.

Psychology of the negro; an experimental study. New York, The Science Press, [1916].

FRAZIER, E. F.

Psychological factors in negro health.

Journal of Social Forces, March, 1925, vol. 3, pp. 488-490.

An article relating to the ignorance and superstitions of the negro in regard to disease, and the part fear and social repression play in the negro's health.

ROMAN, C. V.

The negro's psychology and his health.

(In National Conference of Social Work. Proceedings, 1924, pp. 270-274.)

Brings out the following points: The negro is religious; he is more devoted to personality than to principle; he has an inferiority complex; nature has built a splendid physiological machine in the American negro, but he is the victim of bad surroundings, the fault of the American community; and the negro has as much racial worth as any other race.

Health Resources

DODD, R. A.

Training negro nurses.

Survey, March 26, 1921, vol. 45, pp. 926, 927.

An article on what is being done to meet the need for colored trained nurses. Contains a list of five schools offering training to which colored nurses are admitted.

FOR THE TRAINING OF NEGRO DOCTORS.

Outlook, March 19, 1924, vol. 136, pp. 462-464.

An editorial on the ruling out of order in the Senate of an appropriation of \$500,000 to the medical school of Howard University.

HOSPITAL MAINTAINED BY COLORED RACE.

Modern Hospital, January, 1919, vol. 12, p. 43.

Editorial on the Frederick Douglass Memorial Hospital in Philadelphia.

HOSPITALS AND NURSE TRAINING SCHOOLS.

Negro Year Book, 1921-22, pp. 370-372. Tuskegee, Ala., Negro Year Book Publishing Co.

A list of hospitals and training schools arranged by States.

KENNEY, J. A.

Negro in medicine. Tuskegee Normal and Agricultural Institute, 1912.

KENNEY, J. A.

Safeguarding maternity.

New Republic, March 9, 1921, vol. 26, p. 45.

Letter by J. A. Kennedy, M. D., director of the John A. Andrew Memorial Hospital, Tuskegee Institute, Ala., on the work which Tuskegee Institute is doing for the midwives of Alabama.

[LACK OF NEGRO DOCTORS AND NURSES.] Editorial.

Survey, March 1, 1925, vol. 53, pp. 698, 699.

LANDIS, H. R. M.

Colored physicians and colored nurses for colored patients.

(In National Tuberculosis Association. Transactions, 1916. New York, 1916, pp. 377-386.)

An account of the health work for negroes in Philadelphia and Pennsylvania. The discussion following the article tells of similar work done in other cities, notably Atlanta, Baltimore, and Richmond, and includes discussion of such questions as the ability of colored nurses.

LEWIS, S. J.

The negro in the field of dentistry.

Opportunity, July, 1924, vol. 2, pp. 207-212.

A short history of negro dentistry, including restandardization of dental colleges, the development of the dental section of the National Medical Association, and the growth generally of dentistry among the negro race.

McMURDY, ROBERT.

Negro women as trained nurses in Chicago.

Survey, November 8, 1913, vol. 31, pp. 159-180.

Tells what is being done in Provident Hospital in Chicago, which has already graduated over 100 colored nurses, and has 25 in training.

MEDICAL TRAINING FOR NEGROES.

Outlook, July 4, 1923, vol. 134, p. 304.

An editorial on the need of negro doctors, dentists, and nurses, and training schools for the same as pointed out by the Secretary of the Interior, Hubert Work.

MEHARRY MEDICAL COLLEGE.

Opportunity, April, 1924, vol. 2, pp. 122, 123.

A brief history and description of a negro medical college.

NEGRO MEDICAL ASSOCIATION.

Negro Year Book, 1921-22, p. 369. Tuskegee, Ala., Negro Year Book Publishing Co.

A list of negro medical associations, with names and degrees and addresses of the presidents and secretaries, of same. Arranged according to State.

PROVIDENT HOSPITAL.

(In The Negro in Chicago. Chicago Daily News, 1916. 31 pp.)

Statistical information about Provident Hospital.

SCHOLARSHIPS FOR NEGRO MEDICAL STUDENTS.

School and Society, September 20, 1919, vol. 10, pp. 344, 345.

An editorial on six scholarships of \$1,200 each to specially qualified negro medical students, by Julius Rosenwald, of Chicago.

SLOAN, M. F.

Urgent need of hospital facilities for the tuberculous negro.

Southern Medical Journal, August, 1917, vol. 10, p. 654.

[SOCIAL AGENCIES IN HARLEM AIDING IN PROGRESS OF NEGROES.] Editorial.

Survey, March 1, 1925, vol. 53, pp. 698, 699.

Among the social agencies described are the New York Urban League, the Henry Street visiting nurse service, and the Harlem tuberculosis committee of the New York Tuberculosis Association.

UNITED STATES. *Department of the Interior. Bureau of Education.*

Negro education. (Its Bul. No. 38, 1916.)

Hospitals and nurse training schools, p. 176. A brief survey of the founding of various negro hospitals.

——— Negro education. (Its Bul. No. 39, 1916.)

See index, under "Medical schools," or the name of the specific hospital or school wanted, for references on negro medical schools.

WHY NEGRO VETERANS LACK NEGRO DOCTORS.

Outlook, July 18, 1923, pp. 396-398.

An article on the difficulties in establishing a veterans' hospital controlled by negro nurses and physicians in Tuskegee, Ala. Special stress is laid on the lack of skilled doctors among negroes.

WINNER OF THE SPINGARN MEDAL.

Survey, February 20, 1915, vol. 33, p. 550.

A brief account of E. E. Just, winner of the Spingarn medal, and head of the department of physiology at Howard University.

LABOR ORGANIZATIONS AND CONGRESSES

Membership of Employers' and Workers' Organizations in France, January, 1925

THE Bulletin du Ministère du Travail et de l'Hygiène (Paris) July-September, 1925 (pp. 288, 289), gives the following table, showing the membership of employers' organizations and trade-unions (*syndicats*) in France on January 1, 1924, and January 1, 1925, and the number and membership, both of organizations formed and of those dissolved during the year. These organizations are grouped in 884 federations, 309 of which are employers', 392 workers', 7 mixed, and 176 agricultural.

NUMBER AND MEMBERSHIP OF EMPLOYERS' AND WORKERS' ORGANIZATIONS
IN FRANCE, NUMBER DISSOLVED, AND NUMBER FORMED, JANUARY 1, 1924, TO
JANUARY 1, 1925

Type of organization	January 1, 1924		January 1, 1925 ¹	
	Number of organiza- tions	Number of members	Number of organiza- tions	Number of members
Employers' organizations.....	6, 210	434, 833	6, 596	496, 360
Workers' organizations.....	6, 597	1, 804, 912	7, 072	1, 846, 047
Mixed (employers' and workers') organizations.....	194	32, 161	196	32, 331
Agricultural organizations.....	8, 633	1, 204, 946	9, 041	1, 222, 534
Total.....	21, 634	3, 476, 852	22, 905	3, 597, 272

Twelfth Congress of General Federation of German Trade-Unions¹

THE twelfth congress of the General Federation of German Trade-Unions (*Allgemeiner Deutscher Gewerkschaftsbund*) was held at Breslau from August 31 to September 5, 1925. Compared with the last congress at Leipzig, in 1922, which was attended by about 800 delegates, the number of delegates present (313) was rather small. This decrease in the number of delegates was due not only to the heavy decrease in the membership of the federation to 4,557,032, but also to new regulations for the election of delegates which allowed only one delegate to every 10,000 members.

The International Federation of Trade-Unions of Amsterdam and the central trade-union organizations of Austria, Czechoslovakia, Denmark, Hungary, Latvia, Memel Territory, the Netherlands, Poland, Rumania, Sweden, and Switzerland were also represented.

¹ The data on which this article is based are from: *Allgemeiner Deutscher Gewerkschaftsbund, Gewerkschaftszeitung*, Berlin, Sept. 19, 1925, pp. 547-555; *Soziale Praxis und Archiv für Volkswohlfahrt*, Berlin-Sept. 10, 1925, cols. 801-805; *Arbeit und Wirtschaft*, Vienna, Nov. 1, 1925, pp. 905-908; *International Labor, Office, Industrial and Labor Information*, Geneva, Oct. 12, 1925, pp. 35-39.

Numerous representatives of the German Federal Government and of the State governments, who had been invited by the directorate of the federation, were also present.

In his report to the congress, the president of the federation recalled the difficulties with which the federation had had to contend since its last congress in 1922 and gave an account of the present economic situation.

A report was submitted by Professor Hermsberg on the economic situation in Germany, in which he endeavored to show that the present difficulties of the country were due not so much to shorter hours of labor or wage increases as to methods of production and the inadequacy of economic organization.

Mr. Hermann Müller submitted a report on social legislation in Germany.

A brief summary of the more important resolutions adopted is given below.

Wages.—The congress accused the German employers' association of causing extensive wage disputes, with disastrous results to German industry, by the continuance of their wage policy. It stated that the real value of present-day wages of by far the greater part of German labor is way below that of pre-war wages, and that the purchasing value of these wages is falling steadily with the continued rise in the cost of living caused by the customs tariff and taxation acts adopted by the Reichstag and accentuated by increases in rents. The congress regarded the attempts of employers to justify their pressure on wages as inevitable under present economic conditions as an illustration of their effort to further only their own interests.

While fully appreciating all the burdens imposed on German industry, the congress expressed the firm intention of the trade-unions to continue the struggle for a decent standard of living for labor, contending that improvement of the purchasing power and standard of living of the masses is essential and profitable for German industry and for the whole German people.

