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Contents.

Special articles:	Page.
Industrial rehabilitation in Oregon, by Will T. Kirk, member, Oregon State Industrial Accident Commission.....	1-8
Wage adjustments in California oil fields, by E. P. Marsh, member, President's Mediation Commission.....	9-23
Industrial relations:	
Report of Federal Electric Railways Commission.....	24-28
Prices and cost of living:	
Retail prices of food in the United States.....	29-51
Retail prices of coal in the United States.....	52-55
Retail prices of dry goods in the United States.....	56-59
Index numbers of wholesale prices in the United States.....	59-62
Comparison of retail-price changes in the United States and foreign countries.....	62-64
Changes in cost of living in the United States, 1913 to June, 1920.....	65
Changes in cost of living in the District of Columbia.....	65, 66
Summary of important facts relating to production and prices of commodities.....	66-68
Government control over prices.....	68-71
Increase in cost of weekly family budget in Canada, 1913 to 1920.....	71
Retail price changes in Great Britain.....	72, 73
Retail price regulation in Lima, Peru.....	73, 74
Wages and hours of labor:	
Changes in union scale of wages and hours of labor, 1913 to 1920.....	75-92
Award of the Anthracite Coal Commission and resultant wage rates.....	92-109
New wage schedule for navy yard employees.....	109-112
Rate of wages per hour in the building trades, May, 1920.....	112-119
Prevailing hourly wage scale in the building trades on August 31, 1920..	120, 121
Minimum scale of wages in the building trades on 8-hour basis.....	120-125
Increase in wages of longshoremen on coastwise piers.....	126
Earnings of time workers and pieceworkers in the men's clothing industry of the Boston market.....	126, 127
Some factors affecting the relation between hours and output in Great Britain.....	127-131
Wages of steel workers in Newcastle, Australia.....	131, 132
Wages and hours of labor in Lyon, France.....	132-134
Recent collective agreements and wage awards in Germany. Compiled by Alfred Maylander.....	135-145
Wages in Italy, 1914 to 1919.....	146-150
Minimum wage:	
New minimum wage in the mercantile industry, Fort Smith, Ark.....	151
Recent minimum wage determinations by New South Wales Board of Trade.....	152
Cooperation:	
Comparative study of the cooperative movement in various countries, by Florence E. Parker.....	153-167
Employees' representation:	
Self-government in the building industry in Great Britain.....	168-173
Employment and unemployment:	
Employment in selected industries, August, 1920.....	174-176
Report of employment exchanges in the United Kingdom.....	177
Resettlement and unemployment in the United Kingdom.....	178, 179

	Page.
Employment and unemployment—Concluded.	
Volume of employment in the United Kingdom in August 19, 20.....	179, 180
Large increase in number of British Government employees in 1920 compared with 1914.....	181
Unemployment and unemployment relief in Germany.....	181-183
Industrial medicine:	
Ideals in the organization of an industrial medical service.....	184
Workmen's compensation:	
Workmen's compensation legislation of 1920.....	185-191
Statement of Ohio State insurance fund as of December 31, 1919.....	191, 192
Economic situation of the German workmen's insurance institutes.....	192, 193
Seamen's insurance against accidents on the sea, Spain.....	193
Labor laws and decisions:	
Deportation of aliens for membership in unlawful organizations.....	194-201
Right of labor organizations to erect houses for discharged members.....	201, 202
Constitutionality of the minimum wage law of Washington.....	202
Right of workmen to sue for interference with employment.....	202, 203
Wage agreements of railroad employees contravening the Adamson law..	203, 204
Effect of collective agreements on individual labor contracts.....	204, 205
Injunctions as affected by the Clayton Act.....	205-207
New works council act of Norway.....	207, 208
Labor organizations:	
Second International Labor conference, Genoa.....	209-211
International conference of seafarers at Genoa.....	211, 212
International miners' congress at Geneva.....	212-214
International Association of Printing House Craftsmen.....	214, 215
Growth of International Seamen's Union of America.....	215
Sheet-metal workers' school at Shawnee, Okla.....	215
Philippine labor congress.....	215
Czecho-Slovak trade-union movement, 1919.....	215, 216
Formation of national union of commercial workers in South Africa.....	216
Strikes and lockouts:	
Strikes and lockouts in the United States, April, May, and June, 1920..	217-221
Australian civil-service strike.....	221
What State labor bureaus are doing:	
State commissions for the study and revision of child welfare laws.....	222
Labor camps in California.....	222-224
Work of employment service in North Carolina.....	224
Number of employees in South Carolina cotton mills in 1919 and 1920..	224, 225
Survey of manufacturing industry in the State of Washington.....	225, 226
Current notes of interest to labor:	
Labor cost of making brooms.....	227
Cooperative research plans of American Sociological Society.....	227, 228
Labor questions as topics of theses of university students.....	228, 229
Publication of "Month's Work" discontinued by British Ministry of Labor.	229
Settlement of soldiers on the land in Australia.....	229, 230
National vocational schools in France.....	230
Trade-union boycott of Hungary discontinued.....	230
Government aid to industrial reconstruction in Roumania.....	231, 232
Central Board of Mobilization of Civil Industries in Spain.....	232, 233
Publications relating to labor:	
Official—United States.....	234, 235
Official—foreign countries.....	235-238
Unofficial.....	238-249

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Industrial Rehabilitation in Oregon.¹

By WILL T. KIRK, MEMBER, OREGON STATE INDUSTRIAL ACCIDENT ASSOCIATION.

IN APPROACHING the subject of industrial rehabilitation in Oregon, which has been assigned to me, I appreciate the fact that I am entering a new field of endeavor on the part of the industrial accident commissions and our opinions of to-day may be changed by our experiences of to-morrow. In fact, we entered upon this work in Oregon with very few preconceived notions and were free to form our opinions as we progressed in experience.

Industrial rehabilitation had a very happy inception in our State. In the fall of 1919, when the cost of living was daily proceeding on its flight to the skies, our commission was in receipt of letters from many claimants protesting against the inadequacy of the compensation payments. The matter was taken up with the governor, who decided to call a special session of the legislature to meet the situation. A committee of 15 was appointed to make recommendations to the legislature. This committee consisted of five men selected by the employers' organization, five selected by the State Federation of Labor, and five selected by the governor to represent the State at large.

When this committee met it easily disposed of the main question by recommending a flat increase of 30 per cent in all compensation payments. A member of the labor group then proposed a law providing for the vocational rehabilitation of industrial cripples. His proposal met with the unanimous support of the committee. A bill was drafted and presented to the legislature, which passed it without a dissenting vote. This bill authorized the industrial accident commission to set aside from its funds the sum of \$100,000 for the purposes of the act and to add to that fund 2½ per cent of its monthly income. The bill is very brief, consisting of five short paragraphs, and gives the commission broad powers to formulate its own rules and regulations for the vocational rehabilitation of the men coming under its jurisdiction.

Employers and Workers Cooperate.

WITH such a favorable beginning and with no strings attached to hinder our operations, if the commission does not make a success of the undertaking it will not be due to fault of the law. The same unanimous support which was given the law at the beginning

¹Paper prepared for seventh annual meeting of the International Association of Industrial Accident Boards and Commissions, held at San Francisco, Calif., Sept. 20-24, 1920.

has been shown throughout our brief experience. We have had occasion to go to the employers for cooperation, and have met with a favorable response every time. We have gone to the labor organizations for help and have received the same friendly support.

As this work is new to nearly all of us, I feel justified in discussing details of organization and procedure which otherwise might be tiresome. My purpose is to discuss points which will interest those who want to see the inside, who want to get a close-up view of what we are trying to do. It is such points which interest me when I have opportunity to gather information about the work of other commissions.

The Oregon Commission has its work segregated in three departments. One department takes care of the auditing, bookkeeping, and the work connected with the collection of the contributions to the industrial accident fund, as our State has an exclusive State fund. Another department takes care of the claims for compensation, and the third department handles the statistical work. Our commission has three members, so each commissioner is assigned to a department in which he specializes. The commission as a whole retains full jurisdiction and control over the work of all departments, but with each commissioner giving especial attention to the work of his own department we find the work is more closely supervised than it could be if all three commissioners were trying to direct all three departments.

All Red Tape Cut Out.

THE work of vocational rehabilitation naturally fell to the claim department and became the subject of my particular study. My previous experience in the newspaper field taught me the value of simplicity and direct methods and gave me a lasting prejudice against anything which resembles "red tape." So you will find no red tape connected with our vocational rehabilitation work. We have sought simplicity, and our experience proves beyond doubt that it pays. We did not begin the job by devising a multiplicity of forms and blanks and reports and other material that would bewilder the minds of the men we sought to aid and make them think they were being invited into a mesh from which they might never become extricated. We prepared a simple questionnaire and forwarded it to the men we deemed eligible for consideration for retraining. This questionnaire contained no complicated questions, but could be easily filled out by a boy in the fifth grade at the public schools. No other forms or blanks were prepared in advance, as we decided it would be better to await until the need arose and then prepare the form that would fit the exact need. This method of procedure has caused no delays in our work and has enabled us to adhere to our plan of simplicity.

After the questionnaires were sent out we employed Prof. Frank H. Shepherd, head of the department of industrial education at the Oregon Agricultural College, as director and adviser for the men. We were extremely fortunate in securing the services of a man who has had such a varied experience as Prof. Shepherd in trades and industries. He is a genius in his line and we are glad to give him much credit for the smooth manner in which the work is progressing.

Our vocational rehabilitation law became effective January 17, 1920. On March 8 the first group of men were assigned to courses in vocational schools, and at least one man entered school March 9. You will see by this that no time was consumed in winding or unwinding red tape. After the return of the questionnaires our practice has been to fix a day for interviewing and advising with the men. An appointment is made for each half hour of the day, and the men are cautioned to be prompt. At first a considerable percentage of the men did not respond to our appointments, but now that they have begun to find out the work the commission is doing we nearly always have full and prompt attendance. The commission reimburses them for their traveling expenses. Prof. Shepherd and I sit down with each man and discuss with him his individual problems, relating to his physical handicap, his family situation, his past experiences as a worker, and his desires and inclinations under the conditions now confronting him. Without fail we endeavor to lead him to make his own choice of a new vocation, pointing out to him the advisability of using his past experience, if possible, as a foundation upon which to build.

Handicapped Men Make Own Choice.

ONE case will illustrate the futility of persuading a man to undertake training in a trade for which he has no liking. This young man, who was injured while employed in a logging camp, had been a soldier and spent some time in the Hawaiian Islands, where he became infatuated with the music of the steel guitar. He wanted to study music. We did not enthuse over his suggestions and discussed vocations which we thought were more practical. He could not make up his mind, so we suggested that he talk the matter over with his parents, as he was a young fellow in the twenties and not married. He returned later, saying he had decided to go in for auto mechanics. We entered him in an automobile school and assumed that his problem was settled. A week later he called at the office with a decidedly worried look on his face. Inquiry brought out the fact that he had attended school four days.

"I don't like that work," he said, "but I want to do what you folks think is right, and, if you say so, I will go through with it. I think of the music, and that is what I like."

We told him that a good musician was much more to be desired than a poor auto mechanic, and that we would make some inquiries as to the prospects in the field of music. I might add that because of his injuries he could not raise his arms to a level, so there was considerable limitation as to the trades he might take up. But aside from this, his infatuation for music was genuine. Our inquiries convinced us that it would be practical for him to take up the study of the steel guitar with the idea of becoming a demonstrator of stringed instruments in a music house, and we approved a course in music for him. He is now putting in eight hours a day on his music and is making good progress. We believe at the end of a year he will be prepared to earn his living as a musician, and of course his earning power will increase as he acquires more skill with the instrument. If he had taken a course in auto mechanics at a dozen trade schools he no doubt would still have made a failure

as a mechanic because of his dislike for the work. I asked him why he decided to take up auto mechanics in the first place and he said his father had persuaded him that it would be better than devoting his time to music. He said his father did not believe a man could make a financial success in life in any business in which he did not have to use arithmetic, and he was opposed to a musical career.

Employer Helps Solve Problem.

ONE of the most difficult cases we have had from the standpoint of feeling confident that a proper course has been mapped out for a man's successful retraining was included in the first group we interviewed. He is less than 30 years old and lost his right arm in a boiler explosion in a lumber camp. He had always worked in the woods and the mills, and was unusually timid when associating with men outside of his customary environment. In one of the questions on his questionnaire he was asked to give his first and second preferences for a new vocation. The question was left unanswered. I saw him incidentally before the time set for his formal interview and sought to draw out of him some idea of his plans and ideas for the future. So far as I could learn, he absolutely had none. He seemed to be still dazed from the shock of his misfortune. His employer had shown a keen interest in the young man's welfare, so I invited him to be present with Prof. Shepherd at the time of our interview. The employer came and was of material assistance in planning for the man's future, because the young man himself was like clay in our hands, ready to be molded into any form we might think best. But behind his timidity and apparent lack of ability to make a decision for himself he showed a bright mind and mental capacity.

"Tom has always worked around machinery," the employer said, "and I think he should stick to machinery now. When I go to buy a piece of machinery I can do business much more satisfactorily with a salesman who knows all about the machine than I can with one who does not know the machine, and who can not explain about the various parts of the machine or answer my questions. As Tom knows machinery, I believe he could make a machinery salesman out of himself."

Tom agreed to do his best. The next day he entered a business college in Portland and will put in seven months on a commercial and banking course. This is preliminary work, giving him some knowledge of business customs and procedure and practices. This fall he is to enter the Oregon Agricultural College to take a special course in machinery and salesmanship. We estimate that it will take about 18 months to complete his retraining and prepare him for a new job. We reminded him of his timidity and pointed out that it would be necessary for him to overcome it. His employer purchased for him a membership in the Y. M. C. A. and advised him to mingle with men as much as possible. When later he enters the vocational department of the agricultural college we plan to obtain living quarters for him in a clubhouse, where he will be thrown into intimate contact with other students. At this time, of course, we can not say

what the final outcome will be, but the young man is making good progress in his work at the business college. Prof. Shepherd keeps in weekly touch with him and all the other men who are now taking vocational training courses and helps them over any difficulties which arise.

No Beaten Paths to Follow.

THERE are no beaten paths to follow, and no two men present the same problems. All seem different, and if a vocational rehabilitation law is to meet the situation, those administering it must indeed have authority to devise their own plans for meeting each new situation as it arises. A case in point is that of a young Scandinavian whose back was broken in a shipyard accident. He is paralyzed from the waist down and has lain on a cot in a Portland hospital for 16 months. His attending physician had given up hope of doing anything beneficial for him. He was left to lie on his back or ride in a wheel chair the rest of his life. We sought relatives or friends who might make a home for him, but he had none, and the commission is still paying his hospital bills. Prof. Shepherd and I went out to talk vocational training to him. Before we could interest him in the subject he wanted our assurance that we would have something done for him that would make it possible for him to walk with the aid of crutches. He said if he could only walk with crutches he could do something for himself.

I sent the surgeon who has supervision of the Portland branch of our physiotherapy department out to the hospital to see the young man. After a thorough examination he decided that it would be worth while to make an effort to restore some function to the lower limbs. We are now sending to the hospital each morning a trained physiotherapist who is giving the man daily massage and manipulative treatments. These treatments have been going on for three months and the nurse is very much encouraged. She believes that she will get the man on crutches.

After the treatments were begun the man became much interested in vocational training, and as a result of his talks with Prof. Shepherd and a study of the reading matter furnished him he selected mechanical drawing, drafting, and designing as a profession he could master. In order that he might take up the work at once under as favorable circumstances as possible we had a specially designed table built to fit over his wheel chair. He was provided with instruments and material and Prof. Shepherd is the instructor. When he gets a little farther along we will arrange for an experienced instructor in that line of work to give and supervise his lessons; and when he can get around better he will be in position to take up a complete course in mechanical drawing, drafting, and designing. There is no question about him becoming a competent draftsman, and we are hoping that we will be equally successful in putting him on his feet with the aid of crutches. If nothing else is accomplished we will feel that a great work has been done under the Oregon rehabilitation law.

Some of the hard nuts to crack are found in solving the problems of injured men who have had no schooling. We have one man who was barely able to read and write and count his money, when he re-

ceived an injury while employed as a sheet-metal worker, which left his wife and five small children in a precarious financial condition. He will never return to manual labor. Our solution for his case was to give him sufficient education to enable him to hold down a job as storekeeper, checker, or timekeeper. As his fellow employees displayed an interest in him we conferred with the chairman of the shop committee, who was in position to speak for the employer in this instance, and were told that a job as timekeeper or storekeeper would be open for him as soon as he was fitted for it. We took the case up with the business college and arranged for a special tutor to give the man instruction in English and arithmetic and the rudiments of bookkeeping, with the object in view of fitting him for the particular job we have in mind. The man began his studies at the school the next day and he will make good.

Uses Existing Trade Schools.

IN CARRYING on this work the commission is using the facilities at hand. We are using the vocational and trade schools now established in the State when they offer the course that meets the needs of the particular man, and when they do not we go out into the industries and find a place where the man can get the training he wants, or, as in the broken-back case cited before, we make such special arrangements as will meet the situation. Our purpose is to put the job over and we are not particular about the instrumentalities used so long as the handicapped individual gets the training which will fit him for earning a living for himself and dependents. We have had the heartiest cooperation from the trade and vocational schools and so far have had but little difficulty in finding means for providing the training desired. A man with a badly crushed leg wanted to learn the trade of a vulcanizer, and there is no school in our State giving such instruction. I placed him as an apprentice in a large vulcanizing shop in Salem and he has learned the trade. While he was learning the trade he drew no wages from his employer and we provided for his living expenses.

Every case emphasizes the point I have endeavored to make, that it is necessary to consider the problems of each man separately. The whole procedure should be as simple as possible, so the men will feel that you have a real interest in their welfare and possess a sincere desire to help them. In practically every case the questions involved are definitely settled and the man so advised at the time of our interview. This makes it possible for those who desire to enter upon their vocational course immediately after they have made a decision. We encourage the men to bring their problems to us and permit us to advise with them and help them solve them.