Hours of labor.—The congress strongly condemned the hours-of-labor order of December 21, 1923, as nullifying the eight-hour day, and stated that while this order was issued on the plea of employers that longer hours were essential for the revival of German industry, experience since then has shown that output has not been increased by the enforced extension of working hours. The congress noted with satisfaction that the trade-unions have succeeded in maintaining or winning back the eight-hour day for at least half the German working population and admonished the unions to regain it in those industries in which it is at present exceeded. It also demanded of the Government and Reichstag the introduction as soon as possible of another law reestablishing the eight-hour day. If necessary, this should be effected by means of a national referendum.

Works councils.—The congress reaffirmed its resolutions on the functions of works councils and their support by the trade-unions, adopted at the congress of Leipzig in 1922. It noted with satisfaction that the large majority of works councils have carried on their work in accordance with these resolutions and that they have proved their value as part of the German trade-union movement.

It pointed out, however, that the employers have made strenuous efforts to estrange the works councils and the trade-unions and by works alliances and agreements to exclude the trade-unions in the determination of working and wage conditions. These efforts, the congress claimed, are directed against the right of the workers to share in the control of industry, and the whole of labor should therefore continue to oppose them.

The congress also affirmed strongly the principle that only the trade-unions can be considered as the rightful medium of collective bargaining and that any attempt to give recognition to the works agreements provided for in the bill on collective agreements, now pending, should be fought to the utmost by the unions.

Organization.—Several motions were made in the matter of organization. A proposal made by Mr. Diessmann and signed by a number of delegates of other federations demanded the organization of all unions affiliated to the General Federation into 14 industrial federations. This proposal was, however, rejected by the congress, which passed in its stead one sponsored by the directorate of the General Federation, recognizing the need of related trade organizations affiliated to the General Federation to form industrial unions, with a view to strengthening the power of the trade-union movement as much as possible and simplifying the organization. It considered, however, voluntary amalgamation of the unions the best method for achieving this end.

The congress called on all unorganized workers and especially on the juvenile workers to strengthen the unions by joining them in much larger numbers. In this connection the congress imposed on all unions the obligation to accept as members all unskilled workers, helpers, and female workers employed in the occupational branches over which the individual unions have jurisdiction.

Resolutions on other problems.—The congress also adopted resolutions demanding the dissolution of the "Technical Emergency Corps," which it claimed had degenerated into a corps of strike breakers; opposing the proposed increase of house rents and the abrogation of the law on the protection of tenants of dwellings; encouraging the organization of home workers; advocating that organized labor patronize exclusively the labor bank and the life insurance association, "Volksfürsorge" (an institution founded by the trade-unions and cooperative societies); and demanding the speedy enactment of laws on the labor contract, collective bargaining, labor courts, unemployment insurance, and the creation of a permanent national economic council and of equipartisan chambers of industry and commerce.

STRIKES AND LOCKOUTS

Strikes in Mexico, 1922 to 1924¹

THE Mexican Bureau of Labor has issued the following figures on strikes in that country during the three-year period 1922 to 1924:

	Strikes	Strikers
1922.....	197	63, 000
1923.....	146	54, 396
1924.....	138	29, 244

Labor Disputes in Scandinavian Countries in 1924

Denmark

ACCORDING to data gathered by the Statistical Department in Denmark,² 71 work stoppages took place in that country in 1924. Most of the disputes were of short duration, 27 lasting less than 1 week and only 17 over 3 weeks; and the total number of workers involved in all the disputes was less than 10,000. The number of working-days lost was 175,100, as against 19,700 in 1923. Since 1897, when these statistics were first gathered, only the year 1903 has shown as small a number of working-days lost (18,500), and of the other years only 1912 and 1915 show less than 50,000 days. The number of days lost, 1919 to 1922, was approximately as follows: 1919, 900,000; 1920 and 1921, 1,300,000 each; and 1922, 2,300,000.

Norway³

NORWAY in 1924 had 61 labor disputes which affected a total of 63,117 workers (of whom 47,125 were organized) and caused a loss of 5,152,386 working-days.

The most extensive disputes during the year were the general lockout and strikes in the transport industry, the iron industry, the paper industry, and the masons. The controversy in the transport industry was caused by a dispute over the new agreement, and in the iron industry by a wage reduction.

Strikes involving 99 per cent of the total striking workers were settled by mediation.

Most of the disputes in 1924 fell in the group lasting from 31 to 90 days. From the point of view of scope and duration of disputes 1924 was the most critical year so far experienced.

¹The Mexican American, Mexico City, May 16, 1925, p. 19.

²Denmark. Statistiske Departement. Statistiske Efterretninger No. 22, July, 1925.

³Norway. Statistiske Centralbyrå. Megling og voldgift. Tariffavtaler og arbeidskonflikter. Oslo, 1925.

The following table gives, for the past 4 years, the number of disputes, the number of workers involved, and the number of working-days lost:

NUMBER OF LABOR DISPUTES, WORKERS INVOLVED, AND WORKING-DAYS LOST IN LABOR DISPUTES IN NORWAY, 1921 TO 1924

Year	Number of disputes	Workers involved		Working-days lost	
		Number	Average per dispute	Number	Average per dispute
1921.....	89	154,421	1,735	3,583,742	40,267
1922.....	26	2,168	83	91,380	3,515
1923.....	57	24,965	438	796,274	13,970
1924.....	61	63,117	1,035	5,152,386	84,465

Sweden

DATA furnished in the annual report⁴ of the Swedish Labor Board on labor disputes in Sweden show that in 1924 industrial disputes in that country numbered 261. Comparison with preceding years, especially 1920 and 1923, indicates that in 1924 labor conditions on the whole were peaceful. The number of disputes in 1924 exceeded the number in 1923 but the number of workers involved was less in 1924 than for any other year since 1916. Even the number of working-days lost (1,200,000) was considerably less than for the immediately preceding years. The average number of workers per dispute was 92, as against 500 for 1923 and 172 for the period 1914 to 1923. The greatest number of disputes (62) occurred in the building industry.

Of the 261 disputes, 238 were strikes, 11 were lockouts, and 12 were mixed controversies. Each strike affected on an average 82 workers, each lockout 140, and each mixed dispute 245 workers.

In 1924 wages were the subject of controversy in 178 or 68.2 per cent of the disputes. In the case of 130 or 50 per cent of the disputes, both parties to the controversy were organized, while in 124 or 48 per cent of the disputes only the workers were organized.

Over one-half of the work stoppages during the year lasted less than one month and about one-fourth from one to three months.

The following table shows the results of the disputes:

RESULTS OF LABOR DISPUTES IN SWEDEN, 1914 TO 1924*

Result	Work stoppages				Workers involved			
	1914 to 1923		1924		1914 to 1923		1924	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Settled on employers' terms.....	838	24.1	31	11.9	98,710	16.5	2,736	11.4
Settled on employees' demands.....	869	25.0	41	15.7	59,983	10.1	1,512	6.3
Compromised.....	1,615	46.5	169	64.7	430,604	72.2	17,878	74.6
Result unknown or dispute unsettled.....	154	4.4	20	7.7	7,209	1.2	1,850	7.7
Total.....	3,476	100.0	261	100.0	596,506	100.0	23,976	100.0

* Sweden. [Socialdepartementet] Socialstyrelsen. Arbetsinställelser och kollektivavtal samt förläkningsmännens verksamhet år 1924. Stockholm, 1925. 177 pp.

CONCILIATION AND ARBITRATION

Conciliation Work of the Department of Labor in November, 1925

By HUGH L. KERWIN, DIRECTOR OF CONCILIATION

THE Secretary of Labor through the Conciliation Service, exercised his good offices in connection with 25 labor disputes during November, 1925. These disputes affected a known total of 26,581 employees. The table following shows the name and location of the establishment or industry in which the dispute occurred, the nature of the dispute (whether strike or lockout or controversy not having reached strike or lockout stage), the craft or trade concerned, the cause of the dispute, its present status, the terms of settlement, the date of beginning and ending, and the number of workmen directly and indirectly affected.

On December 1, 1925, there were 45 strikes before the department for settlement and, in addition, 18 controversies which had not reached the strike stage. Total number of cases pending, 63.

LABOR DISPUTES HANDLED BY THE UNITED STATES DEPARTMENT OF LABOR THROUGH ITS CONCILIATION SERVICE, NOVEMBER, 1925

Company or industry and location	Nature of controversy	Craft concerned	Cause of dispute	Present status and terms of settlement	Duration		Men involved	
					Begin-ning	Ending	Direct-ly	Indi-rectly
O. F. Paulson Construction Co., Cedar Rapids, Iowa.	Controversy	Lathers and car-penters.	Jurisdiction.....	Adjusted. Metal lathers employed in place of wood lathers.	1925 Oct. 26	1925 Oct. 30		
Porter Construction Co., Buffalo, N. Y.	do.....	Bridge building	Nonunion carpenters.....	Adjusted. No change in conditions.....	Oct. 1	do.....	50	100
Mather Stock Car Co., Chicago, Ill.	Strike.....	Stock-car building.	Violation of agreement, etc.	Adjusted. Terms of settlement not reported.	Nov. 5	Nov. 16	185	
Weygadt Mills (Inc.), Easton, Pa.	do.....	Silk weaving.....	Wage increase; discharge of boy.	Adjusted. Boy rehired. Demand for increase dropped.	Oct. 26	Oct. 30	29	
American Radiator Co., Bayonne, N. J.	do.....	Radiator industry.	Wage scale and conditions.	Adjusted. Readjustment of conditions.	Nov. 3	Nov. 12	800	200
Marvel Shirt Co., New York City	do.....	Shirt making	Nonunion shop work....	Unclassified. Settled before commissioner's arrival.	Oct. 28	Nov. 2	6	50
Structural Steel & Iron Co., Newark, N. J.	do.....	Ironwork.....	Organization trouble.....	Adjusted. Strike called off by officials of union.	Nov. 12	Nov. 12	8,000	
Pepperell Manufacturing Co., Biddeford, Me.	Threatened strike.	Textile industry	Working conditions.....	Adjusted. Weavers accepted multiple loom system.	(1)	Nov. 11	3,100	721
Marvin Carr Mills, Durham, N. C.	Strike.....	do.....	Wage increase demanded.	Unable to adjust. Mediation declined....	Nov. 9		70	230
D. B. & R. Knight Textile Co., Providence, R. I.	do.....	do.....	do.....	Adjusted. Weavers accepted 10 per cent wage cut.	Nov. 12	Nov. 23	1,100	800
Dering Mine, No. 6, Clinton, Ind.	Controversy	Mining.....	Working conditions; in-junction pending.	Adjusted. Question submitted to 6 men; mine to remain idle till settled.	Nov. 9	do.....	105	20
B. & S. Mine No. 2, Dubois, Pa.	Strike.....	do.....	Abrogation of contract....	Pending.	(1)		400	
Metropolitan Electric Protective Co. and National Wiring Protective Co., New York City.	do.....	Electric-wire industry.	Organization of wiremen.	Adjusted. Union committee will act in this case.	(1)		125	100
Smith Upholstering Co., Wilkes-Barre, Pa.	do.....	Upholstering.....	Discharge of boy.....	Adjusted. Men returned; boy not rehired.	Nov. 17	Nov. 20	12	9
Progressive Upholstering Co., Toledo, Ohio.	do.....	do.....	Asked 44-hour week; \$1.10 per hour.	Unable to adjust. Refused compromise suggested by commissioner.	Nov. 2		28	6
Laborers, New York City	Controversy	Building	Organizations dispute....	Pending.	Nov. 16			
Pants makers, New York City.....	Lockout.....	Clothing industry.	Proposed change from week to piece work.	Unclassified. 16 shops settled before arrival of commissioner.	Nov. 10	Nov. 17	2,500	
Shoe workers, New York City.....	Strike.....	Shoe industry.....	(1)	(1)	(1)		6,000	
W. J. Newman Co., Contractors, Chicago, Ill.	do.....	Ironworkers and common labor.	Jurisdiction of iron wreck-ing.	Adjusted. Ironworkers returned without change.	Nov. 12	Nov. 18	90	
Seven fish companies, Erie, Pa.....	Controversy	Fishing industry.	Wage cut of 2 cents a pound—8 cents to 6 cents.	Adjusted. No cut enforced; limitation imposed on independent boats.	Oct. 26	Nov. 21	300	100
Eli Lilly Building, Indianapolis, Ind.	Threatened strike.	Building trades...	Jurisdiction of metal win-dow-frame work.	Adjusted. Metal workers withdrew request to place metal frames.	(1)	Nov. 28	15	50

1 Not reported.

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CONCILIATION AND ARBITRATION

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LABOR DISPUTES HANDLED BY THE UNITED STATES DEPARTMENT OF LABOR THROUGH ITS CONCILIATION SERVICE, NOVEMBER, 1925—Continued

Company or industry and location	Nature of controversy	Craft concerned	Cause of dispute	Present status and terms of settlement	Duration		Men involved	
					Beginning	Ending	Directly	Indirectly
M. Bandler, New York City..... Liberty Upholstering Co., Philadelphia, Pa.	Controversy Strike.....	Garment trade..... Upholstering.....	Eight cutters laid off..... \$5 cut on upholstering parlor suites.	Adjusted. Cutters reinstated..... Pending.....	Nov. 17 (1)	Nov. 25	15 (1)	185
Fada Radio Co., Bronx, N. Y.....	do.....	Radio-wire work.....	Asked 12½ to 15 per cent increase.	Adjusted. Returned without change—55 and 65 cents per hour continued; 48-hour week.	Nov. 4.	Nov. 14	35	1,015
Barr & Skinner, Akron, Ohio.....	Controversy	Lath work.....	Asked wage increase.....	Unclassified. Settled before commissioner's arrival.	Oct. 1	Nov. 2	30
Total.....	22,995	3,586

¹ Not reported

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IMMIGRATION

Statistics of Immigration for October, 1925

J. J. KUNNA, CHIEF STATISTICIAN, BUREAU OF IMMIGRATION

IN OCTOBER, 1925, there were 48,112 aliens admitted to the United States, of whom 28,685 were immigrants and 19,427 were nonimmigrants. The number departed was 20,938, of whom 7,674 were emigrants and 13,264 nonemigrants. The number debarred was 1,965 and the number deported 909.

During October about twice as many immigrants came from Germany as from any other European country. Germany furnished us 5,459 immigrants; Great Britain and Northern Ireland, 2,392; Irish Free State, 2,921; Italy, 670; Poland, 589; and Sweden, 911. In the Western Hemisphere Canada, as usual, was the principal country from which immigrants were admitted. Canadian immigration amounted to 9,535 and Mexican, 1,919.

There were 7 nationalities each of whom supplied the United States with over a thousand immigrant aliens in October. Germans numbered 6,230; Irish, 4,668; English, 4,657; Scotch, 2,780; French, 2,384; Mexican, 1,860; and Scandinavian, 1,798. There was only one nationality—the Italian, with about 2,000—of which more than a thousand emigrant aliens departed.

In October there were 7 States that received more than a thousand aliens for permanent residence therein. Of the immigrant aliens admitted, 7,268 came to reside permanently in New York State, 3,126 in Michigan, 3,019 in Massachusetts, 1,992 in Illinois, 1,891 in California, 1,782 in Pennsylvania, and 1,496 in New Jersey. New York, with about 3,000 emigrant aliens leaving it, was the only State from which more than a thousand emigrant aliens departed.

Of the total number of 28,685 immigrants admitted 3,724 were servants, 2,366 laborers, 1,731 farm laborers, and 1,634 clerks and accountants. About 45 per cent, or 3,480, of the emigrant aliens departing were laborers.

Some of the figures above come from tables not published here for want of space.

TABLE 1.—INWARD AND OUTWARD PASSENGER MOVEMENT FROM JULY 1 TO OCTOBER 31, 1925

Period	Inward					Outward						
	Aliens admitted			United States citizens arrived	Total	Aliens debarred from entering ¹	Aliens departed			United States citizens departed	Total	Aliens deported after landing ²
	Immigrant	Non-immigrant	Total				Emigrant	Non-emigrant	Total			
1925												
July.....	18,590	14,177	32,767	32,080	64,847	2,000	8,784	17,715	26,499	66,136	92,635	919
August.....	22,421	17,052	39,473	59,663	99,136	1,774	7,539	12,978	20,517	37,185	57,702	940
September.....	26,721	23,081	49,802	76,258	126,060	1,429	7,200	12,485	19,685	24,369	44,054	855
October.....	28,685	19,427	48,112	38,313	86,425	1,965	7,674	13,264	20,938	24,227	45,165	909
Total....	96,417	73,737	170,154	206,314	376,468	7,168	31,197	56,442	87,639	151,917	239,556	3,623

¹ These aliens are not included among arrivals, as they were not permitted to enter the United States.

² These aliens are included among aliens departed, they having entered the United States, legally or illegally, and later being deported.

TABLE 2.—LAST PERMANENT RESIDENCE OF IMMIGRANT ALIENS ADMITTED TO AND FUTURE PERMANENT RESIDENCE OF EMIGRANT ALIENS DEPARTED FROM THE UNITED STATES DURING OCTOBER, 1925, AND FROM JULY 1 TO OCTOBER 31, 1925, BY COUNTRY

[Residence for a year or more is regarded as permanent residence]

Country	Immigrant		Emigrant	
	October, 1925	July to October, 1925	October, 1925	July to October, 1925
Albania.....	14	64	43	164
Austria.....	113	367	40	193
Belgium.....	87	270	38	202
Bulgaria.....	20	62	5	34
Czechoslovakia.....	272	1,224	120	825
Danzig, Free City of.....	24	93	-----	1
Denmark.....	209	682	58	260
Estonia.....	20	39	4	5
Finland.....	37	168	32	165
France, including Corsica.....	460	1,566	89	431
Germany.....	5,459	14,740	382	1,468
Great Britain and Northern Ireland:				
England.....	1,044	3,572	408	2,142
Northern Ireland.....	41	128	23	128
Scotland.....	1,221	4,057	162	680
Wales.....	86	416	4	16
Greece.....	81	322	638	2,557
Hungary.....	88	296	78	344
Irish Free State.....	2,921	9,430	76	402
Italy, including Sicily and Sardinia.....	670	2,716	2,242	7,690
Latvia.....	45	122	4	22
Lithuania.....	67	338	21	200
Luxemburg.....	21	46	-----	3
Netherlands.....	174	599	34	177
Norway.....	447	1,726	180	635
Poland.....	589	1,978	220	1,491
Portugal, including Azores, Cape Verde, and Madeira Islands.....	48	189	276	1,205
Rumania.....	81	381	167	635
Russia.....	149	558	12	56
Spain, including Canary and Balearic Islands.....	15	149	190	963
Sweden.....	911	2,359	75	388
Switzerland.....	214	641	38	183
Turkey in Europe.....	12	87	5	18
Yugoslavia.....	117	407	272	1,068
Other Europe.....	22	87	2	16
Total Europe.....	15,779	49,879	5,938	24,767
Armenia.....	1	2	4	19
China.....	190	731	338	1,036
India.....	17	62	24	50
Japan.....	75	239	111	441
Palestine.....	23	102	22	92
Persia.....	3	19	1	15
Syria.....	43	147	27	163
Turkey in Asia.....	-----	1	11	67
Other Asia.....	6	39	7	27
Total Asia.....	358	1,332	545	1,910
Canada.....	9,535	31,584	222	874
Newfoundland.....	288	857	28	112
Mexico.....	1,919	9,226	310	1,122
Cuba.....	180	898	148	699
Other West Indies.....	87	420	232	740
Central America.....	135	638	54	236
Brazil.....	64	322	22	77
Other South America.....	235	866	130	422
Other America.....	-----	3	-----	1
Total America.....	12,443	44,814	1,146	4,283
Egypt.....	45	100	1	21
Other Africa.....	13	91	6	36
Australia.....	24	127	26	118
New Zealand.....	21	65	10	52
Other Pacific Islands.....	2	9	2	10
Total.....	105	392	45	237
Grand total all countries.....	28,685	96,417	7,674	31,197