At this time our experience is too young to enable us to discuss results, but I can safely say that if nothing more had been done than to put new hope in the hearts of discouraged men and to restore courage to wives and other dependents, the expenditure of \$100,000 originally set aside in Oregon for the vocational retraining of handicapped men would have been well worth while. Men whose future outlook was discouraging indeed are now filled with new life, enthu-

siastic in their work, and determined to overcome their physical handicap by thorough preparation of earning power for the future. The actual cost to the State so far has been comparatively little and our original fund of \$100,000 is constantly growing bigger.

Financial Aid Extended.

UP TO July 1 we had sent questionnaires to 236 men who were eligible for retraining. Replies were received in all but 62 cases. We interviewed and finalized without action 41 cases. In 62 cases the questionnaires revealed that aid from the commission was either not needed or not desired. Twenty-one men we placed were still attending vocational schools. One man had completed his school course. Two men dropped out of school before completing their courses. Twenty-one men were preparing to enter school this fall, and 26 cases were pending.

When a man takes up a vocational course our commission not only pays his tuition and other school costs, but also provides for the living expenses of himself and dependents. Practically all the men are drawing compensation for permanent partial disabilities at the rate of \$32.50 per month. To this the commission adds the following amounts:

Single man, \$30; total, \$62.50 per month.

Man with wife, \$55; total, \$87.50 per month.

Man with wife and one child, \$60; total, \$92.50 per month.

Man with wife and two or more children, \$70; total, \$97.50 per month.

If it is necessary for the man to live apart from his family during the time he is in training, the above amounts are increased until a maximum of \$112.50 per month is reached. A dependent mother is considered the same as a wife.

These payments are made to the man who is employed as an apprentice the same as to the man who is taking a course in a school. It must be recognized that all men arrive at an age when it does not seem practical for them to reenter school, and their cases should be considered from the standpoint of placement training. When we entered upon this work we tentatively adopted the age of 40 as the dividing line and prepared a questionnaire for the men who were 40 or under and another for the men who were over 40. However, the dividing line is not rigid, as we are free to do the particular thing that will be best for the particular individual. For instance, there is the ex-bartender who is past 40 and yet is one of the most enthusiastic and effective students we have placed in an automobile school. For a number of years he tended bar in Portland before the days of the big drought. When the saloons were wiped out, he obtained a job in a fish cannery and eventually drifted into the shipyards, where he lost a foot. When offered an opportunity for retraining he chose the trade of the auto mechanic and has now about finished his course. He took to the work like a duck to water, and the head of the school reports that he will make one of the best mechanics ever turned out of the school.

Who Are Eligible For Retraining.

IT WAS also left to the commission to determine who should be eligible for retraining. We have tentatively laid down the rule that all should be eligible who have lost 50 per cent or more of the use of an arm, hand, foot, or leg, or sustained other permanent disability of equal severity. In some instances the injured man seems to be getting along very well without outside assistance, yet because he has the determination and pep to go ahead in spite of his handicap this should not operate to shut him out of the benefits offered by the rehabilitation law. He should not be penalized for his nerve and enterprise, but, rather, if retraining will make his future more certain, he should have the same privileges as the man who lays down on the job after he is hurt. We now have a case of this type under consideration. He is 24 years old and suffered an injury to his left hand while employed in a sawmill. He is taking a theological course in Willamette University, preparing himself for the ministry. He is in the logging camps again this summer, trying to earn enough money to put him through another year at school. Because he is helping himself should we withhold our assistance? Is the ministry a vocation? Is he entitled to aid from the commission under the rehabilitation law so as to make it easier for him to complete his theological course? We think so.

As previously stated, we began this work in Oregon with a fund of \$100,000. Up to July 1 we had expended the sum of \$2,846.58, segregated as follows: Transportation, \$317.68; tuition, \$555.11; room and board, \$859.90; financial aid to dependents, \$291; school supplies, \$52.60; employees' traveling expenses, \$170.29; salaries, \$600. On July 1 we had a balance in our rehabilitation fund of \$134,061.05.

The cost is indeed small if compared to what it would undoubtedly cost society in general if this retraining were not provided. Take the case of the broken back again. If he is not given a preparation that will enable him to earn his living society must support him, as the pension he will draw from the compensation fund will not meet his needs. Instead of being a dependent and a burden on society the rest of his life, in a few years at most he will be a producer and an asset to the community. It is a work well worth while. It is a work that grips one's interest as he strives to aid the handicapped men to find the proper solution for their problems as he opens the door which lets in the sunlight upon darkened minds and instills new hope in discouraged hearts.

Before closing I think I should turn the spotlight for a moment upon the other side of the screen. All the cases are not encouraging. We find men who would rather be dependents than make the effort to equip themselves to become self-supporting again. Their interest is centered in the size of the cash payment they hope to get from the commission. They argue that if they had a few hundred dollars in cash they could make their fortune. They haven't time for retraining. It is useless to try to do anything for them, but, fortunately, they are very much in the minority,

Wage Adjustments in California Oil Fields.

By E. P. MARSH, MEMBER, PRESIDENT'S MEDIATION COMMISSION.

IF ASKED the question "what is the greatest domestic problem pressing upon the American people for solution," undoubtedly 9 out of 10 men, no matter what their station in life, would instantly reply, "the labor problem." On railroad trains, in hotel lobbies, in factory offices, and in the homes of the Nation, the labor question is ever to the forefront in thought and conversation.

There is no "solution" of the labor problem in the sense that industrial discontent will ever be entirely allayed. Desire and ambition are as old as the human race. It is as natural for men to aspire to improved conditions of life, purchased with the expenditure of brain and brawn, as it is to breathe. Otherwise there would have been no progress, no civilization. He who hopes to evolve a panacea that will end all our industrial troubles, troubles growing out of conflicting emotions and clashing wills, must suffer disillusionment. The problem is not one of dreaming of Elysian fields, but of establishing the proper relationship between employer and employee, bringing to each a proper perspective of his responsibility to society and to the other, of adopting a broad, comprehensive policy of determining how labor and capital shall approach the mutual working out of problems which are vital to both and which in the last analysis spell weal or woe to society.

Both labor and capital, each in its own field and for its own purpose, have found it necessary to combine. The land is dotted with organizations of employers and organizations of workers. They are needful and praiseworthy and modern civilization could not exist without them. There is no criticism in the mind of the writer toward such organization per se of either group. Between many of these groups there is understanding and cooperation, the community and the Nation profiting thereby. Between many more there is nothing but mutual distrust, suspicion, thinly veiled hostility, which every now and then breaks out in open rupture, the community and the Nation suffering thereby.

Too often organized labor fears organized capital and organized capital fears organized labor. From that mutual fear is born mutual hate. Given that state of mind, deadly clash is as inevitable as fate. Let one organize to the point of feeling its strength and seeking to lessen the power of the other, and the other seeks reprisal; and so on ad infinitum. Clearly a way must be found to retain these organizations, which are inherently productive of so much good, and give them some other purpose and motive than that of preying upon and destroying each other.

Situation in the Oil Industry.

THIS article will be a chronicle of what happened in one industry in utilizing the organized strength of both groups in serving their country both in war and in peace and in bringing about an

added measure of contentment to both workers and employers, without strikes or lockouts, so destructive to public welfare, industrial output, and the happiness of the workers.

When our country was plunged into the World War, the first thought of those responsible for its conduct was of the industrial situation. The natural wealth of the land, the inventive genius of America, our highly developed business machinery, and the proven valor of American arms in all the conflicts of the past were sure assets in the stupendous struggle that lay ahead. But what of the industrial man power of America? Would it throw unreservedly its great strength into industrial production, or would it paralyze the Nation by strikes, taking advantage of the Government's needs to wrest from the employers conditions it had hitherto been unable to obtain? Upon the answer to that question rested the success or failure of our military efforts.

Crude oil and its products were to be the driving power that would set and keep in motion all the ponderous machinery of war and this was pouring forth from California's soil. That flow must not diminish nor cease for a single day. The fate of a world depended upon America's basic industries and one of these was oil.

Half a dozen great corporations and many small ones were operating. The workers were almost exclusively of American parentage, of a high type of citizenship. Their hours had been long and their wages low, not because their employers were especially hard-hearted men or "labor haters," but because the workers had been without organization and were therefore voiceless and the employers had not had brought home to them the direct connection between productive efficiency and the labor conditions surrounding their workers.

The employers looked askance at their employees' effort at organization. To them it meant nothing but an arrogant dictation of their business by labor when labor felt itself sufficiently strong to make the attempt. Being without experience in dealing with labor collectively, their state of mind was a natural and understandable one.

Shortly after the war began one of the largest companies reduced the hours from 12 to 8 and established a \$4 minimum wage. Its motive in so doing is not under discussion here, but the natural thing happened, i. e., the workers in the rest of the industry wanted the same conditions. Through the medium of their small organization the workers sought conferences directly with employers to discuss their demands, but failed. Had the workers run true to form they would have struck, with all the attendant suffering, perhaps disaster, that accompanies strikes.

Action of President's Mediation Commission.

IN THIS instance the workers called upon the Government, the United States Department of Labor, for aid. The President's Mediation Commission, headed by the Secretary of Labor, was then in the West, and it heard the case of the workers. The commission sent one of its members to Santa Barbara, where he asked the operators and workers to meet him and discuss the situation.

It was quickly found that both of these groups held the country's dire need first and foremost. The workers realized that their services

were as necessary as those of the men in khaki; had they not so realized, they would have struck, for they were in deadly earnest in their demands. The operators realized that production must not be interrupted. Had they not so realized they would have refused to deal with the workers collectively, directly or indirectly; for, bear in mind that they honestly believed that organization of the workers spelled nothing but disaster to them.

Out of that first conference came the agreement which exists to-day in the oil industry of California. That agreement brought to the workers an eight-hour day and an increased wage, but it brought more than that. Had it done nothing else I should scarcely have troubled to write this article. It is gratifying to note the betterment that comes to the workers of America through shorter hours and more pay, but that is not the theme of this article.

In most basic industries there have been strikes that unsettled business conditions and threatened the fabric of the Nation. In the copper industry of Montana, the Nation's bituminous coal mines, our lines of transportation, the steel industry, and the shipbuilding industry strikes have arisen from time to time that not only portended wide disaster but have made it possible for alarmists to instill into the public mind a fear of trade-unionism per se, a vague fear that labor might some day become so powerful and arrogant that it would take the Nation by the throat.

The California Plan of Industrial Relationship.

THE Santa Barbara conference of 1917, with the succeeding conferences of 1919 and 1920, demonstrated the practicality and worth of a new method in industrial relationship. Because of what the "California plan" of industrial relationship has done to stabilize labor conditions and to substitute tolerance for intolerance within the industry the country ought to know about it: what it is and how it works.

As I have tried to point out earlier in this article, the bar in the way of collective bargaining so often found in our industries, is the fear of the employers that the workers, once organized, and with no legal responsibilities, will not observe their contracts, and that they will be controlled by demagogues and industrial disturbers and try to exact impossible conditions to the constant disturbance of the carefully built business mechanisms. It is a trait in human nature to see the destructive rather than the constructive, and the instances in which collective labor has scrupulously kept its word are lost sight of in the more spectacular instances where labor has violated its pledged word and acted in an arbitrary and unjust manner.

The President's Mediation Commission was impressed with the impossibility of changing such a viewpoint over night and had to devise a way to bring about the same results without direct union recognition. So it suggested what it had already put into operation in the copper industry of Arizona, viz, the "tripartite agreement."

After conference with both parties, meeting them separately, or if jointly, with the distinct understanding that when so meeting at the solicitation of the commission no union recognition was implied or understood, it was agreed that for a certain period of time certain

working conditions should obtain. This understanding, made in the form of a simple "memorandum of terms," was arrived at between the operators and the commission and another memorandum, identical in its provisions, was made between the workers and the commission. The Government thus became the underwriter of the agreement.

It is true that no mandatory power is vested in the Government to compel either party to live up to the terms of this agreement, but there is no more binding force than the moral obligation of each to the Government after pledging good faith. There is also to be considered the force of public opinion, which neither party can afford to defy.

But the Government does not content itself with simply negotiating an agreement and then expecting it to work automatically. It sets up machinery for the adjustment of grievances within the industry which the interested parties can not themselves adjust, and that machinery is simple, human, and at the service of employer and employee alike.

Most of the trouble in industry arises from the unadjusted grievances. Many employers have not as yet realized the importance of maintaining as part of their organizations a labor department, presided over by a man who understands the psychology of labor, to keep the little grievances from assuming undue proportions. The man who has or thinks he has—it is all the same in its effect upon his reasoning—a grievance, and can not give expression to it somewhere within the employer's organization where it may be corrected, is the fallow ground upon which the seed of the demagogue falls.

During the year ending June 30, 1920, the Federal oil adjuster handled 602 grievances. Both parties to the memorandum of terms had bound themselves to abide by any decision the adjuster might make on grievances over which his jurisdiction was recognized in the memorandum. In less than a dozen cases was it necessary to hand down an arbitrary decision. In some cases the grievances were without merit, but the complainants were given their "day in court," and it was patiently explained to them why they had no real grievances. In cases where there were real grievances the matter was discussed with both the employer and the employee, and the case was argued at length on the basis of admitted facts, ending in agreement on the part of both that a certain disposition of the case was fair and just.

I grant you that such machinery must be in the hands of men who are fitted by experience, sympathy, and disposition to deal tactfully with both employers and workmen. Men of any other type are not big enough to deal with the situation. I grant you that the whole scheme would fall if the wrong type of men were chosen for these positions, which are judicial and diplomatic rather than administrative. One of the functions of government, in my opinion, might well be to find and develop just such men and put them at the disposal of the Nation's industries.

The memorandum of terms executed one year ago provided for a "contingent pay" of 25 cents per man per day for the year ending June 30, 1920, if in the judgment of the commission the terms of the memorandum had been fully and fairly lived up to. This meant

that if the men struck or walked out, were guilty of malicious or willful misconduct toward the company, or violated any of the terms of the memorandum, they would forfeit the contingent pay. Let us see what happened.

When the commission met with both parties on July 20 last to negotiate a new memorandum it was informed that its decision in the matter of the contingent pay would only be a matter of form, as all the companies had paid it to their men on their first July pay checks without waiting for the commission's decision.

This provision continues in the new memorandum for the year 1920-21.¹ Volumes might be written about it. Other employers, worried over their rapid turnover, might study this innovation with profit.

Summary of Results Achieved.

THIS article is not an argument either for or against the "closed" or "open" shop in American industry. The writer has no thought that this method should or would supplant any form of industrial relationship which is working satisfactorily to both parties in any plant or industry. The writer has in mind that the unvoiced desire of millions of America's workers is for some form of expression of their very human wants, some machinery through which they may bargain with employers on even terms; that the day of individual bargaining is gone, never to return; and that to many employers direct recognition of labor unionism is repugnant in the extreme. It is in such industries and in such situations that the writer believes the "California plan" would prove valuable.

Let us briefly sum up the results:

In three years the workers in the oil industry of California have reduced their hours from 12 to 8.

In the same period they have raised their minimum wage from \$2.32 a day to \$6 a day.

They have had provided a permanent court to which they may go in the adjudication of their grievances, certain in the knowledge that they will receive courteous treatment and due consideration.

They have received a grand total of wage increases amounting to \$27,000,000.

They are protected under their memorandum of terms in the free and untrammelled right to extend their labor union by any legitimate effort.

The employers have been free from strike trouble and strike losses, not a single strike marring the record in three years.

The employers are able to know to a cent the labor cost of production, as relates to wages, for a given period, and can take contracts and plan their business accordingly. Ask the first employer you happen to meet in any line of business what that means to him.

There was noticeable at the last wage conference such a marked atmosphere of good will between the bargaining parties that we remarked upon that good feeling as one of the splendid results of the whole scheme of things.

Has not California found the way?

¹ For terms of the memorandum see exhibit, pp. 14-23.

Exhibit.

Memorandum of Terms Governing the Relations of Operators and Workmen in Oil and Gas Producing Companies, etc., as Determined by the President's Mediation Commission and the Committee of Such Workmen.

I.

That during the period commencing July 1, 1920, and ending at midnight August 31, 1921, all matters of wages, working conditions, and any controversial matters which may arise between the operators and the workmen shall be governed by the terms of this memorandum.

There shall be no cessation of work through strikes or lockouts during said period of time.

II.

The operators during said period shall pay to the workmen, as provided by the law of the State of California (until said law is changed, semimonthly), the amount of wages for the various classes of workmen set out in the three schedules annexed hereto and marked "schedules A, B, and C." Schedule A refers to oil fields, schedule B refers to pipe lines, and schedule C refers to refineries.

III.

If the terms of this memorandum are fully and fairly lived up to by the men during the year ending August 31, 1921, the operators will, within 45 days after August 31, 1921, pay to every man covered by the annexed schedules, who has been in the company's employ not less than 30 days during the period of this memorandum, 25 cents—designated in the schedules as "plus 25 cents"—for every day worked by such man for the operator; provided, however, that such payments shall not be made to any man who leaves the company's employ through concerted action, or under conditions that endanger the operator's operation, or who is discharged for willful misconduct. This does not cover men who are paid 25 cents or more in excess of the wage stipulated for their class in the schedules. If any workman is paid more than the amount stipulated for his class in the annexed schedules but less than 25 cents a day more than such stipulated wage, the excess so paid is to be credited to the operator on the additional pay referred to in this paragraph.

The question as to whether the terms of the memorandum have been fully and fairly lived up to is to be conclusively determined by the present members of the President's Mediation Commission.

IV.

Eight hours' actual work at the plant or place of employment shall constitute the workday in the oil industry, subject to the provisions of the schedules hereto attached.

Employees covered by any classification are expected to perform any duties to which they may be assigned. If work of a higher class is required of an employee he shall receive the wage of the position to which he has been assigned for as long a time as he occupies that position. If employees are temporarily shifted to any position paying a smaller wage no reduction in wage will be made, but in case a man's services are no longer required in his class, instead of laying him off the management with his consent may transfer the man to any other position and rate the wage according to the position.

V.

Overtime shall be controlled by the regulations in the schedules hereto attached.

VI.

Where boarding houses are maintained by the operators during the period of this memorandum, a flat charge not exceeding \$1.50 per day will be made for board.

No rent shall be charged to the workmen for bunk house or dormitory accommodations; but in the several oil-producing districts, on the pipe lines, at refineries and the allied branches of the industry, where cottages are provided, rentals shall be fixed so as to allow the operator 6 per cent interest and 5 per cent for depreciation and repairs; investments in all cottages shall be averaged for the purpose of determining rentals.