TABLE 3.—IMMIGRANT ALIENS ADMITTED TO AND EMIGRANT ALIENS DEPARTED FROM THE UNITED STATES DURING OCTOBER, 1925, AND FROM JULY 1 TO OCTOBER 31, 1925, BY RACE OR PEOPLE, SEX, AND AGE GROUP

Race or people	Immigrant		Emigrant	
	October, 1925	July to October, 1925	October, 1925	July to October, 1925
African (black).....	91	351	109	398
Armenian.....	86	260	9	46
Bohemian and Moravian (Czech).....	237	902	53	409
Bulgarian, Serbian, and Montenegrin.....	45	164	203	633
Chinese.....	158	564	324	981
Croatian and Slovenian.....	82	282	71	307
Cuban.....	99	611	97	472
Dalmatian, Bosnian, and Herzegovinian.....	2	17	65	213
Dutch and Flemish.....	357	1,040	88	415
East Indian.....	7	24	10	28
English.....	4,657	15,658	592	2,873
Finnish.....	62	233	38	174
French.....	2,384	8,112	100	488
German.....	6,230	17,322	462	1,801
Greek.....	102	408	647	2,597
Hebrew.....	804	3,144	24	183
Irish.....	4,668	15,284	123	616
Italian (north).....	116	426	297	1,548
Italian (south).....	656	2,612	1,929	6,121
Japanese.....	66	224	109	434
Korean.....		11	5	13
Lithuanian.....	46	176	23	211
Magyar.....	84	359	104	449
Mexican.....	1,860	9,021	305	1,097
Pacific Islander.....		2		1
Polish.....	365	984	211	1,418
Portuguese.....	66	246	285	1,232
Rumanian.....	30	109	148	554
Russian.....	128	361	62	272
Ruthenian (Russniak).....	76	170	3	35
Scandinavian (Norwegians, Danes, and Swedes).....	1,798	5,572	332	1,397
Scotch.....	2,780	9,101	224	886
Slovak.....	30	253	73	454
Spanish.....	54	284	245	1,181
Spanish American.....	233	1,134	124	492
Syrian.....	50	165	38	185
Turkish.....	9	48	21	95
Welsh.....	101	462	9	48
West Indian (except Cuban).....	36	154	80	212
Other peoples.....	30	167	32	178
Total.....	28,685	96,417	7,674	31,197
Male.....	14,348	49,581	5,605	21,490
Female.....	14,337	46,836	2,069	9,707
Under 16 years.....	4,764	16,433	370	1,602
16 to 44 years.....	21,084	70,392	5,777	23,038
45 years and over.....	2,837	9,592	1,527	6,557

TABLE 4.—ALIENS ADMITTED TO THE UNITED STATES UNDER THE IMMIGRATION ACT OF 1924, DURING OCTOBER, 1925, AND FROM JULY 1 TO OCTOBER 31, 1925, BY COUNTRY OR AREA OF BIRTH

[Quota immigrant aliens are charged to the quota; nonimmigrant and nonquota immigrant aliens are not charged to the quota]

Country or area of birth	Annual quota	Admitted					Total during October, 1925	Grand total July to October, 1925
		Quota immigrant		Nonimmigrant and nonquota immigrant				
		July to October, 1925	October, 1925	July to October, 1925	October, 1925			
Albania	100	49	7	205	55	62	254	
Andorra	100			2			2	
Austria	785	293	90	596	195	285	889	
Belgium	1 512	169	63	713	191	254	882	
Bulgaria	100	35	7	68	25	32	103	
Czechoslovakia	3,073	1,178	282	1,135	391	673	2,313	
Danzig, Free City of	228	83	24	13	6	30	96	
Denmark	1 2,789	731	203	855	233	436	1,586	
Estonia	124	41	28	35	11	39	76	
Finland	471	149	37	659	229	266	808	
France	1 3,954	1,312	381	2,729	792	1,173	4,041	
Germany	51,227	14,793	5,503	4,722	1,483	6,986	19,515	
Great Britain and Northern Ireland:								
England		4,131	1,259	10,825	2,727	3,986	14,956	
Northern Ireland		285	106	175	51	157	470	
Scotland	1 34,007	4,342	1,282	3,819	951	2,233	8,161	
Wales		432	95	464	120	215	896	
Greece	100	37	6	895	291	297	932	
Hungary	473	178	50	606	171	221	734	
Iceland	100	18	7	12	3	10	30	
Irish Free State	28,567	10,234	3,132	2,670	792	3,924	12,904	
Italy	1 3,845	1,431	347	8,831	2,480	2,827	10,262	
Latvia	142	60	26	104	31	57	164	
Liechtenstein	100	3					3	
Lithuania	344	149	45	269	83	128	418	
Luxemburg	100	28	16	50	14	30	78	
Monaco	100	1	1	5	1	2	6	
Netherlands	1 1,648	522	161	962	329	490	1,484	
Norway	6,453	1,801	476	1,118	272	748	2,919	
Poland	5,982	1,947	526	1,822	549	1,075	3,769	
Portugal	1 503	158	31	817	227	258	975	
Rumania	603	212	61	516	119	180	728	
Russia	1 2,248	635	183	1,152	326	509	1,787	
San Marino	100	2		1			3	
Spain	1 131	77	5	1,860	448	453	1,937	
Sweden	9,561	2,576	955	1,635	575	1,530	4,211	
Switzerland	2,081	569	195	1,047	347	542	1,616	
Turkey in Europe	1 100	51	11	364	99	110	415	
Yugoslavia	671	210	77	838	233	310	1,048	
Other Europe	(1)	84	23	59	15	38	143	
Total Europe	1 161,422	49,016	15,701	52,648	14,865	30,566	101,664	
Afghanistan	100							
Arabia	100	2		2			4	
Armenia	124	27	12	61	19	31	88	
Bhutan	100							
China	100	70	16	2,238	579	595	2,308	
India	100	48	12	220	54	66	268	
Iraq (Mesopotamia)	100	14	1	7	1	2	21	
Japan	100	10	4	1,871	546	550	1,881	
Muscat	100			1	1	1	1	
Nepal	100							
Palestine	100	43	10	102	20	30	145	
Persia	100	43	7	40	14	21	83	
Siam	100			8	2	2	8	
Syria	100	46	10	348	94	104	394	
Turkey in Asia	(1)	3	1	120	40	41	123	
Other Asia	(1)	78	30	89	19	49	167	
Total Asia	1,424	384	103	5,107	1,389	1,492	5,491	

¹ Annual quota for colonies, dependencies, or protectorates in other Europe, other Asia, other Africa, other Pacific, and in America, is included with the annual quota for the European country to which they belong. Quota for Turkey in Asia is included with that for Turkey in Europe.

TABLE 4.—ALIENS ADMITTED TO THE UNITED STATES UNDER THE IMMIGRATION ACT OF 1924, DURING OCTOBER, 1925, AND FROM JULY 1 TO OCTOBER 31, 1925, BY COUNTRY OR AREA OF BIRTH—Continued

Country or area of birth	Annual quota	Admitted					Grand total July to October, 1925
		Quota immigrant		Nonimmigrant and nonquota immigrant		Total during October, 1925	
		July to October, 1925	October, 1925	July to October, 1925	October, 1925		
Cameroon (British).....	100						
Cameroon (French).....	100						
Egypt.....	100	49	22	59	16	38	108
Ethiopia.....	100	1	1			1	1
Liberia.....	100	2		8			10
Morocco.....	100	3	1	8	1	2	11
Ruanda and Urundi.....	100						
South Africa.....	100	49	7	115	20	27	164
South West Africa.....	100			1	1	1	1
Tanganyika.....	100						
Togoland (British).....	100						
Togoland (French).....	100						
Other Africa.....	(1)	14	4	35	10	14	49
Total Africa.....	1,200	118	35	226	48	83	344
Australia.....	121	56	6	1,219	288	294	1,275
Nauru.....	100						
New Zealand.....	100	43	11	419	99	110	462
New Guinea.....	100						
Samoa.....	100						
Yap.....	100			1			1
Other Pacific.....	(1)	4	2	63	17	19	67
Total Pacific.....	621	103	19	1,702	404	423	1,805
Canada.....				32,469	9,372	9,372	32,469
Newfoundland.....				1,541	478	478	1,541
Mexico.....				15,597	3,342	3,342	15,597
Cuba.....				4,434	786	786	4,434
Dominican Republic.....				380	65	65	380
Haiti.....				99	11	11	99
British West Indies.....	(1)	245	70	1,976	444	514	2,221
Dutch West Indies.....	(1)	6	2	58	11	13	64
French West Indies.....	(1)	7	2	14	2	4	21
British Honduras.....	(1)	25	5	43	12	17	68
Canal Zone.....				6	1	1	6
Other Central America.....				1,287	260	260	1,287
Brazil.....				414	95	95	414
British Guiana.....	(1)	33	24	68	18	42	101
Dutch Guiana.....	(1)	2		6			8
French Guiana.....	(1)						
Other South America.....				2,060	512	512	2,060
Greenland.....	(1)			4			4
Miquelon and St. Pierre.....	(1)	4		14	3	3	18
Total America.....		322	103	60,470	15,412	15,515	60,792
Grand total all countries.....	164,667	49,943	15,961	120,153	32,118	48,079	170,096

¹ Annual quota for colonies, dependencies, or protectorates in other Europe, other Asia, other Africa, other Pacific, and in America, is included with the annual quota for the European country to which they belong. Quota for Turkey in Asia is included with that for Turkey in Europe.

² Does not include 57 Chinese aliens admitted under recent court decision, and 1 alien who arrived prior to the close of June 30, 1924, and was admitted during the current fiscal year.

TABLE 5.—ALIENS ADMITTED TO THE UNITED STATES UNDER THE IMMIGRATION ACT OF 1924, DURING OCTOBER, 1925, AND FROM JULY 1 TO OCTOBER 31, 1925, BY SPECIFIED CLASSES

Admissible classes under immigration act of 1924	Number admitted	
	October, 1925	July to October, 1925
<i>Nonimmigrants under section 3</i>		
Government officials, their families, attendants, servants, and employees.....	380	1,332
Temporary visitors for—		
Business.....	1,789	5,335
Pleasure.....	2,367	9,914
In continuous transit through the United States.....	1,340	5,999
To carry on trade under existing treaty.....	38	148
Total.....	5,914	22,728
<i>Nonquota immigrants under section 4</i>		
Wives of United States citizens.....	579	1 2,175
Children of United States citizens.....	394	1 1,338
Residents of the United States returning from a temporary visit abroad.....	9,878	33,493
Natives of Canada, Newfoundland, Mexico, Cuba, Haiti, Dominican Republic, Canal Zone, or an independent country of Central or South America.....	14,904	58,237
Their wives.....	66	1 288
Their children.....	20	1 45
Ministers of religious denominations.....	62	261
Wives of ministers.....	12	1 91
Children of ministers.....	28	1 181
Professors of colleges, academies, seminaries, or universities.....	14	100
Wives of professors.....	6	25
Children of professors.....	3	1 8
Students.....	238	1,183
Total.....	26,204	97,425
Quota immigrants under section 5 (charged to quota).....	15,961	49,943
Grand total admitted.....	48,079	170,096

Wives, and unmarried children under 18 years of age, born in quota countries.

WHAT STATE LABOR BUREAUS ARE DOING

AMONG the activities of State labor bureaus, the following, reported by the bureaus themselves, are noted in the present issue of the MONTHLY LABOR REVIEW:

Connecticut.—Report of placements by public employment offices, page 160.

Illinois.—Report of placements by public employment offices, and statistics of volume of employment in the State, pages 161 and 163.

The following table from the annual report of the Department of Labor of Illinois for the year ending June 30, 1924, shows in brief the activities of the division of factory inspection of that State for the 12 months covered by the report:

SUMMARY OF INSPECTION, JULY 1, 1923, TO JUNE 30, 1924

Laws under the provisions of which inspection is made	Number of inspections		
	Entire State	Chicago and Cook County	State outside of Cook County
Child labor law.....	65,607	40,941	24,666
Women's 10-hour law.....	28,954	16,190	12,764
Structural iron law.....	824		
Blower law.....	917	868	49
Washhouse law.....	435	361	74
Bedding law.....	1,182	527	655
Health, safety, and comfort law.....	8,163	5,863	2,300
Total, under all laws.....	106,082	164,750	140,508

¹ The totals for Chicago and Cook County and the State outside of Cook County do not include inspections under structural iron law, which are not subdivided by divisions of the State. Thus there is a discrepancy between the totals for the two divisions and the total for the entire State.

Maryland.—Statistics of volume of employment in the State, page 165.

Massachusetts.—Placement work of the public employment offices, and statistics of volume of employment, pages 161 and 166.

New York.—Changes in employment and pay roll, page 167.

Ohio.—Activities of the public employment service, page 161.

Oklahoma.—Report of placements by the public employment offices, and statistics of volume of employment in the State, pages 161 and 168.

Pennsylvania.—Placement work of the public employment offices, page 162.

South Dakota.—Report of operations under the State workmen's compensation act, page 187.

Wisconsin.—Report of the activities of the public employment service, and statistics of volume of employment in the State, pages 162 and 169.

CURRENT NOTES OF INTEREST TO LABOR

Organization of Photo-Engravers' Investment Trust ¹

THE creation of an investment trust for the purpose of securing a controlling interest in nonunion photo-engraving plants was agreed to at the 26th annual meeting of the International Photo-Engravers' Union in Cleveland, Ohio, August, 1925. The executive council of the union was authorized to organize "a common-law trust to carry out the plan."

The trustees of the proposed organization "will have the sole legal title to all property, in any part of the United States or in any foreign country, at any time held, acquired, or received by them as trustees." They may purchase, lease, or otherwise secure an interest in photo-engraving establishments with all the equipment, and are empowered to do all that is necessary and incidental to the management and operation of such establishment.

The trustees may also carry on the business of printing, job printing, engraving, publishing, lithography, and electrotyping, and may purchase or otherwise acquire patents, patent rights and privileges, trade-marks, trade names and improved or secret processes, and may sell the right to use the same after they have been acquired.

Mr. Matthew Woll, the president of the International Photo-Engravers' Union, in discussing the proposed security trust before the convention stated that it is intended that members should invest their earnings or savings in this new scheme instead of in the stock of the company with which they are temporarily employed.

New York Building Congress Plan for Recognizing Craftsmanship ²

WITH a view to stimulating interest in skilled workmanship, the New York Building Congress has adopted a plan for recognizing craftsmanship on specific building operations. It has a special committee on the subject, which has recommended that in each new building a bronze tablet should be placed, to bear the names of workers engaged in erecting the building chosen, one from each of the leading crafts, as representative of the best work and finest craft spirit. The names are selected by a representative committee, working in cooperation with the contractors, foremen, and building operatives. In making the choice, attention is paid to the quality and quantity of the work done, the spirit of cooperation and loyalty shown, and the interest of the operative in his work. Each worker who is thus selected is given a certificate of superior craftsmanship prepared by the Building Congress, his name is kept

¹ The American Photo-Engraver, Chicago, September, 1925, p. 758; and the American Labor World, New York, October, 1925, p. 37.

² Bricklayer, Mason, and Plasterer, Washington, D. C., November, 1925, pp. 250, 251.

upon an honor roll maintained at its headquarters, and thereafter his advice is to be sought when a further extension of the craftsmanship movement is contemplated.

As a means of further stressing the importance of good workmanship, it is planned to present the certificates with some ceremony, preferably at a dedication of the building upon which the workers have been engaged when chosen. On September 10, 1925, such a dedication ceremony was held for the Barclay-Vesey Building, being planned to follow upon the laying of the last brick and the setting of the last stone. Certificates were presented to a bricklayer and a stone setter who had been nominated by a secret ballot of their fellow workmen, and approved by the committee, and speeches were made by a number of prominent men, who emphasized the importance of good workmanship, especially at the present time, when there is a tendency toward "near-construction and wall paper houses." Outstanding members of the other crafts will be selected as the work proceeds.

Appointment of Royal Commission of Inquiry into the Nova Scotia Coal-mining Industry³

THE Government of Nova Scotia has appointed a royal commission to investigate the coal-mining industry of that Province. The commission is given authority to investigate the following matters:

1. (a) Income, rates of wages, hours and conditions of employment prevailing in the various classes of occupations of mine workers above and below ground; and whether and if so to what extent and by what means such income, wages, hours or conditions should be varied or revised, having regard to the best interests of the industry and those employed therein;

(b) Any inequalities between the different classes of mine workers as regards wages, hours and conditions of employment; and whether and if so to what extent any of such inequalities are unjustifiable or unfair and what remedy or remedies should be applied;

(c) Conditions affecting mine workers while in the course of their employment; and whether it is practicable to improve such conditions and if so in what manner and to what extent;

(d) The social and domestic conditions under which mine workers live; and whether it is practicable to improve such conditions and if so to what extent and in what manner and direction;

(e) The cause or causes of the constantly recurring disputes, friction and strife between the operators and their workmen.

2. (a) All factors directly or indirectly entering into the cost of production, transportation, distribution and marketing of coal and its by-products by any operator and for as many past years as said commissioners deem expedient; and whether such costs have been or are excessive and if so to what extent and for what reason or reasons;

(b) The capitalization, general financial organization and cost of management of any operator or operators and whether such capitalization, general financial organization and cost of management is or has been excessive, and if so, to what extent and in what direction such capitalization, general financial organization, and cost of management should be revised or reduced in the best interests of the industry;

(c) The possibilities of increasing the demand for coal, including its utilization as coke.

3. All such other conditions and matters whatsoever, whether of the kind hereinbefore mentioned or not, which directly or indirectly have affected or are relevant to the state or condition of the coal-mining industry in the Province, as may be deemed expedient by the commissioners.