VII.

The wages specified in the schedules are minimum wages and are not to be considered as any restriction on either the operator giving or the workmen accepting any additional compensation either by way of a greater wage per diem, a bonus, a premium, or a share of profits; but so long as the schedules are maintained, no increase in wages in one class or to the individual of a class shall necessitate a change in the wage of any other individual or class. Operators shall not, however, by reason of anything herein contained, be justified in reducing the wage of any individual below the amount now being received by him.

VIII.

Membership in any labor union affiliated with the American Federation of Labor shall not be a bar to employment, nor shall any man be discharged or discriminated against for membership in such labor union. No business between the union and any of the men shall be carried on at any time during a man's hours of employment except in matters of sickness or death. No intimidation or coercion of any kind shall be used for the purpose of inducing or compelling a man to join the union at any time.

IX.

The "adjuster" hereafter referred to shall be afforded every opportunity to familiarize himself with actual working conditions in the field. If, after such investigation, it appears to him that the classification as shown in the annexed schedules is inequitable in any particular, he shall call a meeting of the operators' committee and lay the matter before them with his recommendations, and if it shall appear to the operators' committee that the classification is inequitable in any particular, proper changes shall be made therein.

X.

Hywel Davies is hereby named as "adjuster." The duties of the adjuster shall be: First. To familiarize himself with operating conditions and from time to time make representations to the operators or to the men as to any matter which he deems should be changed for the welfare of the industry as a whole.

Second. Whenever in carrying out the provisions of this memorandum any controversies over questions of fact shall arise, and the individual workman or any group of workmen shall find himself or themselves aggrieved, after exhausting the remedies hereinafter provided, the whole matter shall be submitted to the adjuster, who shall be given every assistance by both sides in the investigation of the matter. After hearing both sides the adjuster shall make a written statement of his findings of fact on such controversy, and such findings of fact shall be conclusive on everybody concerned.

XI.

In order to obviate unnecessary accumulation of disputes and thus burden the committees hereinafter provided for, it is of paramount importance that each individual employee shall first seek direct adjustment of any grievance or dispute (not involving a construction of the terms of this agreement) with the foreman in charge of his work.

XII.

Failing to secure a personal adjustment, said employee may then submit the complaint to the workmen's committee, elected as hereinafter set forth. If the committee, after investigation, decides that complainant's case has merit, the committee shall then take up the same for adjustment with the proper representative of the company, and if the committee decides against the complainant the decision shall be final.

XIII.

Still failing of adjustment, the committee, on behalf of the complainant, or complainants, in all cases falling within the scope of the adjuster's authority under Article X of this memorandum of terms, shall prepare briefs outlining the statement of facts for their respective contentions to be submitted to the adjuster.

The adjuster shall make as thorough investigation of the facts involved in the controversy as possible, either by examination of witnesses, or by personal inspection, where that seems desirable. Whenever the adjuster so directs, any statement of fact made by any person shall be committed to writing and sworn to before a notary

public and filed with the adjuster. In the event that any person making a statement of fact refuses to make such affidavit after such request, no further consideration will be given to such statement by the adjuster in the decision in the case.

XIV.

The adjuster will file his decision within 10 days after the completion of any investigation.

Such decision shall be conclusive on everyone concerned, and in all matters affecting wages, through any misclassification, shall be retroactive.

XV.

The workmen's committees shall be elected from the workmen employed in each plant, refinery, pipe line, and oil-producing plant. Companies having few employees may unite for the purpose of electing a workmen's committee.

Employees to be eligible to membership must be American citizens, employees of the company concerned, and must have been actively engaged in the oil industry in California for one year next preceding their election.

No official, foreman, subforeman, straw boss, gang pusher, or any employee having authority to hire or discharge men shall serve on the workmen's committee.

In the election of the workmen's committees, every employee governed by the terms of this memorandum shall have one vote for each member of the committee to be elected.

XVI.

The first election for a full committee shall be held within 60 days from the date hereof. Ten days' notice of the time and place of election shall be conspicuously posted at the plant or plants.

Committees shall consist of three to seven members, according to the size of the plant, refinery, pipe line, or oil-producing plant, and according to the number of departments therein; each department to be represented by at least one member on the committee wherever possible.

Elections shall be held at a time and place convenient to operators and workmen. Opportunity shall be given to all employees who are so entitled to vote.

Workmen's committees shall hold office for a period of 12 months. Vacancies shall be filled by special election and wherever possible by an employee from the same department as his predecessor, the person so elected to serve only until the next general election.

Any complaint arising from any cause as to method of election, or eligibility of candidates, or voters, or of the results of elections, may be filed by operators or employees, with the adjuster, who will investigate, and if it is found that said complaint has merit, a new election shall be ordered. If the adjuster deems it necessary, he may supervise such election.

Any election at which the majority of the employees do not vote may be declared void on complaint of any of the interested parties upon facts in the complaint being substantiated.

Workmen's committees, when elected, shall meet at least once each month, more frequently if necessary. Operators will assist in setting date, time, and place of meetings in order that such date, time, and place may be mutually convenient to committee and operators.

XVII.

The purpose of this memorandum is to provide the necessary machinery to function in the preliminary stages of every dispute, with due recognition of the rights of all concerned. When any dispute reaches the stage of submission to the adjuster after such case has passed through the various stages of individual and workmen's committees' efforts, where any person, company, or organization is interested in the point at issue, though not directly involved in the controversy, the adjuster may give such person, company, or organization an opportunity to be heard before a decision is rendered.

XVIII.

Within 60 days of the expiration of this memorandum the President's Mediation Commission, or in the event of its incapacity to act, the Secretary of Labor may call a conference of operators and workmen in this district with a view to a renewal of this memorandum.

XIX.

Each organization ratifying the action of the committee of workmen, as shown by the terms of this memorandum, shall signify its assent by subscribing the names of its duly authorized officers.

Executed at San Francisco, the 9th day of August, 1920.

J. L. SPANGLER,
E. P. MARSH,
CHARLES T. CONNELL,
President's Mediation Commission.
W. J. YARROW,
Chairman Workmen's Committee.
A. L. WELL,
Chairman Employers' Committee.

SCHEDULE A—FIELD EMPLOYEES.

Classification.	CABLE TOOLS.	Effective wage.
Driller.....		\$9.75 plus 25 cents
Tool dresser.....		7.25 plus 25 cents
Circulator or third man.....		6.25 plus 25 cents

ROTARY TOOLS.

Driller.....	9.75 plus 25 cents
Bit dresser or cat-head man.....	7.75 plus 25 cents
Derrick man.....	7.25 plus 25 cents
Rotary helper.....	6.75 plus 25 cents

RIG BUILDERS.

Head rig builder.....	9.75 plus 25 cents
Rig builder.....	8.75 plus 25 cents
Second rig builder.....	7.75 plus 25 cents

WELL CLEANERS.

Head well cleaner.....	8.00 plus 25 cents
Well-cleaner helper.....	6.50 plus 25 cents
(Clean-out operations do not include drilling hole nor moving pipe.)	

WELL PULLERS.

Head well puller.....	7.50 plus 25 cents
Well pullers.....	6.25 plus 25 cents

ENGINEERS AND FIREMEN.

First engineer (where fireman is employed).....	6.75 plus 25 cents
Second engineer (where fireman is not employed).....	6.50 plus 25 cents
Firemen.....	6.00 plus 25 cents

PUMPERS AND OILERS.

Pumpers.....	6.25 plus 25 cents
Oilers.....	6.25 plus 25 cents

DEHYDRATOR OPERATORS.

Dehydrator operators (employed continuously in operation of large units).....	6.50 plus 25 cents
Dehydrator operators (operating in plants in conjunction with other work; classified as pumpers).....	6.25 plus 25 cents

GASOLINE EXTRACTION PLANTS.

Classification.	Effective wage.
First-class plants:	
First engineer.....	6.75 plus 25 cents
Second engineer.....	3.50 plus 25 cents
Large booster stations:	
Engineer.....	6.50 plus 25 cents
Small booster stations:	
Engineer (operating booster stations with or without other work).....	6.25 plus 25 cents
Oilers.....	6.25 plus 25 cents
Pumpers.....	6.25 plus 25 cents
Trap tenders.....	6.25 plus 25 cents
Firemen.....	6.00 plus 25 cents

TEAMSTERS AND TRUCK DRIVERS.

Teamsters (2-horse).....	5.75 plus 25 cent
(Where teamster does not hitch, unhitch, harness, or unharness.)	
Teamsters (2-horse).....	6.00 plus 25 cents
Teamsters (4-horse).....	6.25 plus 25 cents
Teamsters (6-horse or over).....	6.50 plus 25 cents
(Providing that teamsters clean, harness, and unharness, hitch, and unhitch their own teams. An additional 25 cents in lieu of overtime for stable work will be paid where the teamster also feeds and acts as stableman.)	
Truck drivers (to and including 1 ton).....	6.00 plus 25 cents
Truck drivers (to and including 2 tons).....	6.25 plus 25 cents
Truck drivers (2 tons, when equipped with pneumatic tires all around; and all trucks over 2 tons).....	6.75 plus 25 cents
Head stableman (provided that this classification shall only apply where more than 2 stablemen are employed in the same barn)...	6.25 plus 25 cents
Stablemen (split time understood; 8 hours' work within any 10½ consecutive hours).....	5.75 plus 25 cents
Tractor driver (heavy).....	6.75 plus 25 cents
Tractor driver (light).....	6.25 plus 25 cents
Road-grading machine operator (operator of any machinery handled behind tractor).....	6.25 plus 25 cents

BOILER WASHERS.

Boiler washers (no scaling or chipping).....	5.75 plus 25 cents
Boiler washers (when compelled to scale or chip).....	6.50 plus 25 cents
Boiler washers (any scaling or chipping, regular men, continuous pay).....	6.50 plus 25 cents

STEAM, GAS ENGINE, AND PUMP REPAIR MEN.

Repairman No. 1.....	7.25 plus 25 cents
Repairman No. 2.....	6.75 plus 25 cents
Repairman's helper.....	6.25 plus 25 cents

ROUSTABOUT CREW.

Head roustabout.....	7.25 plus 25 cents
Roustabouts.....	5.75 plus 25 cents

GENERAL.

Field gaugers.....	6.00 plus 25 cents
Warehouse yardmen (checkers).....	6.00 plus 25 cents
Tank car loaders.....	5.75 plus 25 cents

GARAGE REPAIRMEN.

Head garage repairman.....	7.50 plus 25 cents
Garage repairmen.....	7.00 plus 25 cents
Garage repairmen's helpers.....	6.25 plus 25 cents

FIELD ELECTRICIANS.

Classification.	Effective wage.
Electricians (journeymen).....	\$8.00 plus 25 cents
Electricians' helpers.....	6.25 plus 25 cents

FIELD SHOPS.

Acetylene welder.....	7.50 plus 25 cents
Heavy fire blacksmith (employed principally in tool manufacture and at heavy forge work).....	9.00 plus 25 cents
Light fire blacksmith.....	7.50 plus 25 cents
Other blacksmiths.....	7.00 plus 25 cents
Blacksmith helper (heavy fire).....	6.50 plus 25 cents
Blacksmith helper (light fire).....	6.25 plus 25 cents
Heavy hammer driver (2,500 pounds or over).....	6.50 plus 25 cents
Light hammer driver (under 2,500 pounds).....	6.25 plus 25 cents
Boiler maker.....	7.50 plus 25 cents
Boiler maker's helper.....	6.25 plus 25 cents
Machinist No. 1.....	7.75 plus 25 cents
Machinist No. 2.....	7.25 plus 25 cents
Pipe machinist (6 inches and over).....	7.00 plus 25 cents
Pipe machinist (under 6 inches; at bolt machines and other work).....	6.75 plus 25 cents
Shop helpers.....	6.25 plus 25 cents

The wage schedules fixing wages for craftsmen are not applicable to refineries, pipe line stations, or fields south of Tehachapi.

Wages for craftsmen covered by last year's schedule shall maintain the same differential as last year, and to the wages of all such craftsmen there shall be added the sum of 75 cents straight and 25 cents contingent.

GENERAL SPECIFICATIONS—SCHEDULE A FIELDS.

Roustabouts are defined as all semiskilled laborers, not hereinbefore classified.

Common labor is defined to be that labor employed in other lines of business, and not peculiar to the oil business, and shall consist of the following classifications:

Gardeners; janitors; watchmen engaged at the usual watchman's duties, and not required to bleed or gauge tanks; gatekeepers; swampers; auto and truck washers; clean-up men; water carriers; weed-cutters; ditch diggers; pick-and-shovel men; yard laborers; tank, tank-car and pipe cleaners, scrapers and painters; men loading and unloading cars, trucks, or other vehicles; men distributing material in warehouses, yards, storehouses, or about the fields or plants.

Working conditions.—Will follow present practices and custom in the fields; and as follows:

(a) *Drilling crews.*—All drilling crews to remain on duty until relieved by succeeding crew, and are expected to work 8 full hours per day; i. e. There must be no cessation of activities, but a period of one-half hour shall be allowed during which the workers will, in turn, be permitted to eat their lunch or intermediate meal.

All shifts to rotate once each month, in order that equitable working conditions may obtain.

Preparations for work as well as for leaving work to be made on employee's time.

(b) *Pumpers and oilers.*—When three shifts are employed, the preceding suggestions will apply.

Where operations are conducted by two shifts, each shift will work 8 hours on such reasonable hourly schedules as will best suit pumping conditions, conforming so far as may be with the working schedules of other departments.

Where one shift only is employed, and on small properties where daylight men are used, time may be divided to conform to most economical pumping operations and the securing of maximum production.

(c) *Daylight employees.*—All daylight men to work a full day of 8 hours. Where work is located at a considerable distance from the boarding house or other central station, daylight men will go to their work on company time, and return on their own time, with the proviso that loss of time to workers is not to exceed 20 minutes per day.

(d) *Truck drivers and teamsters.*—Owing to the exigencies of the service, truck drivers and teamsters may be required to work such additional time over 8 hours as may be necessary, and shall be paid therefor on a pro rata hourly basis of the day's wage.

(e) Eight hours will constitute a day's work for all workers, and longer hours of labor will not be permitted, even though the employer desires and the worker is

willing to work additional time, except in cases of emergency when life or property are in danger, and except as herein otherwise specifically provided.

In cases of emergency, overtime may be compensated for by the allowance of an equivalent amount of time at some subsequent date, unless otherwise mutually agreed upon.

General conditions.—Employees covered by these classifications are expected to perform any duties to which they may be assigned. If work of a higher class is required of an employee he shall receive the wage of the position to which he has been assigned for as long a time as he occupies that position. If employees are temporarily shifted to any position paying a smaller wage no reduction in wage will be made, but in case of any temporary shutting down of any particular unit, instead of laying off the employees in that unit the management may transfer the men to any other position and rate the wage according to the position.

SCHEDULE B—PIPE LINES.

Classification.	Effective wage.
First engineer, double stations.....	\$7.50 plus 25 cents
Second engineer, double stations.....	6.75 plus 25 cents
Firemen, double stations.....	6.25 plus 25 cents
First engineer, single stations.....	7.00 plus 25 cents
Second engineer, single stations.....	6.50 plus 25 cents
Firemen, single stations.....	6.00 plus 25 cents
Heater station firemen.....	6.25 plus 25 cents
Combination engineer-firemen.....	6.25 plus 25 cents
2-horse teamsters (where teamster does not hitch, unhitch, harness or unharness).....	5.75 plus 25 cents
2-horse teamsters (providing that teamsters clean, harness and unharness, hitch and unhitch their own teams. An additional 25 cents in lieu of overtime for stable work will be paid where the teamster also feeds and acts as stableman).....	6.00 plus 25 cents
Truck drivers (to and including one ton).....	6.00 plus 25 cents
Truck drivers (to and including two tons).....	6.25 plus 25 cents
Truck drivers (2-ton trucks, equipped with pneumatic tires all around; and all trucks over 2 tons).....	6.75 plus 25 cents
Dehydrator operators (also men operating plants in conjunction with other work).....	6.25 plus 25 cents
Line riders.....	6.00 plus 25 cents
Gaugers.....	6.00 plus 25 cents
Boiler makers.....	7.50 plus 25 cents
Boiler maker helpers.....	6.25 plus 25 cents
Traveling machinists.....	7.75 plus 25 cents
Traveling mechanics' helpers.....	6.25 plus 25 cents
Electricians.....	8.00 plus 25 cents
Electricians' helpers.....	6.25 plus 25 cents
Garage repairmen.....	7.00 plus 25 cents
Garage repairmen helpers.....	6.25 plus 25 cents
Roustabouts.....	5.75 plus 25 cents
Permanent pipe line crews.....	5.75 plus 25 cents
Line walkers.....	5.75 plus 25 cents
Tank car loaders.....	5.75 plus 25 cents
Boiler washers (where chipping is done occasionally).....	5.75 plus 25 cents
Wharfmen, not including wharfingers.....	5.75 plus 25 cents
Warehouse men.....	5.75 plus 25 cents
Tong men.....	5.75 plus 25 cents
Jack and jack-board men.....	5.75 plus 25 cents
Lever men.....	5.75 plus 25 cents
Back-up men.....	5.75 plus 25 cents
Pipe hustlers.....	5.75 plus 25 cents
Growler-board men.....	5.75 plus 25 cents
Collar greasers.....	5.75 plus 25 cents
Rope men.....	5.75 plus 25 cents
Swab men.....	5.75 plus 25 cents
Barmen.....	5.75 plus 25 cents

The wage schedules fixing wages for craftsmen are not applicable to refineries, pipe-line stations, or fields south of Tehachapi.

GENERAL SPECIFICATIONS—SCHEDULE B PIPE LINES.

Roustabouts include the following classes of semiskilled labor:

Permanent pipe-line crews which are regularly employed in permanent pipe-line gangs; line walkers; tank-car loaders; boiler washers (where chipping is done occasionally); wharfmen (not including wharfingers).