³ Reports from American Consul General at Halifax, Nov. 2 and 12, 1925.

The members of the commission are: Sir Andrew Rae Duncan, chairman, selected by the British Government, formerly British coal controller and now chairman of the advisory committee to the Department of Mines of Great Britain; Maj. Hume Cronyn, Ontario business man, formerly member of the Canadian House of Commons; and Rev. Hugh P. MacPherson, president-rector of St. Francis Xavier University, Antigonish, Nova Scotia.

The first open session of inquiry was held on November 11, 1925.

PUBLICATIONS RELATING TO LABOR

Official—United States

ILLINOIS.—Department of Labor. *Seventh annual report, July 1, 1923, to June 30, 1924.* Springfield, 1925. *iv*, 160 pp.

A table from this report, which summarizes the work of the factory inspection division of the Illinois Department of Labor for the year ending June 30, 1924, is published on page — of this issue of the MONTHLY LABOR REVIEW.

MASSACHUSETTS.—Department of Education. *Bulletin, vol. X, No. 6: Thirty lessons in naturalization and citizenship—an outline for teachers of adult immigrants, by the Division of University Extension.* Boston, November, 1925. 77 pp.

NORTH CAROLINA.—Child Welfare Commission. *Rulings for children employed under 16 years of age. Revised and passed May 27, 1925.* Raleigh, 1925. 8 pp.

PENNSYLVANIA.—Department of Labor and Industry. *State-wide safety conference of the Department of Labor and Industry, Harrisburg, May 22, 1925.* Harrisburg, 1925. 64 pp.

The proceedings of a congress dealing with various aspects of the safety problem in the State of Pennsylvania.

PORTO RICO.—Governor. *Twenty-fourth annual report, for the fiscal year ended June 30, 1924.* Washington, 1925. *iv*, 72 pp. (U. S. H. of Rep. Doc. No. 529, 68th Cong., 2d sess.)

Data from this report are published on page 66 of this issue of the MONTHLY LABOR REVIEW.

SOUTH DAKOTA.—Industrial Department. *Eighth annual report, for the 12 months ending June 30, 1925.* [Pierre?], 1925. 49 pp.

A summary of the contents of this report is given on page 187 of the present issue of the MONTHLY LABOR REVIEW.

UNITED STATES.—Coal Commission. *Report transmitted pursuant to the act approved September 22, 1922 (public No. 347). In five parts.* Washington, 1925. [Various paging.] *Part I: Principal findings and recommendations [including index to all five parts, and recommendations for legislation]. Part II: Anthracite—detailed studies. Part III: Bituminous coal—detailed labor and engineering studies. Part IV: Bituminous coal—detailed studies of cost of production, investment, and profits. Part V: Atlas of statistical tables.* (S. Doc. No. 195, 68th Cong., 2d sess.)

The principal provisions of the act creating the United States Coal Commission were published in the MONTHLY LABOR REVIEW for November, 1922 (pp. 193, 194), and summaries of various sections of this report which appeared in mimeographed form were printed in the following issues of the REVIEW in 1923: February (pp. 36-42); August (pp. 22-26); October (pp. 18-25); November (pp. 17-24); and December (pp. 26-39).

— Department of Agriculture. *Report of the Secretary of Agriculture, 1925.* Washington, 1925. *iv*, 97 pp.

Besides material relating to purely farm matters, contains data of interest to labor on agricultural cooperation, the Government's relation to cooperative marketing, the farmer's cost of living, and price spreads in distribution.

UNITED STATES.—Department of Commerce. *Thirteenth annual report of the Secretary of Commerce, for the fiscal year ended June 30, 1925.* Washington, 1925. v. 213 pp.

According to this report, the prominent features of the year ended June 30, 1925, for the nation at large were "the high rate of production, consumption, and exports; high real wages; the absence of any consequential unemployment; continued growing efficiency in management and labor; continued expansion in application of scientific discovery in such fields as electric power and light, the gas engine, and radio."

— Bureau of Foreign and Domestic Commerce. *Statistical abstract of the United States, 1924.* Washington, 1925. xviii, 824 pp.

The sections of this report which relate to labor give statistics of prices and cost of living, wages, hours of labor, industrial accidents, vocational education, and immigration.

— Bureau of Mines. *Miners' circular 29: Misuse of flame safety lamps and dangers of mixed lights,* by L. C. Hsley. Washington, 1925. 12 pp.

This circular gives advice on the use and care of flame safety lamps in mines and gives examples of explosions which have been caused by the abuse or misuse of flame safety lamps or by the use of open lights and safety lamps in the same mine.

— Technical paper 372: *Silicosis among miners,* by R. R. Sayers. Washington, 1925. iv, 24 pp.

This is a review of the literature, including various special studies, relating to miners' phthisis. The prevalence of silicosis in the United States, Great Britain, South Africa, Australia, and New Zealand is shown, and the conditions promoting silicosis, the effects of rock dust on the lungs, and the stages of silicosis are discussed, the different stages of the disease being illustrated by reproductions of X-ray pictures. There is also an account of the different methods used in determining the quantity of dust in the air and the methods of protection against dust, including wet drilling, water sprays, water blasts, ventilation, and physical examination of the workers.

— Technical paper 388: *Coke-oven accidents in the United States during the calendar year 1924,* by William W. Adams. Washington, 1924. ii, 38 pp.

Data from this report are given on page 175 of this issue of the MONTHLY LABOR REVIEW.

— Department of Labor. *Thirteenth annual report of the Secretary of Labor, for the fiscal year ended June 30, 1925.* Washington, 1925. v, 141 pp.

This publication is summarized on page 60 of this issue of the MONTHLY LABOR REVIEW.

— Bureau of Immigration. *Annual report, fiscal year ended June 30, 1925.* Washington, 1925. v, 181 pp.

Extracts from this report are given in the summary of the thirteenth annual report of the Secretary of Labor, on page 61 of this number of the MONTHLY LABOR REVIEW.

Statistics of immigration for the fiscal year 1924-25 were published on pages 195-201 of the September, 1925, issue of the MONTHLY LABOR REVIEW.

— Bureau of Labor Statistics. *Bulletin No. 369: The use of cost-of-living figures in wage adjustments,* by Elma B. Carr. Washington, 1925. v, 506 pp.

A short description of the contents of this report is given on page 99 of this issue of the MONTHLY LABOR REVIEW.

— Bulletin No. 391: *Decisions of courts affecting labor, 1923-24,* by Lindley D. Clark and Stanley J. Tracy. Washington, 1925. xviii, 551 pp.

A short summary of this report is given on page 201 of the present issue of the MONTHLY LABOR REVIEW.

UNITED STATES.—Department of Labor. Bureau of Labor Statistics. *Bulletin No. 394: Wages and hours of labor in metalliferous mines, 1924.* Washington, 1925. iii, 34 pp.

Advance figures from this bulletin were published in the MONTHLY LABOR REVIEW for May, 1925 (pp. 77-83).

— — — *Bulletin No. 397: Building permits in the principal cities of the United States in 1924.* Washington, 1925. iii, 95 pp.

Advance figures from this report were published in MONTHLY LABOR REVIEW for June (pp. 144-159), July (pp. 173-176), and September (pp. 155-159), 1925.

— — — Bureau of Naturalization. *Annual report, fiscal year ended June 30, 1925.* Washington, 1925. 57 pp.

Some figures from the above document were published in the thirteenth annual report of the Secretary of Labor, summarized on page 61 of this issue of the MONTHLY LABOR REVIEW.

— — — Children's Bureau. *Thirteenth annual report, fiscal year ended June 30, 1925.* Washington, 1925. iii, 42 pp.

A brief résumé of the work of the Children's Bureau in 1924-25 is given in the summary of the report of the Secretary of Labor on page 61 of this issue of the MONTHLY LABOR REVIEW.

— — — Women's Bureau. *Seventh annual report, fiscal year ended June 30, 1925.* Washington, 1925. 22 pp.

A statement regarding the work of the Women's Bureau for the last fiscal year is given in the summary of the thirteenth annual report of the Secretary of Labor, on page 62 of this number of the MONTHLY LABOR REVIEW.

— — — Treasury Department. Public Health Service. *Public health bulletin No. 148: Mental hygiene with special reference to the migration of people, by Walter L. Treadway.* Washington, 1925. xii, 190 pp.

The study of migration with special reference to its bearing upon mental health was started by the Public Health Service in 1922, and this report gives the result of certain preliminary inquiries concerning immigration which may assist in the development of our immigration policy. A review is given of the evolutionary process in man as furnishing a background for an estimate of the probable effects of the intermingling of races through immigration on the mental health of the population. The development of relief organizations and the evolution of special facilities for the care of the insane and the feeble-minded; the results of 10 decades of immigration to the United States; the evolution of immigration laws; the medico-legal status of the mentally disabled immigrant; and mental diseases among foreign-born and native-born persons are among the subjects treated. There is a bibliography, and various statistical tables relating to immigration are appended.

— — — *Public health bulletin No. 150: Carbon-monoxide literature, by R. R. Sayers.* Washington, 1925. vii, 54 pp.

This is a review of the literature relating to carbon-monoxide poisoning, giving a list of places and industries in which it occurs, the symptoms, pathology, percentages dangerous to health, methods of detecting carbon monoxide in the blood and air, and treatment and prevention of poisoning from the gas. A bibliography is also given.

— — — *Public health bulletin No. 158: Proceedings of a conference to determine whether or not there is a public health question in the manufacture, distribution or use of tetraethyl lead gasoline.* Washington, 1925. vii, 116 pp.