Common labor (unskilled labor): Common labor is defined to be that labor employed in other lines of business and not peculiar to the oil business, and shall consist of the following classifications:

Gardeners; janitors; watchmen engaged at the usual watchman's duties, and not required to bleed or gauge tanks; gatekeepers; swamper; auto and truck washers; water carriers; weed cutters; ditch diggers; pick and shovel men; clean-up men; yard laborers; tank, tank-car, and pipe cleaners, scrapers, and painters; men loading and unloading cars, trucks, or other vehicles; men distributing material in warehouses, yards, storehouses, or about the fields or plants.

Double-line station is defined as one which operates at least 50 per cent of the time of any pay-roll period on two or more outgoing main lines.

When the above conditions of operation are not met, the station will be deemed a single-line station.

Single-line station is defined as one which operates as a main-line station on one only outgoing line of 6-inch diameter pipe or over.

The designation "Combination engineer-fireman" applies to those employees working at small stations whose duties comprehend both pumping and firing.

Working conditions.—Will follow the present practice with pipe-line operators with respect to shift work.

All other conditions will follow those outlined for field employees, and as follows:

(a) *Daylight employees.*—All daylight men to work a full day of eight hours. Where work is located at a considerable distance from the boarding house or other central station, daylight men will go to their work on company time and return on their own time, with the proviso that loss of time to workers is not to exceed 20 minutes per day.

(b) *Truck drivers and teamsters.*—Owing to the exigencies of the service, truck drivers and teamsters may be required to work such additional time over eight hours as may be necessary, and shall be paid therefor on a pro rata hourly basis of the day's wage.

(c) Eight hours will constitute a day's work for all workers, and longer hours of labor will not be permitted, even though the employer desires and the worker is willing to work additional time, except in cases of emergency, when life or property are in danger, or in the loading or discharge of vessels.

In such cases overtime may be compensated for by the allowance of an equivalent amount of time at some subsequent date, unless otherwise mutually agreed upon.

General conditions.—Employees covered by these classifications are expected to perform any duties to which they may be assigned. If work of a higher class is required of an employee, he shall receive the wage of the position to which he has been assigned for as long a time as he occupies that position. If employees are temporarily shifted to any position paying a smaller wage, no reduction in wages will be made, but in case of any temporary shutting down of any particular unit instead of laying off the employees in that unit the management may transfer the men to any other position and rate the wage according to the position.

SCHEDULE C—REFINERIES.

SEMISKILLED LABOR.

Effective wage.	Classification.
\$5.75 plus 25 cents—	Case, barrel, and drum fillers, weighers, painters, stencilers, and labelers. (All departments.)
	Drum and barrel washers, reamers, gluers, coaters, sprayers, and nailers. (All departments.)
	Drum-repairer helpers.
	Cooper helpers.
	Can-filling crews.
	Second-class box makers and nailers.
	Tank-car loaders.
	Compound house and grease makers' helpers.

Effective wage.	Classification.
\$5.75 plus 25 cents—	Tail house men.
	Pumper's helper and gauger and second-class pumper.
	Wharfmen.
	Sump or trap tenders.
	Boiler washers. (An increase of 50 cents over the base wage will be paid for the actual number of hours while engaged in chipping or working inside of the boiler.)
	Assistant gaugers and gaugers for run-down and receiving tanks.
	Stablemen. (Split time understood; 8 hours' work within any 10½ consecutive hours.)
	Teamsters, 2-horse (where teamster does not hitch, unhitch, harness, or unharness).

SKILLED LABOR.

\$6.00 plus 25 cents—	Boiler firemen. (Tank farms, small plants or assistant in large plants.)	
	Still firemen (small plants).	
	Solderers repairing drums and cans, and solderers soldering new lubricating oil cans.	
	Box makers.	
	Printing press men.	
	Assistant filtermen.	
	Assistant compounders.	
	Earth burners.	
	Mechanics' helpers.	
	Assistant acid sludge treaters.	
	Truck drivers (to and including 1-ton trucks).	
	Teamsters, 2-horse (providing that teamsters clean, harness, hitch, unhitch, and unharness their own teams. An additional 25 cents in lieu of overtime for stable work will be paid where the teamster also feeds and acts as stableman).	
	\$6.00 plus 25 cents—	Loading pumpers.
		\$6.25 plus 25 cents—	Industrial locomotive engineers.
	Solderer on filling machines (light refined oil).	
Pumpers (including pumper-gaugers, steam or motor driven pumps).		
Compressor-house men.		
Still firemen (large plants).		
Boiler firemen (large plants).		
Assistant treaters.		
Gaugers.		
Truck drivers (to and including 2 tons).		
Tractor drivers (light).		
Dehydrator operators (also operating in plants in conjunction with other work).		
Power-driven, refined oil filling machine operator.		
Head stablemen. (Provided that this classification shall only apply where more than two stablemen are employed in the same barn.)		
Teamsters, 4-horse. (Providing that teamsters clean, harness and unharness, hitch and unhitch their own teams. An additional 25 cents in lieu of overtime for stable work will be paid where the teamster also feeds and acts as stableman.)		
\$6.50 plus 25 cents—	Still men's helpers (helpers to first-class still men).	
	Compound and grease makers.	
	Power plant engineers (second class).	
	Pumpers (main pump house in large refineries).	
	Filter men.	
	Boiler water tender and fireman (when assistant is employed).	
	Assistant chief gauger or oil dispatcher.	
	Teamsters, 6-horse. (Providing that teamsters clean, harness and unharness, hitch and unhitch their own teams. An additional 25 cents in lieu of overtime for stable work will be paid where the teamster also feeds and acts as stableman.)	

Effective wage.	Classification.
\$6.75 plus 25 cents—	Refined oil treaters.
	Acid sludge treaters.
	Second-class still men (rerun, steam and small unit stills in large plants).
	First still men (in small refineries and topping plants).
	Power plant engineers (first class).
	Truck drivers (2-ton trucks, equipped with pneumatic tires all around, and all trucks over two tons).
	Tractor drivers (heavy).
\$7.75 plus 25 cents—	Tight barrel coopers (first class).
	First-class still men.
	Lubricating oil treaters and treaters in charge of both light oil and lubricating oil agitators.

MECHANICS.

\$7.75 plus 25 cents—	First-class mechanics (boiler makers, blacksmiths, electricians, machinists, pipe fitters, riggers, tinsmiths, and welders).
\$6.50 plus 25 cents—	Second-class mechanics (boiler makers, blacksmiths, electricians, machinists, pipe fitters, riggers, tinsmiths, and welders).

The wage schedules fixing wages for craftsmen are not applicable to refineries, pipe line stations, or fields south of Tehachapi.

The wage schedules in reference to refineries are not applicable to refineries in Los Angeles and the vicinity.

GENERAL SPECIFICATIONS—SCHEDULE C REFINERIES.

Common labor (unskilled labor): Common labor is defined to be that labor employed in other lines of business, and not peculiar to the oil business; and shall consist of the following classifications:

Gardeners; janitors; watchmen engaged at the usual watchman's duties, and not required to bleed or gauge tanks; gatekeepers; swamper; auto and truck washers; water carriers; weed cutters; ditch diggers; pick-and-shovel men; clean-up men; yard laborers; tank, tank-car, and pipe cleaners, scrapers, and painters; men loading and unloading cars, trucks, or other vehicles; men distributing material in warehouses, yards, storehouses, or about the fields or plants.

WORKING CONDITIONS.

Hours of work.—Eight hours shall constitute a day's work for all workers, except in cases of emergency or where the economical conduct of the business demands longer hours. All daylight men are to work a full day of eight hours on the job. Shift men are to remain on duty until relieved by a succeeding shift. In cases where daylight employees are required to work overtime, time and a half shall be paid for such overtime. In the exceptional cases where shift men may be required to work longer time, such overtime shall be compensated for on a pro rata hourly basis of the day's wage.

Truck drivers and teamsters, owing to the exigencies of the service, may also be required to work additional time over the customary eight hours, and they shall be paid therefor on a pro rata hourly basis of the day's wage.

General conditions.—Employees covered by these classifications are expected to perform any duties to which they may be assigned. If work of a higher class is required of an employee he shall receive the wage of the position to which he has been assigned for as long a time as he occupies that position. If employees are temporarily shifted to any position paying a smaller wage no reduction in wage will be made, but in case of any temporary shutting down of any particular unit, instead of laying off the employees in that unit the management may transfer the men to any other position and rate the wage according to the position.

INDUSTRIAL RELATIONS.

Report of Federal Electric Railways Commission.

PRESIDENT Wilson appointed the Federal Electric Railways Commission on May 31, 1919, in response to a suggestion outlining the need for such a commission in a joint letter from William C. Redfield, then Secretary of Commerce, and William B. Wilson, Secretary of Labor.

The commission was instructed to make a careful study of the whole electric railway problem, involving an investigation of general franchise and operating conditions in their relation to rates, including the service-at-cost plan, State and municipal taxation, local paving requirements, and internal economics that might be effected. The thought was to give State and municipal authorities and others concerned the benefit of full information and of any conclusions or recommendations that might be formulated. The personnel of the commission was as follows:

Charles E. Elmquist, president and general solicitor of the National Association of Railway and Utilities Commissioners.

Edwin F. Sweet, Assistant Secretary of Commerce, representing the Department of Commerce.

Philip H. Gadsden, representing the American Electric Railway Association.

Royal Meeker, Commissioner of Labor Statistics, Department of Labor, representing that department.

Louis B. Wehle, general counsel of the War Finance Corporation, representing the Treasury Department.

Charles W. Beall, of Harris, Forbes & Co., New York, bankers, representing the Investment Bankers Association of America.

William D. Mahon, president of Amalgamated Association of Street & Electric Railway Employees of America, representing that association.

George L. Baker, mayor of Portland, Oreg., representing the American Cities League of Mayors.

The commission began its work early in June, 1919, the first public hearing being held in New York City on the 19th. Altogether 95 witnesses testified in person and 21 others sent prepared statements. Data were gathered also by a series of questionnaires sent to each city in which there is a street or interurban railway, addressed to the electric railways, the mayors, chambers of commerce, and the central labor unions, and also to all State public utility commissions. The final meeting of the commission was held in Washington July 22 to 27, 1920.

The report of the commission, which was submitted to the President on July 28 and made public on August 24, suggests sweeping reforms in the electric railway industry designed to restore public confidence and vitally needed credit. Outstanding among the recommendations is that for the installation of the service-at-cost plan of operation. This plan, now operative in Cleveland, Cincinnati, Dallas, Montreal, and other cities, will, it is believed, remove the industry from the field of speculative gain, furnish rides at the lowest possible cost and restore credit and public confidence. Primarily, the plan

provides for furnishing rides at actual cost, which shall govern the rate of fares, and for protecting the investor by guaranteeing a fixed return on an agreed valuation of his holdings.

We strongly recommend the principles of the service-at-cost contract, not as the only solution, but as one means of solving a very difficult problem.

The main features of the contract as given in the report are: (a) Fair valuation of the property; (b) capitalization to conform thereto; (c) agreed return upon capital; (d) public control of capital issues, and to a certain extent over expenditures; (e) public supervision over management, operation and service; (f) automatic changes of rates to meet fluctuating economic conditions and to insure a proper return on the value; (g) private operation, subject to the right of the municipality to purchase the property at its value or upon an agreed price; (h) reduction of taxes and assessments.

The controlling element in its favor is the restoration of public confidence in the corporation due to the removal of those elements of friction which have so frequently engaged the attention of the public. It might also be said that to a certain extent it removes the railways from the idea of speculative gain and places them on a common-sense business basis where the people pay for the service they get and where the opportunity for large profits no longer exist, since economies and lower operating costs are reflected in reduced charges for service. When the contract once is established, the opportunity for municipal corruption is reduced to the minimum.

The report insists that chaos faces the industry unless credit is restored and cooperation between public, managements and employees established.

Managements are advised that their primary duty is to serve the public with the highest efficiency at the lowest cost, with their cards face upward on the table, and not to use the industry as a means of obtaining profits beyond what may be necessary for upkeep, to pay a fair return upon the agreed value of the property and to secure the investment of funds further required. The public duty is declared to be the supervision and control of railway properties with the view of safeguarding the public interest, and the allowance of such return upon the fair valuation of the property as may be agreed upon in the contract between the city and the company. By reason of such supervision the future attitude of the public should be one of friendliness and cooperation. Employees, it is said, should have a living wage and humane hours of labor and working conditions and a right to deal collectively with their employers, through committees or representatives of their own selection, but it is added that "all labor disputes should be settled voluntarily or by arbitration and the award of such board should be final and binding on both parties. It is intolerable that the transportation service of a city should be subject to occasional paralysis, whether by strikes or by lockouts."

Labor on Street Railways.

THE section of the report dealing with labor on street railways is quoted in full:

The labor policies of the electric street railways will in the future be of great importance as an element in the restoration and the permanent maintenance of their credit. The full cooperation of labor is essential to the highest prosperity and usefulness of the industry. This is particularly true because in the case of the street railways the employees who immediately handle the service come into direct contact with the people who consume that service.

The evidence before this commission shows that in the past the suspensions of service due either to strikes or lockouts have been costly to both the employees and to the operating company, but the loss occasioned to these two groups has been secondary to the damage wrought to the public interest. The conditions which recurrently bring about such interruptions of service should be treated at their roots. The employees engaged in this occupation should have a living wage and humane hours of labor and working conditions. They should have the right to deal collectively with their employers through committees or representatives of their own selection. In all contracts and working agreements made between them and the employing companies, there should be arbitration provisions under which all labor disputes which can not be voluntarily settled shall be submitted to boards of arbitration composed of disinterested persons. The award of such a board of arbitration should be final and binding upon both parties to the controversy; for it is intolerable that the transportation service of a city should be subject to occasional paralysis, whether by strikes or by lockouts. It would seem that public authorities could well interest themselves in the formulation of such plans and rules for the arbitration of labor disputes under these contracts as will secure justice to both parties and as will assure continuity of service in so far as that may be possible of achievement.

But the full cooperation of labor in the street railway industry will not have been brought about alone by the recognition of the right of collective bargaining which we have just been urging. Such recognition is but a foundation for full cooperation. The actual work of insuring it must come from the employees themselves to whom the right of collective bargaining is thus given. For that right carries with it a duty. It would seem to be the duty of the organization which bargains for the individual worker to interest itself actively and unremittingly in his delivering to the company his best strength and intelligence.

This commission thinks that where the street railway worker has the right of collective bargaining, the public has a right to expect that the organization or association representing him will not only procure his wage but will also continuously stimulate his whole-hearted constructive cooperation with the company and his effective service to the public.

Wages in the Electric Railway Industry.

THE commission states that a large number of factors have contributed to the present plight of the electric railway industry, one of which is the increasing demands of labor. Of this the commission says:

The wages of street railway labor prior to the war were generally insufficient from the viewpoint of the living wage, and the increases in wages that have taken place since the beginning of the war period have not on the average been as great as the increase in the cost of living.

At the time of our entry into the war the average wages of motormen and conductors for companies of 100 miles and over were approximately 31.5 cents per hour. Since the war there has been a rapid increase in the wages of employees. The National War Labor Board by its awards in the year 1918 established the normal wages for this class of service in different cities varying from 38 cents to 48 cents per hour, increasing wages 23½ per cent. The awards of the board mark the beginning of the rapidly increasing wages in this class of employment. An exhibit filed by the Amalgamated Association of Street and Electric Railway Employees of America shows the wages for conductors in the principal cities of the United States and Canada as of January 1, 1920. Since that date new contracts have been agreed to which substantially increase the wages in a number of cities.

Conclusions and Recommendations.

THE conclusions and recommendations of the commission are summed up in section 1 of the report, as follows:

1. The electric railway furnishing transportation upon rails is an essential public utility, and should have the sympathetic understanding and cooperation of the public if it is to continue to perform a useful public service.

2. The electric railway has been, and will continue to be, a public utility, subject to public control as to the extent and character of the service it renders, and as to the rates it charges for such service.

3. It is of the highest importance that both the total cost of the service and the cost to the individuals who use it shall be kept as low as possible without injustice to those who take part in producing it.

4. The electric railway industry as it now exists is without financial credit, and is not properly performing its public function.

5. This condition is the result of early financial mismanagement and economic causes, accentuated by existing high price levels of labor and materials, and of the failure of the uniform unit fare of 5 cents prescribed either by statute or by local franchise ordinances or contracts to provide the necessary revenues to pay operating costs and to maintain the property upon a reasonable basis.

6. The industry can be restored to a normal basis only by the introduction of economies in operation, improving its tracks, equipment and service, and securing a reasonable return upon the fair value of its property used in the public service when honestly and efficiently managed.

7. The electric railways must expand to meet the growing needs of their communities; therefore, the first essential is to restore credit in order to obtain necessary new capital for the extension and improvement of service.

8. Restoration of credit involves a readjustment of relations which will remove public antagonism, provide public cooperation, and insure to the investor the integrity of his investment and a fair rate of return thereon.

9. Effective public cooperation should be exercised by eliminating, in so far as it is practicable, special assessments for sprinkling, paving, and for the construction and maintenance of bridges which are used by the public for highway purposes.

10. Extensions into new territory resulting in special benefits to the property in that vicinity should be paid for by assessments on such property in proportion to the benefits received, and that the amount of such assessments should not be added to the physical value of the corporate property.

11. The great increase in the use of private automobiles, the jitney and motor buses, has introduced a serious, although not a fatal, competition to the electric railway. These forms of public motor conveyance when operated as public carriers should properly be subject to equivalent regulatory provisions.

12. The full cooperation of labor is essential to the highest prosperity and the usefulness of the industry. The employees engaged in this occupation should have a living wage and humane hours of labor and working conditions. They should have the right to deal collectively with their employers, through committees or representatives of their own selection. All labor disputes should be settled voluntarily or by arbitration, and the award of such a board should be final and binding upon both parties. It is intolerable that the transportation service of a city should be subject to occasional paralysis, whether by strikes or by lockouts.

13. A private industry should not be subsidized by public funds, unless it is imperatively necessary for the preservation of an essential service, and then only as an emergency measure.

14. Unless the usefulness of the electric railways is to be sacrificed, public control must be flexible enough to enable them to secure sufficient revenues to pay the entire cost of the service rendered, including the necessary cost of both capital and labor.

15. There can be no satisfactory solution of the electric railway problem which does not include the fair valuation of the property employed in the public service, and where that is done, the companies should voluntarily reduce any excessive capitalization to the basis of such values.

16. There is no insuperable objection to a large, wide-awake city having exclusive jurisdiction over the rates and services of public utilities.

17. The necessity for scientific and successful regulation of systems, whether large or small, and especially those which operate through several cities and villages and in rural territory, leads to the conclusion that local regulation should generally be subject to the superior authority of the State, whether as a matter of original jurisdiction or through the medium of appeal.

18. Cost-of-service contracts are in the experimental stage, but where tried, they seem to have secured a fair return upon capital, established credit, and effected reasonably satisfactory public service. Such contracts may safely be entered into where the public right eventually to acquire the property is safeguarded.

19. The right of the public to own and operate public utilities should be recognized, and legal obstacles in the way of its exercise should be removed.

20. While eventually it might become expedient for the public to own and operate electric railways, there is nothing in the experience thus far obtained in this country which will justify the assertion that it will result in better or cheaper service than privately operated utilities could afford if properly regulated.

21. Public ownership and operation of local transportation systems, whether or not it be considered ultimately desirable, is now, because of constitutional and statutory prohibitions, financial and legal obstacles, the present degree of responsibility of our local governments, and the state of public opinion, practicable in so few instances that private ownership and operation must as a general rule be continued for an extended period.

22. If the reforms incident to public regulation which we suggest in this report should not result in making private ownership satisfactory to the public, such reforms should at least enable public ownership to be established upon a just and equitable basis.

PRICES AND COST OF LIVING.

Retail Prices of Food in the United States.

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

Table 1 shows for the United States retail prices of food on July 15 and August 15, 1920, and on August 15, 1919, as well as the percentage changes in the month and in the year. For example, the price of fresh milk in August, 1919, was 15.5 cents; in July, 1920, 16.7 cents; and in August, 1920, 17 cents. These figures show an increase of 10 per cent in the year and an increase of 2 per cent in the month.

TABLE 1.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE, AUG. 15, 1920, COMPARED WITH AUG. 15, 1919, AND JULY 15, 1920.

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

Article.	Unit.	Average retail price on—			Per cent of increase (+) or decrease (—) Aug. 15, 1920, compared with—	
		Aug. 15, 1919.	July 15, 1920.	Aug. 15, 1920.	Aug. 15, 1919.	July 15, 1920.
		<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>		
Sirloin steak.....	Pound.....	42.1	48.7	47.3	+ 12	- 3
Round steak.....	do.....	39.5	45.0	43.7	+ 11	- 3
Rib roast.....	do.....	32.4	35.9	34.9	+ 8	- 3
Chuck roast.....	do.....	26.6	28.6	27.5	+ 3	- 4
Plate beef.....	do.....	19.3	19.1	18.6	- 4	- 3
Pork chops.....	do.....	46.9	43.7	45.9	- 2	+ 5
Bacon.....	do.....	57.7	54.7	54.8	- 5	+ 0.2
Ham.....	do.....	56.9	59.7	60.2	+ 6	+ 1
Lamb.....	do.....	36.4	41.1	39.7	+ 9	- 3
Hens.....	do.....	41.8	45.0	45.1	+ 8	+ 0.2
Salmon (canned).....	do.....	32.3	38.7	38.8	+ 20	+ 0.3
Milk, fresh.....	Quart.....	15.5	16.7	17.0	+ 10	+ 2
Milk, evaporated.....	15-16 oz. can	16.3	15.4	15.6	- 4	+ 1
Butter.....	Pound.....	64.1	67.9	67.0	+ 5	- 1
Oleomargarine.....	do.....	42.5	42.7	42.2	- 1	- 1
Nut margarine.....	do.....	38.5	36.1	36.0	- 7	- 0.3
Cheese.....	do.....	43.5	41.2	40.5	- 7	- 2
Lard.....	do.....	42.0	29.0	27.8	- 34	- 4
Crisco.....	do.....	40.5	36.5	34.5	- 15	- 5
Eggs, strictly fresh.....	Dozen.....	60.2	57.3	63.6	+ 6	+11
Bread.....	Pound.....	10.1	11.9	11.9	+ 18	0
Flour.....	do.....	7.4	8.7	8.4	+ 14	- 3
Corn meal.....	do.....	6.6	7.0	6.9	+ 5	- 1
Rolled oats.....	do.....	8.9	11.0	11.1	+ 25	+ 1
Corn flakes.....	8-oz. pkg.....	14.0	14.8	14.6	+ 4	- 1
Cream of Wheat.....	28-oz. pkg.....	25.1	30.3	30.4	+ 21	+ 0.3
Macaroni.....	Pound.....	19.3	21.4	21.7	+ 12	+ 1
Rice.....	do.....	15.5	18.6	18.3	+ 18	- 2
Beans, navy.....	do.....	12.3	11.9	11.7	- 5	- 2
Potatoes.....	do.....	5.0	8.9	5.0	0	-44
Onions.....	do.....	7.8	6.7	5.6	- 28	-16
Cabbage.....	do.....	5.3	7.5	4.4	- 17	-41
Beans, baked.....	No. 2 can.....	17.1	16.8	16.8	- 2	0
Corn, canned.....	do.....	19.1	18.8	18.7	- 2	- 1
Peas, canned.....	do.....	19.1	19.3	19.4	+ 2	+ 1
Tomatoes, canned.....	do.....	15.9	15.2	15.2	- 4	0
Sugar, granulated.....	Pound.....	11.1	26.5	22.9	+106	-14
Tea.....	do.....	70.7	74.5	74.3	+ 5	- 0.3
Coffee.....	do.....	47.8	49.3	48.4	+ 1	- 2
Prunes.....	do.....	27.4	28.4	28.3	+ 3	- 0.4
Raisins.....	do.....	18.0	28.2	28.9	+ 61	+ 2
Bananas.....	Dozen.....	39.1	46.5	44.3	+ 13	- 5
Oranges.....	do.....	53.7	66.8	65.8	+ 23	- 2
22 weighted articles ^a					+ 8	- 6

^a See note 2, p. 30.

¹ In addition to monthly retail prices of food and coal, the Bureau secures prices of gas and dry goods from each of 51 cities and publishes these prices as follows: Gas in the June issue and dry goods in the April, July, October, and December issues.

The cost of 22 food articles² combined showed an increase of 8 per cent in August, 1920, as compared with August, 1919, but a decrease of 6 per cent in August, 1920, as compared with July, 1920. This decrease of 6 per cent in August, 1920, was the largest decrease in any one month since 1913, with the exception of a decrease of 7 per cent in February, 1919.

TABLE 2.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PERCENT OF INCREASE OR DECREASE, AUG. 15 OF EACH YEAR 1914 TO 1920, COMPARED WITH AUG. 15, 1913.

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

Article.	Unit.	Average retail prices Aug. 15—								Per cent of increase (+) or decrease (-) Aug. 15 of each specified year compared with Aug. 15, 1913.													
		1913	1914	1915	1916	1917	1918	1919	1920	1914	1915	1916	1917	1918	1919	1920							
Sirloin steak...	Pound.	26.4	27.9	26.5	28.4	32.9	41.5	42.1	47.3	+	6	+0.4	+	8	+	25	+	57	+	59	+	79	
Round steak...	do.	23.2	25.1	23.8	25.7	30.8	39.6	39.5	43.7	+	8	+	3	+	11	+	33	+	71	+	70	+	88
Rib roast...	do.	20.2	21.4	20.5	21.9	25.6	32.6	32.4	34.9	+	6	+	1	+	8	+	27	+	61	+	60	+	73
Chuck roast...	do.	16.5	17.5	16.4	17.6	21.7	28.3	26.6	27.5	+	6	+	1	+	7	+	32	+	72	+	61	+	67
Plate beef...	do.	12.2	13.0	12.2	12.9	16.2	21.7	19.3	18.6	+	7	0	+	6	+	33	+	78	+	58	+	52	
Pork chops...	do.	21.9	25.1	21.6	24.4	34.5	42.2	46.9	45.9	+	15	-	1	+	11	+	58	+	93	+	114	+	110
Bacon...	do.	28.3	28.8	27.1	29.2	43.1	54.0	57.7	54.8	+	2	-	4	+	3	+	52	+	91	+	104	+	94
Ham...	do.	28.4	29.1	26.3	30.0	39.4	48.5	56.9	60.2	+	2	-	7	+	6	+	39	+	71	+	100	+	112
Lamb...	do.	18.9	20.6	20.5	23.1	29.7	36.9	36.4	39.7	+	9	+	8	+	22	+	57	+	95	+	93	+	110
Hens...	do.	21.5	22.1	20.6	23.8	27.9	38.6	41.8	45.1	+	3	-	4	+	11	+	30	+	80	+	94	+	110
Salmon ^a ...	do.	19.8	2.0	27.1	30.2	32.3	38.8
Milk, fresh...	Quart.	8.8	8.9	8.8	9.0	11.4	13.6	...	15.5	+	1	0	+	2	+	30	+	55	+	76	+	93	
Milk, evaporated...	15-16 oz. can.	...	...	...	...	...	...	16.3	15.6	...	...	...	...	...	...	...	...	...	...	...	...	...
Butter...	Pound.	35.4	36.1	31.4	36.5	47.6	53.9	64.1	67.0	+	2	-	11	+	3	+	34	+	52	+	81	+	89
Oleomargarine...	do.	...	...	...	...	...	...	42.5	42.2	...	...	...	...	...	...	...	...	...	...	...	...	...
Nut margarine...	do.	...	...	...	...	...	...	35.8	36.0	...	...	...	...	...	...	...	...	...	...	...	...	...
Cheese...	do.	22.0	22.8	22.8	24.4	32.8	34.6	43.5	40.5	+	4	+	4	+	11	+	49	+	57	+	98	+	84
Lard...	do.	16.1	15.6	14.1	17.6	27.7	33.1	42.0	27.9	-	3	-	12	+	9	+	72	+	106	+	161	+	73
Crisco...	do.	...	...	...	...	...	...	40.5	34.5	...	...	...	...	...	...	...	...	...	...	...	...	...
Eggs, strictly fresh...	Dozen.	33.0	33.2	30.5	36.3	46.1	53.6	60.2	63.6	+	1	-	8	+	10	+	40	+	62	+	82	+	93
Bread...	Pound.	5.6	6.3	7.1	7.1	10.2	9.9	10.1	11.9	+	13	+	27	+	27	+	82	+	77	+	80	+	113
Flour...	do.	3.3	3.5	4.1	4.4	7.6	6.8	7.4	8.4	+	6	+	24	+	33	+	130	+	106	+	124	+	155
Corn meal...	do.	3.0	3.1	3.2	3.3	6.6	6.8	6.6	6.9	+	3	+	7	+	10	+	120	+	127	+	120	+	130
Rolled oats...	do.	...	...	...	...	...	...	8.9	11.1	...	...	...	...	...	...	...	...	...	...	...	...	...
Corn flakes...	8-oz. pkg.	...	...	...	...	...	...	14.0	14.6	...	...	...	...	...	...	...	...	...	...	...	...	...
Cream of Wheat...	28-oz. pkg.	...	...	...	...	...	...	25.1	30.4	...	...	...	...	...	...	...	...	...	...	...	...	...
Macaroni...	Pound.	...	...	...	...	...	...	19.3	21.7	...	...	...	...	...	...	...	...	...	...	...	...	...
Rice...	do.	8.7	8.8	9.1	9.1	10.6	13.4	15.5	18.3	+	1	+	5	+	5	+	22	+	54	+	78	+	110
Beans, navy...	do.	...	...	7.6	12.1	19.2	17.1	12.3	11.7	...	...	...	...	...	...	...	...	...	...	...	...	...
Potatoes...	do.	1.9	1.9	1.4	2.4	3.5	3.9	5.0	5.0	0	-	26	+	26	+	84	+	105	+	163	+	163	
Onions...	do.	...	...	3.1	5.0	4.6	5.5	7.8	5.6	...	...	...	...	...	...	...	...	...	...	...	...	...
Cabbage...	do.	...	...	...	...	...	...	5.3	4.4	...	...	...	...	...	...	...	...	...	...	...	...	...
Beans, baked...	No. 2 can.	...	...	...	...	...	...	17.1	16.8	...	...	...	...	...	...	...	...	...	...	...	...	...
Corn, canned...	do.	...	...	...	...	...	...	19.1	18.7	...	...	...	...	...	...	...	...	...	...	...	...	...
Peas, canned...	do.	...	...	...	...	...	...	19.1	19.4	...	...	...	...	...	...	...	...	...	...	...	...	...
Tomatoes, canned...	do.	...	...	...	...	...	...	15.9	15.2	...	...	...	...	...	...	...	...	...	...	...	...	...
Sugar, granulated...	Pound.	5.6	7.9	6.7	8.5	10.0	9.3	11.1	22.9	+	41	+	20	+	52	+	79	+	66	+	98	+	309
Tea...	do.	54.4	54.7	54.6	54.6	60.2	65.8	70.7	74.3	+	1	+	0.4	+	0.4	+	11	+	21	+	30	+	37
Coffee...	do.	29.8	29.7	30.0	29.9	30.5	30.1	47.8	48.4	-	0.3	+	1	+	0.3	+	2	+	1	+	60	+	62
Prunes...	do.	...	...	13.5	13.4	16.2	17.1	27.4	28.3	...	...	...	...	...	...	...	...	...	...	...	...	...
Raisins...	do.	...	...	12.5	12.8	14.8	15.3	18.0	28.9	...	...	...	...	...	...	...	...	...	...	...	...	...
Bananas...	Dozen.	...	...	...	...	...	...	39.1	44.3	...	...	...	...	...	...	...	...	...	...	...	...	...
Oranges...	do.	...	...	...	...	...	...	53.7	65.8	...	...	...	...	...	...	...	...	...	...	...	...	...
22 weighted articles. ²		+	6	-	1	+	11	+	48	+	70	+	91	+	106

^a Canned.

² The following are the 22 articles, weighted according to the consumption of the average family: Sirloin steak, round steak, rib roast, chuck roast, plate beef, pork chops, bacon, ham, lard, hens, flour, corn meal, eggs, butter, milk, bread, potatoes, sugar, cheese, rice, coffee, tea. These include all articles for which prices have been secured each month since 1913 with the exception of lamb, for which the Bureau has no consumption figures.

Table 2 shows for the United States average retail prices of specified food articles on August 15 of each year, 1913 to 1920, together with the percentage change in August of each year compared with August, 1913. For example, the price of bread, as compared with the price in August, 1913, showed an increase of 13 per cent in August, 1914; 27 per cent in August, 1915, and August, 1916; 82 per cent in August, 1917; 77 per cent in August, 1918; 80 per cent in August, 1919; and 113 per cent in August, 1920.

The cost of 22 food articles, combined, showed an increase of 106 per cent in August, 1920, as compared with August, 1913.

Table 3 shows the changes in the retail prices of each of 22 articles of food as well as the changes in the amounts of the articles that could be purchased for \$1, each year, 1913 to 1919, and in August, 1920.

TABLE 3.—AVERAGE RETAIL PRICES OF SPECIFIED ARTICLES OF FOOD AND AMOUNT PURCHASABLE FOR \$1, 1913 TO AUGUST, 1920.

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	.310	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: August..	.473	2.1	.437	2.3	.349	2.9	.275	3.6	.186	5.4	.459	2.2
	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>Doz.</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	\$0.345	2.9	\$0.383	2.6
1914.....	.275	3.6	.273	3.7	.156	6.4	.218	4.6	.353	2.8	.362	2.8
1915.....	.269	3.7	.261	3.8	.148	6.8	.208	4.8	.341	2.9	.358	2.8
1916.....	.287	3.5	.294	3.4	.175	5.7	.236	4.2	.375	2.7	.394	2.5
1917.....	.410	2.4	.382	2.6	.276	3.6	.286	3.5	.481	2.1	.487	2.1
1918.....	.529	1.9	.479	2.1	.333	3.0	.377	2.7	.569	1.8	.577	1.7
1919.....	.554	1.8	.534	1.9	.369	2.7	.411	2.4	.628	1.6	.678	1.5
1920: August..	.548	1.8	.602	1.7	.314	3.2	.451	2.2	.636	1.6	.670	1.5
	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.....	.232	4.3	.088	11.4	.070	14.3	.042	23.8	.033	30.3	.091	11.0
1916.....	.258	3.9	.091	11.0	.073	13.7	.044	22.7	.034	29.4	.091	11.0
1917.....	.332	3.0	.112	9.0	.092	10.9	.070	14.3	.058	17.2	.104	9.6
1918.....	.359	2.8	.139	7.2	.098	10.2	.067	14.9	.068	14.7	.129	7.8
1919.....	.426	2.3	.155	6.5	.100	10.0	.072	13.9	.064	15.6	.151	6.6
1920: August..	.405	2.5	.170	5.9	.119	8.4	.084	11.9	.069	14.5	.183	5.5
	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.....	.027	37.0	.080	12.5	.299	3.3	.546	1.8				
1917.....	.043	23.3	.093	10.8	.302	3.3	.582	1.7				
1918.....	.052	31.3	.097	10.3	.305	3.3	.648	1.5				
1919.....	.038	26.3	.113	8.8	.433	2.3	.701	1.4				
1920: August..	.050	20.0	.229	4.4	.484	2.1	.743	1.3				

Relative Retail Prices of 22 Articles of Food.

IN TABLE 4 the average monthly and yearly prices of 22 food articles³ are shown as relative prices or percentages of the average prices for the year 1913. These relatives 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. Relative prices must be used with caution. For example, the relative price of pork chops in November, 1919, was 200, which means that the money price was 200 per cent of the money price in 1913, or, in other words, the price doubled. The relative price of pork chops in December was 181, showing a drop of 19 points from 200, which is a decrease of only 9.5 per cent.

In the last column of this table are given index numbers⁴ showing the changes by months and years in the retail cost of the 22 food articles weighted according to the importance of each article in the consumption of the average family. Prices are obtained each month for 43 food articles, but only 22 of these are included in the retail food price index, because the amounts consumed by the average family have been obtained as yet for only these 22 food articles. These articles comprise about two-thirds of the entire food budget of the average family and reflect with great accuracy changes in the cost of the food budget. The figure representing the cost of these 22 food articles was 219 in July and 207 in August. This shows that, as compared with 1913, the cost of these food articles in August, 1920, was more than double what it was in 1913, and that during the month from July to August there was a decrease of approximately 6 per cent.