The proceedings of the conference on the use of tetraethyl lead gasoline includes accounts of the methods of manufacture, and the mixing, distribution, and transportation of tetraethyl lead gasoline, including a paper by Dr. R. R. Sayers giving the results of an experimental study by the United States Bureau of Mines of the

toxic effects on animals of ethyl gasoline and its combustion products. The larger part of the discussion centered in the public health aspects of the use of this fuel; and the conference passed a resolution calling upon the Surgeon General of the United States Public Health Service to appoint a committee of seven recognized authorities in clinical medicine, physiology, and industrial hygiene to study the health hazard involved in the retail distribution and general use of ethyl gas and to report the results of this investigation by January 1, 1926, if possible, to a public conference called by the Public Health Service, at which labor should be represented. The resolution also stated that the conference indorsed as wise the decision of the Ethyl Gasoline Corporation to discontinue temporarily the sale of ethyl gas, and recommended that the investigation should be paid for exclusively out of public funds.

Official—Foreign Countries

GERMANY.—Reichskohlenrat. *Statistische Übersicht über die Kohlenwirtschaft im Jahre 1924*. Berlin, 1925. 63 pp.

A series of international and national statistical tables on coal production in 1924 and preceding years, published by the German National Coal Council. Some of the data shown have been reproduced in an article in the present issue of the MONTHLY LABOR REVIEW, page 125.

GREAT BRITAIN.—Foreign Office. *Papers respecting labor conditions in China. China No. 1, (1925)*. London, 1925. 130 pp. Cmd. 2442.

This report was presented to Parliament by the Secretary of State for Foreign Affairs. It contains reports on labor conditions in China furnished by consuls stationed in the various sections of China to the British Ministry of Labor.

— Industrial Fatigue Research Board. *Report No. 32: Studies in repetitive work with special reference to rest pauses*, by S. Wyatt and J. A. Fraser. London, 1925. iv, 43 pp.

This report on the effects of breaking up long periods of light repetitive work by short rest pauses is based on observation of 16 workers in 3 processes over periods of 15 weeks. The operations studied were handkerchief folding, hand-ironing the folded handkerchiefs, and stamping out cigarette-tin lids on stamping presses. A comparison of the results obtained in the three processes shows that the introduction of rest pauses resulted in a distinct increase in the rate of working. In handkerchief folding the total output of the workers increased 2.3 per cent, in handkerchief ironing, 1.6 per cent, and in the morning spell of the stamping process 0.7 per cent, with a decrease, however, of 2.7 per cent in the afternoon work. In the latter process, though, the results of the introduction of rest periods were affected by the fact that there were frequent enforced stoppages of work. A comparison of the results following a regular rest period of 10 minutes and enforced and irregular stoppages due to conditions of the work amounting to the same length of time show that the expected rest is superior in its effects. In addition to the general improvement in the output following the introduction of a 10-minute rest period in each spell of work the study demonstrated that it resulted in increased contentment and satisfaction on the part of the operatives.

— Registry of Friendly Societies. *Report for the year 1924. Part 2: Appendix*. London, 1925.

A complete list of the societies registered under the friendly societies act on December 31, 1924, with particulars as to members, funds, and valuation. The appendix is published in eight sections, of which six deal with different parts of England, one with Wales, and one with Scotland.

— — — *Part 5: Building societies*. London, 1925. ii, 60 pp.

Some data from this report are given on page 212 of this issue of the MONTHLY LABOR REVIEW.

GREAT BRITAIN.—Royal Commission on National Health Insurance. *Minutes of evidence taken before commission. Vol. II, thirteenth to twenty-third days; Vol. III, twenty-fourth to thirty-fourth days.* London, 1925. [Various paging.]

— — — — *Appendix, Part III: Statements submitted by certain approved societies, medical associations, representative bodies, etc.* London, 1925. [Various paging.]

ITALY.—Ministero dell'Economia Nazionale. Direzione Generale della Statistica. *Annuario statistico Italiano, 1919-1921. Seconda serie, Vol. VIII. Indici economici fino al 1924.* Rome, 1925. iii, 526 pp.

Statistical yearbook of Italy for the years 1919 to 1921, published by the Italian Statistical Office. In an appendix are given certain economic indexes for the period 1881 to 1924. Of special interest to labor are the statistics on emigration, sickness and mortality among railroad employees, trade schools, production in various industry groups, wholesale and retail prices, cost of living, chambers of labor, trade-unions, strikes and lockouts, unemployment, employment exchanges, industrial courts, and social insurance.

NORWAY.—[Departementet for Sociale Saker.] Riksforsikringsanstalten. *Sykeforsikringen for året 1924.* Oslo, 1925. [6], 83 pp. *Norges offisielle statistikk, VII, 180.*

Annual report by the State Insurance Institution of Norway on sickness insurance in that country in 1924. Sickness insurance is compulsory, with opportunity for voluntary insurance offered under certain conditions.

— — — — Statistiske Centralbyrå. *Megling og voldgift. Tariffavtaler og arbeidskonflikter.* Oslo, 1925. 28*, 48 pp. *Norges offisielle statistikk, VII, 177.*

Report by the Central Statistical Bureau of Norway on conciliation and arbitration, collective agreements, and labor disputes in that country in 1924. Figures from this report appear on pages 143 and 248 of this issue of the MONTHLY LABOR REVIEW.

SWEDEN.—[Socialdepartementet.] Socialstyrelsen. *Arbetartillgång, arbetstid och arbetslön inom sveriges jordbruk år 1924. Jämte specialundersökning rörande vissa arbets- och löneförhållanden för betodlingsarbetare i Skåne.* Stockholm, 1925. 77 pp.

Data from this report are given on page 124 of this issue of the MONTHLY LABOR REVIEW.

— — — — *Arbetsinställelser och kollektivavtal samt förlikningsmännens verksamhet år 1924.* Stockholm, 1925. 177 pp.

Report by the Swedish Social Board on labor disputes, collective agreements, and activities of the conciliators in Sweden in 1924. For brief extracts from this report see page 249 of this issue of the MONTHLY LABOR REVIEW.

— — — — *Hyresräkningen år 1924. Del I. Hyresförhållandena m. m.* Stockholm, 1925. 68 pp.

The Social Board of Sweden (*Socialstyrelsen*) when taking the census made a housing survey for certain localities (220) in Sweden in 1924, the results of which with respect to rents appear in this report. Data as to dwellings and number of persons occupying them will follow in a later report.

The report contains a résumé in French.

UNION OF SOUTH AFRICA.—Department of Mines and Industries. *Annual reports of the secretary for mines and industries and the Government mining engineer for the calendar year ended December 31, 1924.* Pretoria, 1925. [Various paging.] 29 tables.

Some data from this report will be found on page 67 of this issue of the MONTHLY LABOR REVIEW.

Unofficial

AMERICAN ACADEMY OF POLITICAL AND SOCIAL SCIENCE. *The Annals*, Vol. CXXII, No. 211: *The Far East*. Philadelphia, November, 1925. v, 277 pp.

Data on living conditions in China, taken from this volume, are published on page 109 of this issue of the MONTHLY LABOR REVIEW.

AMERICAN FEDERATION OF LABOR. New York branch. *Official book. Proceedings of the sixty-second annual convention, at Syracuse, August 25-27, 1925*. Albany, 1925. 216 pp.

The adopted report of the legislative committee to this convention recommended, among other measures, the ratification of the Federal child labor amendment, an exclusive State insurance fund for workmen's compensation, the prohibition of injunctions in industrial controversies unless such injunctions be "authorized by a verdict after trial of the facts before a judge and a jury," and a 48-hour week for women and minors in gainful occupations.

The joint report of the insurance committee of the New York State Federation of Labor and the Central Trades and Labor Council of Greater New York and vicinity is of special interest.

ANTHRACITE BOARD OF CONCILIATION. *Report*. Vol. X. 1925. xv, 207 pp. Vol. XI. [1925?] xii, 155 pp. Vol. XIII. [1925?] xv, 204 pp. Wilkes-Barre, Pa.

BROTHERHOOD OF RAILWAY CARMEN OF AMERICA. *Proceedings of the fifteenth convention, Kansas City, Mo., September 14-28, 1925*. Kansas City, Mo., 1925. 529 pp.

Among the numerous subjects discussed at the convention were the following: Brotherhood cooperative banking, progressive political action, the strike of July, 1922, a trade-union insurance company, and the brotherhood and union-management cooperation.

CHADDOCK, ROBERT E. *Principles and methods of statistics*. Boston, Houghton, Mifflin Co., 1925. xvi, 471 pp.

This volume is designed to present the elementary principles of statistics both from the standpoint of assembling the data and of sifting evidence. The book is divided into three sections, covering, in Part I, a preliminary review of the subject, including misuses of statistical data and statistics in the service of science; in Part II, the classification and description of mass data; and in Part III, the gathering and presentation of statistical data.

COMITÉ CENTRAL DES ALLOCATIONS FAMILIALES. *V^me congrès national des allocations familiales, Rouen-Le Havre, Juin 8 au 10, 1925*. Compte rendu. Lille, 1925. 224 pp.

The subjects of some of the principal addresses at the fifth National Congress on Family Allowances were as follows: The social institutions of the Lower Seine; the social action of funds for family allowances—new realizations; family allowances in agriculture; vacation colonies; and vacation camps.

CRAIG, DAVID R. *The economic condition of the printing industry in New York City—a wage arbitration study of the book and job branch*. New York, New York Employing Printers' Association, 1925. ix, 76 pp.

Since 1907 arbitration has been the established procedure for settling wage disputes in the book and job branch of the New York printing industry. Since 1919 one of the factors to be considered by the arbitrator has been the economic condition of the industry. This, however, has not been easy to determine, as "no systematic analysis had been made of the existing information" and the parties' statements are said to have rarely been based upon fact. The present study is an attempt to supply the need for a more solid foundation of fact, and covers fluctuations of production, employment, sales, pay roll, overhead costs, total costs, and profits.

FOSTER, WILLIAM T., AND CATCHINGS, WADDILL. *Profits. Boston, Houghton Mifflin Co., 1925. xxii, 465 pp.*

The introduction of this volume contains a general statement of the economic problem and a discussion of the results of the profit motive in developing industry, the various kinds of income, and the various sources of profits. Other phases of the subject dealt with are the necessity of profits and losses, the amount and distribution of profits, the functions of prices and profits, and money and profits in relation to consumption. The appendix contains notes to all the chapters, and various statistical tables.

GOODRICH, CARTER. *The miner's freedom—a study of the working life in a changing industry. Boston, Marshall Jones Co., 1925. xi, 189 pp.*

The "freedom" under discussion developed from the old-time conditions of mining, under which coal getting was largely an individual job depending upon the skill and knowledge of the miner, who from the nature of his work enjoyed a larger measure of independence and personal responsibility than was permitted to the worker in some form of mass production. The introduction of machinery threatens this freedom, and the author's question is whether the advantages of machine production can not be secured without reducing the miner's work to the monotonous routine of the factory hand. This can not be done, he states, without a realization of the full import of the change that is going on and a deliberate effort to preserve the opportunity offered under the old system for the worker to make his job a real and important part of his life, instead of merely a means of earning a livelihood.

HAMILTON, WALTON H., AND WRIGHT, HELEN R. *The case of bituminous coal. New York, Macmillan Co., 1925. xi, 310 pp.*

The authors give an analysis of the situation in regard to the production of bituminous coal, comparing the actual results with those which the working of the competitive system is expected to produce, and showing the confusion which prevails in the production, transportation, and sale of bituminous coal, which is the chief source of manufacturing power, and therefore absolutely basic. An examination is made of the hopes for improvement held out by such plans as greater unification, greater efficiency in the individual mine, the mechanization of the industry, and the like, and some of the causes militating against the success of each of these are given. The authors do not attempt to forecast the solution of the problem, but point out its exceeding difficulty, due largely to the fact that "a solution must make terms with an established system buttressed about with hoary traditions." Because of this fact the observer sees little but confusion in the industry.

He sees a clash of vested interests in which operators, mine workers, and consumers alike refuse to surrender current advantages for the greater promises of a nebulous afterwhile. He sees an array of vested rights compelling individuals to do as they will with their own even though their blind doings return to plague their authors. He sees the chance of action by all concerned with coal pent in by the laws of the land which make a unified direction of the industry impossible. He sees a bewildering ignorance of the larger situation and a confusing abundance of fearless and ill-informed advice. He sees an inertia which rejects the new for the reason that it is the new, and clings blindly to the old because it is the customary. And, permeating it all, as the creator and the created of all the rest, he discovers the strange notions, the obsolete thoughts, the confused ideas which thwart vision, promote disorder, and hold a chaotic industry as in a vise. He wonders if it can be that vested chaos, like established order, creates in men's minds a defensive scheme of thought which makes its overthrow impossible.

[INTERNATIONAL UNION OF WOODWORKERS.] *Working conditions for woodworkers in various countries—the position on October 1, 1924. [Amsterdam, 1925?] 13 pp.*

Data from this report are reproduced on page 113 of this issue of the MONTHLY LABOR REVIEW.

JONES, EDWARD D. *The administration of industrial enterprises, with special reference to factory practice.* New York, Longmans, Green & Co., 1925. v, 618 pp. Revised edition.

Some of the subjects covered in this volume are the general principles of business administration; scientific management; employment management, including materials on mental tests, trade tests, job analyses, and rating scales; an analysis of the elements involved in wage bargaining, and wage-payment plans; and a discussion of recent studies of fatigue.

KOBE (JAPAN) HIGHER COMMERCIAL SCHOOL. Institute for Commercial Research. *The second annual bulletin of the financial and economic statistics of Japan (1913-1924).* Kobe, 1925. [Various paging.]

In addition to financial statistics of Japan the yearbook contains index numbers of wholesale prices and of the average monthly wages in Tokio and Osaka.

MCMAHON, THERESA S. *Social and economic standards of living.* New York, D. C. Heath & Co., 1925. vi, 420 pp.

This is a historical and analytical study of the development of social and economic standards of living in Europe and in the United States. It includes consideration of the immigrant and his standard of living, wages and standards of living, American rural standards, feminine living standards, the evolution of social classes in Europe and in the United States, and the democratization of American standards of living.

METROPOLITAN LIFE INSURANCE CO. Policyholders' Service Bureau. *Methods of compensation No. 3: Methods of paying factory workers.* New York, 1925. 15 pp.

This pamphlet gives examples of methods of paying factory workers which are in force in different companies, including the group payment plan, and various individual incentive plans.

MINE INSPECTORS' INSTITUTE OF AMERICA. *Proceedings, Peoria, Ill., May, 1925.* [Hartford, Conn.?], 1925. 105 pp.

The proceedings of the 16th annual meeting of the Mine Inspectors' Institute of America contains papers relating to causes and prevention of accidents and rock-dusting legislation and regulations in coal mines.

NATIONAL ASSOCIATION OF MANUFACTURERS OF THE UNITED STATES OF AMERICA. *Labor conditions in England, by Noel Sargent.* New York, 50 Church St. [1925?]. 11 pp.

NATIONAL BUREAU OF ECONOMIC RESEARCH (INC.). *Publication No. 7: Income in the various States, its sources and distribution, 1919, 1920, and 1921, by Maurice Leven.* New York, 1925. 306 pp.

This study of the sources and distribution of income is based upon estimates of the national totals, by Willford I. King. The distribution by States includes over 50 items entering into the income of the American people. In the summary the total income from all sources received by individuals in each State is shown for the years 1919, 1920, and 1921, at its current value, and also at its purchasing value based on the purchasing value of the dollar in 1913. The share of the farm population in the total net income is also shown, the per capita current income in each State for the nonfarm population and for the farm population, and the income of the bulk of the people for specified income classes, excluding incomes of \$10,000 or over.

NATIONAL INDUSTRIAL CONFERENCE BOARD (INC.). *Industrial pensions in the United States.* New York, 247 Park Avenue, 1925. xiii, 157 pp.

This study covers the results of operation of 248 pension plans established by industrial firms or corporations in this country. An account is given of types of plans, costs and amounts of pensions and methods of financing the plans, together with a statement of the attitude of employees and of labor organizations. The

second part of the book gives suggestions regarding the organization and administration of pension systems. A list of the companies scheduled is given in the appendix.

RUSSELL SAGE FOUNDATION LIBRARY. *Bulletin No. 73: Cooperative housing [a selected bibliography].* New York, 130 East Twenty-second St., October, 1925. 3 pp.

SHIN, TAKU. *Industrial conditions among women in China. An address to the International Congress of Working Women, August, 1923, in Vienna.* London, International Federation of Working Women, 32 Eccleston Square, S. W. 1, [1923?]. 11 pp.

This is a brief résumé of working and living conditions of working women in China.

SOMMERFELDT, W. P. *Norsk tidsskriftindex, 1923. Systematisk fortegnelse over innholdet av 202 Norske periodiske skrifter. Sjette årgang. Utgitt med støtte av den Norske interparlamentariske gruppe.* Christiania, Steenske Forlag, 1924. xxv, 160 pp.

Catalogue of contents of 202 Norwegian periodicals, some of which cover the labor field. This is the sixth year of publication.

STANFORD UNIVERSITY. Food Research Institute. *Miscellaneous publication No. 2: The American baking industry, 1849-1923, as shown in the census reports, by Hazel Kyrk and Joseph Stancliffe Davis.* Stanford University, Calif., 1925. ix, 108 pp.

In the summary of this study it is stated that both salaries and wages in the baking industry have increased greatly since 1914 and wages have advanced relatively much more than salaries. This may be said of manufactures in general, but "wages in the bread-baking branch of the industry in particular have risen in a greater degree than in all manufacturing industries." The baking industry also has a shorter working-day than the manufactures in general.

STODDARD, LOTHROP. *Social classes in postwar Europe.* New York, Charles Scribner's Sons, 1925. vii, 178 pp.

A comparative survey of the various social classes making up the population of the different countries of Europe, both within the classes themselves and in their relations to each other.

UNIVERSITY DEBATERS' ANNUAL. *Construction and rebuttal speeches delivered in debates of American colleges and universities during the college year 1924-25.* Edited by Edith M. Phelps. New York, H. W. Wilson Co., 1925. ix, 416 pp.

Among the eight debates included in this volume two relate to labor problems—those on Japanese exclusion and child labor.

XARDEL, NICOLE. *Le mouvement d'hygiène industrielle.* Aix-en-Provence, Imprimerie d'Éditions Paul Roubaud, 1925. xvi, 355 pp.

The first section of this work on industrial hygiene gives a historical review of the development of the movement; the second part treats of industrial fatigue, its causes and remedies, the industrial diseases and industrial accidents; and the third part gives a résumé of the accomplishments in industrial hygiene in France, the United States, Great Britain, and Italy, and the international aspect of the question. A bibliography is appended.