The curve shown in the chart on page 36 pictures more readily to the eye the changes in the cost of the family market basket and the trend in the cost of the food budget than do the index numbers given in the table. The chart has been drawn on the logarithmic scale,⁵ because the percentages of increase or decrease are more accurately shown than on the arithmetic scale.

³ For list of articles, see note 2, p. 30.

⁴ For a discussion of the method used in the computation of these index figures, see MONTHLY LABOR REVIEW for March, 1920, p. 34.

⁵ For a discussion of the logarithmic chart, see article on "Comparison of arithmetic and ratio charts," by Lucian W. Chaney, MONTHLY LABOR REVIEW for March, 1919, pp. 20-34. Also, "The 'ratio' chart," by Prof. Irving Fisher, reprinted from Quarterly Publications of the American Statistical Association, June, 1917, 24 pp.

TABLE 4.—RELATIVE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN THE UNITED STATES, 1907 TO AUGUST, 1920.

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.	Su-gar.	Cof-fee.	Tea.	22 weighted arti-cles.
1907.....	71	68	76	.....	.....	74	74	76	81	81	84	85	.....	87	.....	95	88	.....	105	105	.....	.....	82
1908.....	73	71	78	.....	.....	76	77	78	80	83	86	86	.....	90	.....	102	92	.....	111	108	.....	.....	84
1909.....	77	74	81	.....	.....	83	83	82	90	89	93	90	.....	91	.....	109	94	.....	112	107	.....	.....	89
1910.....	80	78	85	.....	.....	92	95	91	104	94	98	94	.....	95	.....	108	95	.....	101	109	.....	.....	93
1911.....	81	79	85	.....	.....	85	91	89	88	91	93	88	.....	96	.....	102	94	.....	130	111	.....	.....	92
1912.....	91	89	94	.....	.....	91	91	91	94	93	99	98	.....	97	.....	115	102	.....	132	115	.....	.....	98
1913: Av. for year.	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
January.....	94	92	95	93	92	89	94	93	97	95	108	107	100	100	100	100	99	99	91	106	100	100	98
February.....	94	93	95	93	93	90	95	94	98	97	91	108	100	100	100	100	98	99	90	100	100	100	97
March.....	97	96	98	98	98	97	97	99	100	99	100	77	108	100	100	100	98	99	88	99	100	100	97
April.....	101	99	101	101	101	103	99	99	100	104	73	106	100	100	100	100	98	99	87	98	100	100	98
May.....	101	100	101	101	101	100	100	99	100	104	76	94	99	99	100	101	98	99	91	97	100	100	97
June.....	102	101	102	102	101	99	101	102	100	103	81	92	99	99	100	101	98	99	104	97	100	100	98
July.....	104	104	102	103	101	103	104	104	101	102	87	91	99	99	100	101	98	100	110	100	100	100	100
August.....	104	104	102	103	101	104	105	106	102	101	96	92	100	99	100	100	100	109	102	100	100	101	101
September.....	103	104	101	103	102	108	104	104	102	101	109	98	100	100	100	100	102	100	110	104	100	100	102
October.....	101	104	101	103	102	107	103	102	101	100	120	100	101	101	100	99	103	100	106	101	100	100	104
November.....	100	102	100	102	102	102	101	100	101	97	144	101	102	102	100	99	104	100	107	99	100	100	105
December.....	99	101	100	101	102	97	99	99	100	98	138	104	102	102	100	99	104	100	106	98	100	100	104
1914: Av. for year.	102	106	103	104	104	105	102	102	102	102	102	102	104	102	112	104	105	101	108	108	100	100	102
January.....	99	102	100	102	102	99	98	98	100	100	126	104	104	102	110	98	104	100	108	95	99	100	104
February.....	99	102	101	103	102	100	98	99	99	104	106	93	104	102	110	99	103	100	108	94	99	100	101
March.....	100	103	101	102	102	100	99	99	99	105	90	92	105	101	110	99	103	100	107	93	100	100	99
April.....	100	103	102	103	102	103	99	99	99	108	74	86	104	100	110	99	103	100	105	91	100	100	97
May.....	102	105	102	103	103	106	99	99	98	106	77	85	103	100	110	99	103	100	112	91	100	101	98
June.....	103	106	103	104	103	103	100	100	97	103	82	88	103	100	100	99	103	100	132	93	100	101	99
July.....	106	109	105	106	104	106	101	103	97	103	87	89	103	100	110	98	103	101	155	95	99	101	102
August.....	110	113	108	109	107	119	107	108	99	104	96	94	103	100	112	106	105	101	111	143	100	101	107
September.....	107	110	105	108	107	113	108	108	99	103	107	98	104	100	114	113	109	101	105	145	100	101	107
October.....	103	107	104	106	106	110	106	105	98	100	113	98	104	101	114	111	109	101	89	132	99	101	105
November.....	100	105	103	104	105	104	104	102	99	97	131	103	104	101	114	112	109	101	83	113	99	101	105
December.....	101	103	101	103	103	93	103	100	97	94	139	103	104	101	116	113	107	101	84	110	99	101	105
1915: Av. for year.	101	103	101	101	100	96	100	97	93	97	99	93	105	99	124	126	108	104	89	120	101	100	101
January.....	100	102	101	101	102	88	101	98	97	95	129	101	105	101	120	124	109	104	85	110	101	100	103
February.....	98	100	100	99	101	85	99	96	97	97	98	98	106	100	126	138	110	104	84	118	101	100	101
March.....	97	99	99	98	100	85	98	95	96	99	74	94	106	99	126	136	110	104	82	120	101	100	98
April.....	99	100	100	99	100	94	98	94	96	100	75	94	105	99	126	137	109	104	86	122	101	100	99
May.....	101	103	101	101	101	99	98	95	96	101	76	91	106	98	128	139	109	104	89	124	101	100	100
June.....	103	105	103	103	101	98	98	97	95	98	78	90	106	98	128	130	109	104	99	126	101	100	100
July.....	105	107	104	103	101	100	100	98	93	97	81	90	105	98	126	125	108	104	85	127	101	100	100
August.....	104	107	104	103	101	103	100	98	89	97	88	88	103	99	126	124	108	104	82	123	101	100	100
September.....	104	106	103	102	101	107	100	97	88	97	101	88	103	99	124	117	108	104	79	118	100	100	100

[657]

PRICES AND COST OF LIVING.

TABLE 4.—RELATIVE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN THE UNITED STATES, 1907 TO AUGUST, 1920—Concluded.

[658]

Year and month.	Sirloin steak.	Round steak.	Rib roast.	Chuck roast.	Plate beef.	Pork chops.	Bacon.	Ham.	Lard.	Hens.	Eggs.	Butter.	Cheese.	Milk.	Bread.	Flour.	Corn meal.	Rice.	Potatoes.	Sugar.	Coffee.	Tea.	22 weighted articles.
1915—Concluded.																							
October.....	103	104	102	101	99	110	101	99	91	97	117	92	104	100	124	113	108	104	94	111	100	100	103
November.....	101	102	101	99	98	99	101	100	92	95	133	95	105	100	122	113	107	104	97	119	100	100	104
December.....	99	101	100	99	98	87	101	100	92	95	135	101	107	100	122	114	107	104	106	124	100	100	105
1916: Av. for year.	108	110	107	107	106	108	106	109	111	111	109	103	117	102	130	135	113	105	159	146	100	100	114
January.....	101	102	101	99	99	89	101	101	93	101	123	100	110	100	122	120	107	104	140	137	100	100	107
February.....	101	102	102	99	100	92	101	102	94	104	101	99	112	100	124	125	108	104	141	125	100	100	106
March.....	104	104	104	103	102	104	103	104	96	107	82	105	113	100	124	120	107	104	140	137	100	100	107
April.....	106	108	106	106	105	107	104	107	100	111	79	108	113	99	124	119	108	104	138	145	100	100	109
May.....	109	112	110	109	107	109	105	109	106	113	82	97	112	99	124	119	108	104	140	156	100	100	109
June.....	113	117	113	113	111	110	107	110	108	114	87	95	111	99	124	117	108	105	167	158	100	100	112
July.....	113	116	112	112	109	111	107	111	110	113	93	93	110	100	124	116	108	105	134	160	100	100	111
August.....	112	115	111	110	107	116	108	111	111	112	105	95	111	101	126	134	110	105	141	155	100	100	113
September.....	111	115	110	110	107	125	110	114	118	113	120	102	116	102	136	148	113	105	161	141	100	100	118
October.....	108	111	108	108	106	118	110	114	123	114	132	109	122	105	144	155	117	105	165	149	100	100	121
November.....	106	108	106	107	106	111	111	114	135	112	149	114	132	109	150	174	126	105	198	157	100	100	126
December.....	106	107	106	106	106	106	110	114	137	112	154	118	140	112	138	167	131	105	198	151	100	100	126
1917: Av. for year.	124	130	126	131	130	152	142	175	134	139	127	150	125	164	211	192	119	253	169	101	107	107	146
January.....	109	111	109	109	108	113	110	114	136	119	158	118	141	112	140	171	132	105	225	146	100	100	128
February.....	113	117	114	116	116	125	114	118	138	126	147	122	142	112	142	171	136	104	290	148	100	100	133
March.....	116	119	118	128	121	133	123	125	151	129	101	121	146	112	144	174	137	104	297	160	101	101	133
April.....	125	130	127	131	132	146	141	136	167	136	112	133	150	114	150	206	154	108	339	175	101	101	145
May.....	127	133	130	134	135	146	155	144	176	138	116	122	153	117	168	266	178	121	352	183	101	103	151
June.....	129	135	132	137	137	148	158	145	177	136	119	123	153	119	170	246	182	125	366	170	101	104	152
July.....	129	137	130	137	136	151	159	147	174	131	122	120	149	125	176	220	195	123	246	166	103	110	146
August.....	130	138	129	136	134	164	160	147	176	131	134	124	148	128	182	229	219	122	206	181	102	111	149
September.....	131	133	131	137	135	185	164	152	188	142	152	129	152	132	176	223	272	124	172	179	102	112	153
October.....	130	138	130	136	136	185	178	159	198	146	160	133	158	143	176	214	232	128	178	177	102	113	157
November.....	124	133	127	132	134	165	179	159	207	138	168	138	156	144	176	208	235	131	183	174	102	114	155
December.....	128	134	128	134	134	161	181	161	211	143	184	142	156	147	166	205	235	133	178	172	102	114	157
1918: Av. for year.	153	165	155	166	170	186	196	178	211	177	165	151	162	156	175	203	227	148	188	176	102	110	168
January.....	129	137	130	138	142	163	180	162	208	154	195	148	156	151	168	200	233	134	188	173	102	115	160
February.....	132	141	133	142	146	160	179	163	209	170	182	151	158	151	170	200	233	136	188	193	102	112	161
March.....	133	143	135	145	150	161	181	164	210	(1)	128	144	159	151	171	200	240	138	147	167	102	113	154
April.....	144	155	148	159	164	170	183	166	209	(1)	123	132	154	148	175	200	237	139	129	165	101	117	154
May.....	157	170	161	174	181	175	187	170	208	178	123	133	151	148	177	200	233	141	129	165	101	117	158
June.....	168	182	169	184	188	177	191	173	206	177	123	133	150	146	179	203	223	144	171	165	101	119	162
July.....	166	181	168	182	185	180	194	181	206	178	142	137	152	148	179	203	223	148	229	167	101	120	167
August.....	163	178	165	177	179	201	200	180	209	181	155	141	157	153	177	206	227	154	229	169	101	121	171
September.....	164	178	165	178	181	220	208	193	213	185	170	155	163	161	177	206	230	157	229	175	102	122	178
October.....	161	175	163	174	178	216	214	193	216	183	186	170	174	166	175	203	227	161	206	193	102	124	181
November.....	159	173	162	172	175	206	216	195	216	185	215	174	184	173	175	203	217	161	194	196	103	125	183
December.....	159	171	161	171	174	197	217	198	216	180	235	190	193	176	175	203	213	160	188	196	109	124	187

1919: Av. for year.	164	174	164	169	167	201	205	299	134	193	182	177	193	174	179	218	213	174	224	205	145	129	186
January.....	162	175	165	175	181	193	217	199	211	188	218	184	201	175	175	200	207	159	188	196	117	127	185
February.....	162	174	165	174	181	180	205	193	203	186	147	149	185	174	175	203	200	164	182	195	123	126	172
March.....	165	177	169	178	183	184	203	191	211	193	140	174	183	172	175	206	197	154	171	193	126	129	175
April.....	172	182	175	184	187	197	212	197	223	202	143	186	190	169	175	218	200	154	182	193	129	128	182
May.....	175	187	178	186	186	205	210	203	246	204	154	177	191	167	175	227	207	154	194	193	136	128	185
June.....	170	181	171	176	174	202	212	205	254	200	155	165	192	167	177	227	210	159	224	193	143	129	184
July.....	171	183	169	173	168	220	215	211	266	197	164	164	195	169	179	227	217	168	282	198	155	130	190
August.....	166	177	164	166	160	223	214	212	266	196	174	167	197	174	180	224	220	178	294	202	160	130	192
September.....	161	170	158	153	150	219	206	205	242	194	183	172	195	176	180	221	223	190	253	200	164	130	188
October.....	157	165	155	153	145	211	196	195	228	189	209	186	192	180	180	221	220	199	224	207	163	131	189
November.....	155	162	153	151	143	200	189	188	231	184	235	197	195	184	182	224	220	202	229	227	164	131	192
December.....	154	161	153	152	143	181	186	186	221	184	261	204	196	188	182	233	220	202	253	264	164	127	197
1920:																							
January.....	159	166	159	158	152	178	186	187	215	197	240	194	196	187	195	245	220	208	318	324	165	132	201
February.....	160	167	159	157	152	180	186	188	204	210	199	190	196	188	198	245	217	210	353	342	165	131	200
March.....	161	168	161	157	150	186	186	190	192	215	161	196	194	187	200	242	217	211	400	340	165	135	200
April.....	170	179	169	166	157	206	191	199	191	224	153	199	194	183	200	245	217	214	535	367	165	135	211
May.....	171	179	169	160	155	202	195	206	189	221	153	187	194	182	205	264	223	215	565	462	165	136	215
June.....	182	191	176	174	157	194	200	215	185	216	155	175	189	182	211	267	230	215	606	485	165	136	219
July.....	192	202	181	179	158	208	203	222	184	211	166	177	186	188	213	264	233	214	524	482	165	137	219
August.....	186	196	176	172	154	219	203	224	177	212	184	175	183	191	213	255	230	210	294	416	162	137	207

¹ No hens sold in this month by order of Food Administration.

[659]

TREND IN RETAIL COST OF 22 FOOD ARTICLES, COMBINED, FOR THE UNITED STATES, BY MONTHS, JANUARY, 1913, TO AUGUST, 1920.

[Average cost for 1913=100.]



Retail Prices of Food in 51 Cities on Specified Dates.

AVERAGE retail food prices are shown in Table 5 for 39 cities, for August 15 of each year, 1913, 1919, and 1920, and for July 15, 1920. These cities are as follows:

Atlanta, Ga.	Indianapolis, Ind.	New York, N. Y.
Baltimore, Md.	Jacksonville, Fla.	Omaha, Nebr.
Birmingham, Ala.	Kansas City, Mo.	Philadelphia, Pa.
Boston, Mass.	Little Rock, Ark.	Pittsburgh, Pa.
Buffalo, N. Y.	Los Angeles, Calif.	Portland, Oreg.
Charleston, S. C.	Louisville, Ky.	Providence, R. I.
Chicago, Ill.	Manchester, N. H.	Richmond, Va.
Cincinnati, Ohio.	Memphis, Tenn.	St. Louis, Mo.
Cleveland, Ohio.	Milwaukee, Wis.	Salt Lake City, Utah.
Dallas, Tex.	Minneapolis, Minn.	San Francisco, Calif.
Denver, Colo.	Newark, N. J.	Scranton, Pa.
Detroit, Mich.	New Haven, Conn.	Seattle, Wash.
Fall River, Mass.	New Orleans, La.	Washington, D. C.

Average prices are shown for August 15, 1919, and for July 15 and August 15, 1920, for 11 other cities from which prices were not secured in 1913, as follows:

Bridgeport, Conn.	Mobile, Ala.	Rochester, N. Y.
Butte, Mont.	Norfolk, Va.	St. Paul, Minn.
Columbus, Ohio.	Peoria, Ill.	Springfield, Ill.
Houston, Tex.	Portland, Me.	

Average prices are shown for Savannah, Ga., for July 15 and August 15, 1920, only, as prices were not secured from this city until January, 1920.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

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

Article.	Unit.	Atlanta, Ga.				Baltimore, Md.				Birmingham, Ala.			
		Aug. 15—		July 15, 1920.	Aug. 15, 1920.	Aug. 15—		July 15, 1920.	Aug. 15, 1920.	Aug. 15—		July 15, 1920.	Aug. 15, 1920.
		1913	1919			1913	1919			1913	1919		
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.		
Sirloin steak.....	Pound.....	25.0	39.5	43.3	42.5	24.3	42.7	51.4	47.3	28.1	42.6	46.9	46.2
Round steak.....	do.....	24.5	37.5	40.4	39.2	23.0	41.1	48.4	45.9	22.5	40.2	43.0	42.4
Rib roast.....	do.....	20.1	29.9	32.3	31.8	19.3	33.7	39.4	36.2	20.6	34.1	34.7	33.7
Chuck roast.....	do.....	15.5	23.8	26.5	25.6	16.0	28.1	30.5	28.8	16.8	28.8	28.5	27.8
Plate beef.....	do.....	9.4	19.4	18.8	18.0	12.6	21.6	20.0	19.9	10.5	19.9	19.3	18.7
Pork chops.....	do.....	23.5	44.3	40.9	45.3	19.3	47.8	44.4	46.7	20.0	43.8	40.6	42.7
Bacon.....	do.....	32.0	61.0	56.8	57.1	26.3	53.6	47.4	47.8	35.0	63.4	62.0	62.1
Ham.....	do.....	31.0	57.9	57.9	59.0	34.5	60.6	63.8	63.4	31.3	57.5	61.4	61.8
Lamb.....	do.....	19.4	38.8	42.8	42.2	18.3	37.1	43.8	40.2	23.3	39.4	45.0	45.0
Hens.....	do.....	20.2	37.3	41.7	41.4	21.2	46.0	48.6	48.2	17.0	35.0	38.0	37.8
Salmon (canned).....	do.....	26.8	31.2	28.0	28.7	35.2	35.6	33.2	39.7	40.1			
Milk, fresh.....	Quart.....	10.0	20.0	25.0	8.8	15.0	16.0	10.3	20.0	25.0			
Milk, evaporated (sweet- ened).....	15-16 oz. can	17.0	17.3	16.9	16.1	14.7	14.8	17.8	16.2	16.4			
Butter.....	Pound.....	37.1	69.1	71.2	70.4	36.7	67.8	71.6	71.3	39.0	67.7	73.2	71.8
Oleomargarine.....	do.....	43.1	45.8	45.0	39.1	43.0	41.8	45.1	45.0	44.8			
Nut margarine.....	do.....	38.9	39.0	37.3	35.0	35.7	35.4	40.0	40.0	39.8			
Cheese.....	do.....	25.0	43.2	40.2	39.5	22.5	44.4	41.5	40.2	23.0	43.1	40.8	39.6
Lard.....	do.....	16.1	43.7	29.1	27.9	15.0	41.9	27.6	26.8	16.5	42.1	29.2	27.6
Crisco.....	do.....	38.7	35.4	33.2	40.2	33.3	30.7	39.2	36.8	33.5			
Eggs, strictly fresh.....	Dozen.....	28.3	56.5	50.0	60.6	27.7	55.7	53.0	57.0	28.3	54.2	52.7	59.3
Bread.....	Pound.....	6.0	10.0	12.7	12.8	5.4	9.6	11.4	11.4	5.4	9.7	11.5	11.5
Flour.....	do.....	3.5	7.4	8.7	8.3	3.2	7.7	9.1	8.6	3.6	7.6	8.9	8.7
Corn meal.....	do.....	2.6	6.2	6.5	6.2	2.5	5.8	6.1	5.9	2.4	6.0	6.1	5.8
Rolled oats.....	do.....	10.3	12.2	12.2	7.6	10.1	10.1	11.1	12.2	12.8			
Corn flakes.....	8-oz. pkg.....	14.1	14.5	14.4	13.0	13.6	13.6	14.5	16.2	15.1			
Cream of Wheat.....	2S-oz. pkg.....	25.4	31.8	31.2	23.2	28.9	29.1	25.7	32.2	32.8			
Macaroni.....	Pound.....	20.7	22.3	22.9	17.7	20.4	21.2	20.5	22.6	22.2			
Rice.....	do.....	8.6	16.1	18.5	17.1	9.0	15.4	18.0	17.8	8.2	15.8	18.9	17.4
Beans, navy.....	do.....	14.1	13.9	13.7	12.5	11.0	11.0	14.1	14.2	13.6			
Potatoes.....	do.....	2.3	6.4	10.2	7.5	1.7	4.6	7.8	4.6	2.3	6.9	10.1	6.1
Onions.....	do.....	9.7	9.6	8.4	7.3	6.3	4.5	8.1	8.8	6.3			
Cabbage.....	do.....	7.3	9.1	6.6	4.6	4.7	2.6	6.2	8.5	6.1			
Beans, baked.....	No. 2 can.....	16.3	16.3	15.8	15.5	15.0	15.0	18.8	18.2	18.4			
Corn, canned.....	do.....	20.1	20.4	19.9	18.5	18.1	18.5	20.0	19.6	19.5			
Peas, canned.....	do.....	20.4	20.1	19.8	17.8	18.8	18.8	22.0	21.5	21.6			
Tomatoes, canned.....	do.....	14.1	14.6	14.5	14.5	14.3	14.2	14.2	15.0	14.8			
Sugar, granulated.....	Pound.....	5.9	12.1	20.1	22.8	5.1	10.8	25.4	22.5	5.7	11.4	27.9	23.7
Tea.....	do.....	60.0	87.3	92.2	83.5	66.0	73.9	70.4	70.4	61.3	88.3	89.5	89.2
Coffee.....	do.....	32.0	48.1	52.6	49.5	24.8	44.9	45.3	44.1	28.8	47.9	50.5	50.7
Prunes.....	do.....	21.8	29.7	26.7	28.3	26.4	26.3	25.0	30.0	29.3			
Raisins.....	do.....	17.9	24.9	24.4	18.0	28.5	29.5	17.9	25.9	28.5			
Bananas.....	Dozen.....	30.6	36.5	36.4	32.3	31.8	30.8	40.6	47.2	45.7			
Oranges.....	do.....	59.1	67.5	67.9	56.2	70.4	66.4	52.9	62.9	62.9			

¹ The steak for which prices are here quoted is known as "porterhouse" in most of the cities included

PRICES AND COST OF LIVING.

CLES OF FOOD FOR 51 CITIES ON CERTAIN SPECIFIED DATES.

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

Boston, Mass.				Bridgeport, Conn.			Buffalo, N. Y.			Butte, Mont.			Charleston, S. C.			
Aug. 15—		July 15, 1920.	Aug. 15, 1920.	Aug. 15, 1919.	July 15, 1920.	Aug. 15, 1920.	Aug. 15—		July 15, 1920.	Aug. 15, 1920.	July 15, 1919.	Aug. 15, 1920.	Aug. 15—		July 15, 1920.	Aug. 15, 1920.
1913	1919						1913	1919					1913	1919		
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
35.8	62.0	71.5	70.3	51.6	58.2	56.8	23.8	40.8	46.4	45.1	34.2	39.2	21.8	38.8	42.5	41.3
36.2	58.4	67.0	68.8	49.1	54.8	54.2	20.5	38.0	42.9	41.1	30.3	36.0	20.0	37.9	42.3	41.2
25.6	41.1	45.6	44.7	37.5	42.1	41.2	17.0	31.8	35.5	34.1	26.2	31.4	20.0	32.5	33.7	33.0
18.0	31.9	36.6	36.8	31.5	33.3	32.1	15.5	27.0	29.0	27.3	19.0	25.1	23.4	15.8	26.4	27.8
.....	.....	.....	.....	19.3	15.6	15.5	11.5	19.6	19.3	18.5	12.4	17.7	16.6	11.9	20.2	22.7
24.2	49.1	48.1	50.6	45.4	42.9	45.7	22.0	49.8	46.5	48.6	48.0	42.4	46.0	22.5	45.6	44.2
25.8	53.4	50.4	49.8	59.9	60.0	59.5	24.5	50.4	48.9	49.4	64.7	64.0	64.9	27.5	62.2	53.5
33.8	60.6	69.0	70.4	64.6	69.5	71.3	28.0	57.1	58.3	58.5	61.9	64.0	65.1	28.3	56.8	57.3
23.0	40.6	46.5	43.7	38.7	44.6	42.6	15.5	32.0	35.6	33.2	29.0	36.5	35.2	21.3	40.0	45.0
25.6	46.2	52.2	51.4	44.5	48.4	48.1	21.8	43.3	44.1	36.7	42.8	42.5	22.2	48.3	50.7	49.9
.....
.....	30.9	37.2	37.6	34.3	38.8	38.6	.....	29.2	35.6	35.9	42.5	44.2	44.4	.....	30.2	36.8
.....	8.9	15.4	17.0	16.0	16.0	17.0	8.0	16.0	15.0	16.0	15.5	15.6	15.6	11.7	20.7	23.8
.....
.....	16.5	15.8	15.9	16.2	15.4	15.4	.....	15.6	14.7	14.5	17.4	16.0	16.6	.....	16.3	15.3
.....	35.9	64.4	68.8	68.0	62.4	67.2	66.2	32.9	61.4	66.2	64.9	66.7	64.8	64.9	34.2	63.8
.....	.....	42.5	45.1	44.5	41.1	40.6	40.1	.....	41.6	41.8	41.8	.....	40.0	40.0	.....	44.8
.....
.....	35.5	36.2	36.3	35.0	35.9	35.1	.....	34.1	34.5	34.4	.....	39.6	39.0	.....	45.7	39.3
.....	22.4	42.7	41.0	40.7	42.7	42.3	41.4	20.0	41.3	38.8	38.6	44.8	43.0	20.5	42.8	38.9
.....	15.7	42.4	28.8	28.0	41.4	27.2	26.0	14.5	40.6	26.9	25.6	43.9	34.7	33.5	15.3	42.9
.....	.....	41.2	35.4	34.0	40.7	34.2	32.3	.....	38.8	34.2	32.2	44.9	43.1	43.2	.....	39.7
.....	42.4	78.2	80.1	87.4	76.3	72.4	80.5	29.8	62.1	58.9	64.5	67.9	65.0	72.0	30.0	55.4
.....
.....	5.9	9.6	11.3	11.3	10.7	12.5	12.7	5.6	10.0	11.3	11.4	12.2	14.4	14.3	6.0	10.0
.....	3.8	7.9	9.5	9.1	7.5	8.9	8.5	3.0	6.9	8.5	7.9	9.3	9.2	3.7	7.7	8.9
.....	3.5	7.4	7.7	7.6	8.0	9.0	9.0	2.6	6.3	6.6	6.7	7.6	7.6	7.8	2.4	6.2
.....	.....	7.8	9.8	10.0	9.3	10.6	10.7	.....	7.5	9.0	9.5	9.1	10.0	10.0	.....	9.7
.....	.....	13.5	14.9	14.6	13.7	14.0	14.1	.....	12.8	13.2	13.0	14.6	15.8	15.5	.....	14.9
.....
.....	.....	4.8	30.4	30.1	24.1	28.1	29.1	.....	24.2	28.3	27.9	30.0	33.2	33.5	.....	25.0
.....	.....	21.6	26.0	25.9	22.4	24.9	25.0	.....	19.9	23.1	23.0	19.2	22.5	22.5	.....	20.9
.....	9.2	25.0	19.4	19.3	16.1	18.4	18.3	9.3	15.0	18.3	18.1	14.6	18.9	19.3	5.5	14.4
.....	.....	11.6	11.0	10.8	11.9	11.8	11.8	.....	11.6	11.5	11.2	12.1	12.6	12.2	.....	13.6
.....	1.9	15.3	8.7	4.2	4.6	8.7	4.1	2.0	5.0	8.0	4.0	4.6	9.7	4.9	2.3	5.7
.....
.....	.....	7.4	5.9	5.5	9.0	5.6	4.9	.....	8.4	6.4	5.1	7.0	6.9	5.8	.....	9.4
.....	.....	5.2	8.8	4.7	4.0	8.4	3.5	.....	5.3	6.8	2.7	6.6	7.4	6.3	.....	7.4
.....	.....	18.0	18.3	17.6	16.4	15.6	15.3	.....	13.9	14.1	13.9	22.4	22.2	22.3	.....	15.3
.....	.....	21.7	21.2	21.6	22.1	21.9	21.8	.....	18.2	18.4	18.2	18.7	18.8	18.6	.....	21.6
.....	.....	21.2	22.3	22.3	20.6	22.2	22.4	.....	17.6	17.9	17.6	18.6	18.2	18.5	.....	22.3
.....
.....	.....	16.8	15.7	15.5	16.1	15.8	15.5	.....	16.2	15.6	15.9	17.6	17.0	16.9	.....	15.7
.....	5.6	10.7	25.7	23.8	10.9	27.3	23.1	5.5	10.4	25.4	23.7	12.1	28.6	27.2	5.1	11.0
.....	58.6	66.0	69.9	69.4	63.1	68.9	67.2	45.0	66.9	67.0	66.5	75.3	77.4	76.5	50.0	76.4
.....	33.0	52.5	53.5	53.0	45.3	47.3	46.8	29.3	44.6	47.3	45.6	56.9	60.5	60.2	26.3	46.6
.....
.....	.....	30.4	28.3	28.2	29.2	27.7	26.9	.....	29.6	26.7	26.9	27.5	29.6	29.6	.....	26.1
.....	.....	17.2	28.6	28.6	19.4	27.7	28.2	.....	16.6	28.2	28.4	18.6	31.0	31.0	.....	17.9
.....	.....	47.8	56.5	56.3	39.0	48.0	45.0	.....	43.0	52.4	49.5	51.3	58.8	58.8	.....	45.0
.....	.....	61.2	75.8	70.4	58.9	69.9	67.1	.....	58.8	64.4	66.3	52.4	69.7	72.2	.....	65.0

in this report, but in this city it is called "sirloin" steak.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES

Article.	Unit.	Chicago, Ill.				Cincinnati, Ohio.				Cleveland, Ohio.			
		Aug. 15—		July	Aug.	Aug. 15—		July	Aug.	Aug. 15—		July	Aug.
		1913	1919	15, 1920.	1920.	1913	1919	15, 1920.	1920.	1913	1919	15, 1920.	1920.
Sirloin steak.....	Pound.....	24.1	41.1	47.8	47.1	24.1	34.7	41.3	41.1	25.4	40.2	50.4	48.7
Round steak.....	do.....	21.2	36.1	40.9	39.6	22.1	34.6	39.0	38.0	22.9	36.7	45.1	43.5
Rib roast.....	do.....	20.2	32.5	35.9	35.9	19.3	28.3	33.7	32.8	18.7	30.3	34.1	33.0
Chuck roast.....	do.....	15.7	27.2	28.0	27.3	15.2	22.1	25.4	24.1	16.9	25.9	29.5	28.9
Plate beef.....	do.....	11.4	19.5	19.0	18.4	11.0	19.7	20.7	19.7	12.0	17.9	18.1	17.6
Pork chops.....	do.....	20.9	44.7	42.6	43.4	21.7	43.3	42.4	45.5	22.1	47.5	46.6	47.8
Bacon.....	do.....	32.0	61.7	60.1	60.1	26.3	51.5	47.8	48.3	30.3	54.6	56.9	56.8
Ham.....	do.....	32.2	59.8	61.3	61.8	30.2	58.5	60.5	61.4	37.3	60.1	65.1	64.6
Lamb.....	do.....	19.9	35.8	41.5	39.6	16.5	30.8	36.7	34.8	19.6	37.2	42.5	39.2
Hens.....	do.....	19.7	38.3	42.3	42.9	23.4	41.0	49.3	46.4	21.5	42.6	46.9	48.6
Salmon (canned).....	do.....	33.7	38.8	38.5	38.5	29.3	36.9	37.4	37.0	31.3	39.0	39.2	39.2
Milk, fresh.....	Quart.....	8.0	15.0	15.0	16.0	8.0	14.0	15.0	15.0	8.0	15.0	15.0	16.0
Milk, evaporated (sweet- ened).....	15-16-oz. can	15.2	14.6	14.9	14.9	15.4	14.6	14.9	14.9	16.7	16.0	16.5	16.5
Butter.....	Pound.....	32.7	58.4	62.9	61.3	35.5	61.8	67.2	66.0	35.7	63.2	69.0	67.3
Oleomargarine.....	do.....	41.3	38.7	37.9	37.9	42.3	39.2	38.5	38.5	44.3	45.4	43.6	43.6
Nut margarine.....	do.....	33.8	33.1	32.7	32.7	35.0	34.8	34.3	34.3	35.7	36.0	35.4	35.4
Cheese.....	do.....	25.0	44.6	43.4	42.0	21.0	45.1	42.7	42.4	23.0	43.6	42.1	41.2
Lard.....	do.....	15.1	39.9	27.7	27.2	14.3	38.8	25.7	24.8	16.6	41.4	30.2	29.1
Crisco.....	do.....	38.3	35.1	33.6	33.6	37.8	34.1	32.9	32.9	39.9	37.5	36.3	36.3
Eggs, strictly fresh.....	Dozen.....	27.3	54.9	53.4	59.5	24.9	49.6	52.0	48.4	33.3	62.4	60.2	66.0
Bread.....	Pound.....	6.1	10.0	12.4	12.4	4.8	9.9	11.5	11.5	5.6	10.1	11.6	11.8
Flour.....	do.....	2.9	7.2	8.3	7.8	3.3	7.5	8.8	8.4	3.2	7.6	8.8	8.5
Corn meal.....	do.....	2.8	6.1	7.2	7.1	2.7	5.8	6.3	6.3	2.8	6.1	6.8	7.2
Rolls oats.....	do.....	6.7	10.0	10.0	10.0	8.2	10.7	11.4	11.4	8.7	12.1	12.6	12.6
Corn flakes.....	8-oz. pkg.....	12.8	14.4	14.1	14.1	13.8	14.1	14.2	14.2	14.3	16.2	15.9	15.9
Cream of Wheat.....	28-oz. pkg.....	23.9	29.0	29.2	29.2	25.1	30.6	31.7	31.7	24.5	29.9	29.7	29.7
Macaroni.....	Pound.....	18.2	19.3	19.8	19.8	16.5	19.4	20.4	20.4	18.7	23.3	23.2	23.2
Rice.....	do.....	9.0	14.8	18.0	17.8	8.8	15.1	18.3	18.2	8.5	15.8	19.3	19.2
Beans, navy.....	do.....	11.9	11.6	11.6	11.6	11.0	10.7	10.6	10.6	12.4	11.6	11.3	11.3
Potatoes.....	do.....	2.0	5.2	9.8	5.1	2.2	4.6	8.2	5.6	2.1	5.5	9.3	4.8
Onions.....	do.....	6.9	5.8	4.8	4.8	5.9	6.0	5.4	5.4	6.6	6.9	5.6	5.6
Cabbage.....	do.....	5.2	8.1	4.2	4.2	6.1	5.3	3.9	3.9	6.1	9.3	5.0	5.0
Beans, baked.....	No. 2 can.....	16.8	16.8	16.6	16.6	14.6	15.3	15.4	15.4	16.3	16.4	16.1	16.1
Corn, canned.....	do.....	17.8	17.3	17.5	17.5	17.1	17.7	18.1	18.1	19.6	20.5	20.3	20.3
Peas, canned.....	do.....	17.9	17.2	17.3	17.3	17.2	17.8	18.4	18.4	19.2	21.8	21.9	21.9
Tomatoes, canned.....	do.....	15.4	15.2	14.9	14.9	14.3	15.3	15.3	15.3	16.7	15.8	15.8	15.8
Sugar, granulated.....	Pound.....	5.2	11.9	26.5	20.3	5.4	11.6	26.8	20.7	5.6	11.0	28.7	23.1
Tea.....	do.....	55.0	63.0	70.2	71.6	60.0	77.1	75.3	75.7	50.0	70.6	78.2	76.8
Coffee.....	do.....	30.7	43.1	45.4	45.0	25.6	43.1	43.3	43.3	26.5	48.4	51.7	51.2
Prunes.....	do.....	28.5	29.3	29.2	29.2	24.0	30.7	31.3	31.3	26.8	29.0	29.7	29.7
Raisins.....	do.....	18.3	28.2	28.9	28.9	20.1	31.8	32.3	32.3	19.3	30.1	30.6	30.6
Bananas.....	Dozen.....	36.8	44.7	42.4	42.4	37.5	52.4	45.0	45.0	46.8	60.9	56.7	56.7
Oranges.....	do.....	49.7	66.7	63.2	63.2	43.0	64.3	60.9	60.9	54.1	68.8	68.3	68.3

² The steak for which prices are here quoted is known as "porterhouse" in most of the cities included in

PRICES AND COST OF LIVING.

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

Columbus, Ohio.			Dallas, Tex.					Denver, Colo.					Detroit, Mich.					Fall River, Mass.				
Aug. 15, 1919.	July 15, 1920.	Aug. 15, 1920.	Aug. 15—		July 15, 1920.	Aug. 15, 1920.	Aug. 15—		July 15, 1920.	Aug. 15, 1920.	Aug. 15—		July 15, 1920.	Aug. 15, 1920.	Aug. 15—		July 15, 1920.	Aug. 15, 1920.				
			1913	1919			1913	1919			1913	1919			1913	1919						
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.				
39.3	42.9	43.3	22.8	38.1	40.0	40.0	24.3	38.0	45.2	42.1	26.3	42.0	47.9	46.3	236.0	260.2	274.6	273.8				
37.9	40.1	40.1	20.8	37.3	38.4	37.3	22.2	35.0	43.5	38.1	21.0	37.5	42.2	40.4	28.4	50.4	59.6	58.1				
32.2	33.0	32.5	20.1	33.3	33.4	33.5	17.8	29.8	32.6	31.2	20.5	32.1	35.8	34.5	23.2	36.1	40.4	38.8				
27.6	28.6	28.3	16.7	28.5	29.3	28.4	15.8	23.5	27.1	25.1	15.0	25.5	28.0	26.5	18.4	29.9	32.6	30.6				
20.8	20.6	20.0	12.9	23.3	23.2	23.3	9.6	16.0	15.9	15.4	11.3	18.4	19.5	18.6	.....	.....	.....	.....
43.7	39.6	40.9	22.0	43.8	41.6	44.2	20.0	44.9	41.7	45.9	21.5	48.4	45.6	47.3	22.0	47.2	43.3	46.1				
56.1	52.9	52.9	38.0	62.1	57.0	57.0	30.5	60.0	58.9	58.9	25.0	57.7	55.5	54.5	25.7	54.1	51.6	51.9				
58.8	60.0	61.7	31.3	58.8	61.7	62.3	33.8	62.1	63.0	64.6	28.0	61.9	65.3	63.1	32.5	58.1	61.9	62.0				
30.0	30.0	31.7	22.0	38.8	45.0	45.0	16.1	33.9	37.7	36.3	17.3	37.9	42.3	39.1	21.0	37.5	40.7	42.4				
37.5	38.0	38.8	17.7	38.3	38.6	37.8	19.4	38.7	40.6	41.4	21.8	43.7	47.4	47.6	25.0	46.5	52.5	52.2				
30.0	36.6	36.8	.....	31.9	39.4	38.2	.....	32.5	39.6	39.8	.....	31.5	38.9	39.5	.....	30.4	38.9	39.2
14.0	14.0	14.0	10.0	18.0	20.7	20.7	8.4	12.8	13.0	13.0	7.9	16.0	16.0	16.0	9.0	15.3	16.5	16.5				
15.2	14.8	15.1	.....	16.8	16.7	16.6	.....	16.1	14.3	14.6	.....	15.7	15.7	15.9	.....	16.1	16.1	16.1
61.6	66.1	65.4	36.0	62.7	65.9	64.7	34.3	61.2	61.9	61.9	33.7	62.6	67.5	65.8	34.6	62.4	66.5	66.6				
42.6	41.3	41.2	.....	36.7	37.8	38.5	.....	40.2	43.3	43.2	.....	43.4	44.0	42.7	.....	40.3	42.0	41.9
35.0	34.9	35.2	.....	37.4	38.0	37.0	.....	35.3	36.0	35.9	.....	34.5	34.9	34.7	.....	36.5	36.9	37.3
43.0	39.9	39.5	20.0	44.5	40.1	40.1	26.1	44.7	43.7	43.1	20.7	43.6	41.6	40.6	22.8	42.7	41.6	41.4				
39.8	26.3	25.0	16.8	38.6	31.5	28.4	16.5	41.5	31.3	30.3	16.6	42.4	29.9	29.0	15.3	42.1	27.1	26.4				
40.7	34.9	33.9	.....	42.0	36.0	32.7	.....	39.2	38.8	35.0	.....	40.4	35.8	33.4	.....	41.7	34.8	34.2
48.3	48.4	54.3	27.0	50.3	47.3	53.8	30.0	57.3	55.0	61.5	30.0	61.5	57.8	65.7	41.8	79.4	76.9	84.5				
10.2	11.6	11.9	5.4	10.0	12.0	12.0	5.4	11.7	12.2	12.2	5.6	10.4	11.7	12.1	6.2	10.9	12.0	12.0				
7.0	8.5	8.2	3.2	7.3	8.5	8.1	2.5	6.1	7.2	6.7	3.1	7.3	8.9	8.5	3.4	7.9	9.2	8.9				
6.4	6.6	6.4	2.8	7.0	7.0	6.7	2.5	6.1	6.1	6.1	2.8	6.8	7.6	7.4	3.5	8.2	8.8	9.0				
8.5	11.6	11.7	.....	10.3	12.2	12.8	.....	8.6	10.6	11.1	.....	8.0	11.2	11.6	.....	9.6	11.1	11.3
14.2	14.7	14.8	.....	14.2	13.9	14.3	.....	14.6	15.0	14.7	.....	13.8	14.8	14.5	.....	14.5	15.3	15.1
25.0	30.1	30.0	.....	25.4	32.2	32.2	.....	25.2	30.2	30.4	.....	24.9	29.6	29.8	.....	24.8	28.8	29.6
18.6	21.4	21.3	.....	20.3	22.9	22.0	.....	19.5	20.0	20.3	.....	18.9	21.0	24.7	.....	22.4	26.6	26.5
16.3	18.8	17.9	9.3	15.9	19.9	20.3	8.6	14.9	18.9	18.6	8.4	15.6	19.3	18.9	10.0	15.1	18.9	18.8				
11.3	10.7	10.6	.....	13.6	12.0	11.8	.....	12.8	12.9	13.2	.....	11.6	11.1	11.1	.....	11.9	11.6	11.7
5.4	8.7	5.1	2.7	6.6	10.3	6.3	1.8	4.8	9.7	4.9	1.9	5.5	9.2	4.2	1.9	4.6	8.9	4.2				
8.1	9.1	7.3	.....	5.7	7.8	7.0	.....	7.1	7.2	6.1	.....	8.3	6.4	5.1	.....	9.4	6.4	5.5
6.4	7.4	3.5	.....	6.0	9.1	7.8	.....	3.2	8.4	3.2	.....	4.9	9.3	3.8	.....	4.4	7.2	2.6
16.4	16.3	16.0	.....	19.0	19.0	18.5	.....	17.9	18.2	18.5	.....	16.2	15.4	15.7	.....	16.4	16.7	16.5
15.6	15.5	15.5	.....	19.4	21.3	21.2	.....	18.2	18.0	18.6	.....	20.1	19.5	19.9	.....	20.4	19.9	19.7
15.4	16.9	16.7	.....	21.2	24.4	23.3	.....	19.7	19.1	19.3	.....	19.2	19.0	19.3	.....	21.3	20.7	20.0
14.2	14.5	14.5	.....	15.1	15.3	15.4	.....	15.9	14.9	14.9	.....	17.4	14.9	15.1	.....	15.5	15.0	15.5
10.9	26.5	22.5	5.9	11.3	28.1	24.7	5.8	11.1	16.0	15.9	5.4	11.3	28.4	22.9	5.5	10.9	26.7	24.8				
82.2	88.5	88.8	66.7	80.0	88.9	88.5	52.8	70.8	73.4	72.9	43.3	63.3	67.1	68.1	44.2	56.6	60.3	61.1				
47.7	49.1	48.6	36.7	53.7	54.6	54.4	29.4	48.4	50.4	50.0	29.3	47.7	49.7	48.7	33.0	47.4	51.7	51.4				
23.2	29.0	29.4	.....	27.5	28.8	27.9	.....	24.9	31.0	30.4	.....	29.3	29.9	29.7	.....	25.2	26.1	26.8
18.6	28.7	28.8	.....	18.0	26.9	27.1	.....	18.4	27.7	27.8	.....	17.9	27.6	28.4	.....	19.8	27.5	27.3
38.1	51.3	44.0	.....	37.5	44.4	43.6	.....	42.5	56.5	54.7	.....	31.8	41.4	37.6	.....	42.7	49.5	47.0
55.0	59.0	59.1	.....	51.8	60.6	58.3	.....	50.2	58.3	65.2	.....	53.8	62.7	60.7	.....	50.1	70.4	63.4

this report, but in this report it is called "rump" steak.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES

Article.	Unit.	Houston, Tex.			Indianapolis, Ind.				Jacksonville, Fla.			
		Aug. 15, 1919.	July 15, 1920.	Aug. 15, 1920.	Aug. 15—		July 15, 1920.	Aug. 15, 1920.	Aug. 15—		July 15, 1920.	Aug. 15, 1920.
					1913	1919			1913	1919		
Sirloin steak.....	Pound.....	<i>Cts.</i> 34.4	<i>Cts.</i> 36.9	<i>Cts.</i> 36.8	<i>Cts.</i> 25.5	<i>Cts.</i> 38.4	<i>Cts.</i> 45.2	<i>Cts.</i> 44.5	<i>Cts.</i> 26.0	<i>Cts.</i> 40.6	<i>Cts.</i> 41.4	<i>Cts.</i> 40.3
Round steak.....	do.....	35.0	35.2	35.4	24.7	38.4	44.6	43.2	22.0	38.1	38.5	38.0
Rib roast.....	do.....	27.6	29.5	30.4	18.2	27.6	30.9	30.6	23.3	30.6	29.9	29.7
Chuck roast.....	do.....	25.6	25.5	26.9	16.4	25.7	28.5	27.7	14.0	26.2	24.1	23.8
Plate beef.....	do.....	20.3	21.2	21.2	12.1	18.7	20.2	19.1	10.3	19.6	17.1	16.8
Pork chops.....	do.....	43.7	40.7	43.1	22.7	44.8	39.7	43.3	22.3	45.0	40.2	44.2
Bacon.....	do.....	64.4	62.4	62.1	31.0	56.7	53.4	53.9	30.3	59.6	53.3	53.9
Ham.....	do.....	51.4	60.5	55.5	31.2	59.9	62.8	62.8	28.7	57.9	57.9	58.8
Lamb.....	do.....	40.0	40.0	41.0	20.7	42.0	48.3	37.1	19.3	38.3	36.0	37.0
Hens.....	do.....	36.0	40.0	40.8	21.0	35.6	43.0	42.2	22.8	38.8	42.7	42.0
Salmon (canned).....	do.....	30.9	37.4	36.3	.....	26.6	31.8	31.6	.....	31.5	35.9	34.6
Milk, fresh.....	Quart.....	18.2	19.7	19.7	8.0	13.0	14.0	14.0	12.4	18.0	25.9	25.0
Milk, evaporated.....	15-16-oz. can	16.3	15.9	16.2	.....	16.7	16.0	16.2	.....	16.9	15.2	15.2
Butter.....	Pound.....	61.0	62.2	61.7	34.5	62.3	67.2	64.8	38.6	66.2	71.3	70.8
Oleomargarine.....	do.....	42.6	44.2	43.5	.....	44.9	43.1	41.8	.....	44.0	43.1	42.2
Nut margarine.....	do.....	36.7	37.5	37.6	.....	35.8	35.1	34.8	.....	38.2	39.0	38.5
Cheese.....	do.....	40.5	38.3	37.1	21.0	45.0	42.3	40.3	22.5	43.2	39.4	38.7
Lard.....	do.....	39.1	28.6	27.8	15.2	41.2	27.3	26.4	15.5	40.3	30.3	28.3
Crisco.....	do.....	37.5	41.6	34.6	.....	41.3	36.1	34.0	.....	41.0	37.2	35.5
Eggs, strictly fresh.....	Dozen.....	52.0	46.7	53.8	24.0	51.9	48.4	55.1	34.0	58.4	56.8	60.7
Bread.....	Pound.....	8.8	10.5	10.3	5.1	9.7	11.6	11.6	6.5	10.0	12.7	12.7
Flour.....	do.....	7.6	8.8	8.7	3.1	7.2	8.5	8.1	3.8	7.7	9.2	9.1
Corn meal.....	do.....	6.4	6.6	5.9	2.6	6.2	6.6	6.4	2.9	6.2	6.5	6.0
Rollod oats.....	do.....	9.5	12.0	12.1	.....	9.5	11.7	12.3	.....	10.9	12.4	12.0
Corn flakes.....	8-oz. pkg..	14.4	14.6	14.6	.....	14.6	15.4	15.2	.....	14.7	15.7	15.4
Cream of Wheat.....	28-oz. pkg.	24.7	29.8	30.2	.....	26.2	30.4	31.7	.....	25.4	31.0	31.4
Macaroni.....	Pound.....	18.8	20.5	20.4	.....	20.7	21.9	21.7	.....	21.6	22.0	22.7
Rice.....	do.....	14.7	16.8	16.3	9.2	16.7	19.7	19.4	6.6	15.1	16.8	15.5
Beans, navy.....	do.....	12.4	11.8	11.5	.....	12.7	11.5	11.0	.....	14.1	13.1	12.8
Potatoes.....	do.....	5.4	8.9	6.1	2.2	6.4	9.9	5.5	2.6	6.7	8.6	6.2
Onions.....	do.....	6.5	6.1	5.9	.....	8.2	8.6	6.0	.....	9.9	8.8	7.2
Cabbage.....	do.....	6.0	7.3	6.4	.....	6.9	8.6	4.1	.....	7.6	8.0	6.4
Beans, baked.....	No. 2 can..	18.3	16.6	16.8	.....	17.9	16.6	16.3	.....	17.4	17.0	16.8
Corn, canned.....	do.....	17.7	16.5	16.4	.....	18.1	17.1	16.9	.....	20.0	20.3	20.6
Peas, canned.....	do.....	18.5	19.3	20.1	.....	17.4	16.7	16.7	.....	22.6	21.1	21.9
Tomatoes, canned.....	do.....	13.7	15.1	14.9	.....	16.2	15.5	15.3	.....	15.4	14.9	14.8
Sugar, granulated.....	Pound.....	10.9	26.7	23.0	5.9	11.2	28.4	22.3	5.9	11.3	26.0	25.5
Tea.....	do.....	63.2	77.5	76.9	60.0	83.3	85.1	86.8	60.0	86.8	90.9	90.6
Coffee.....	do.....	45.5	46.2	44.1	30.0	51.3	51.1	50.6	34.5	53.8	55.8	52.8
Prunes.....	do.....	25.5	25.8	25.9	.....	30.1	29.4	29.4	.....	30.5	27.3	26.5
Raisins.....	do.....	17.4	25.8	27.0	.....	19.8	31.5	33.4	.....	19.5	29.3	30.0
Bananas.....	Dozen.....	36.9	40.6	29.6	.....	31.4	38.1	30.9	.....	41.7	45.7	42.0
Oranges.....	do.....	50.6	56.1	56.9	.....	47.2	60.3	69.8	.....	100.0	.....	75.0

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

PRICES AND COST OF LIVING.

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

Kansas City, Mo.				Little Rock, Ark.				Los Angeles, Calif.				Louisville, Ky.				Manchester, N. H.			
Aug. 15—		July 15, 1920.	Aug. 15, 1920.	Aug. 15—		July 15, 1920.	Aug. 15, 1920.	Aug. 15—		July 15, 1920.	Aug. 15, 1920.	Aug. 15—		July 15, 1920.	Aug. 15, 1920.	Aug. 15—		July 15, 1920.	Aug. 15, 1920.
1913	1919		1913	1919		1913	1919	1913	1919	1920.	1920.	1913	1919	1920.	1920.	1913	1919	1920.	1920.
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
24.4	36.8	46.5	43.8	26.3	37.2	40.9	39.6	24.0	32.0	38.0	38.1	23.2	36.7	40.7	38.6	137.4	157.2	173.6	172.0
22.3	34.7	41.5	39.4	20.6	34.8	38.9	37.6	21.0	28.6	33.2	33.0	20.0	35.6	39.2	37.1	30.6	50.8	63.8	60.1
18.0	27.7	31.6	30.9	20.0	30.8	33.8	32.7	19.6	27.3	31.4	31.3	18.3	29.1	30.7	29.4	20.8	33.6	39.7	38.6
15.3	22.9	24.3	23.4	16.3	24.5	26.6	26.3	15.8	20.3	22.4	22.1	15.6	25.1	26.9	26.0	17.2	30.0	35.7	33.2
12.3	18.6	17.3	16.5	13.5	19.5	21.3	21.1	12.3	16.0	17.2	16.9	13.1	20.7	22.0	21.6	.....	.....	.....	.....
20.9	42.4	39.7	40.6	22.5	43.4	42.5	43.7	25.4	50.6	50.7	51.5	20.6	43.3	40.2	41.5	21.4	48.7	46.4	49.1
31.3	58.3	58.3	57.7	38.0	58.8	57.9	58.2	33.8	66.0	64.8	65.0	29.7	59.8	52.8	52.5	23.6	53.2	50.4	49.5
30.6	56.8	60.7	60.6	30.0	67.5	63.2	63.4	36.7	64.0	68.2	70.1	30.0	59.5	59.5	59.6	30.0	52.7	62.6	63.7
18.7	30.6	35.5	34.4	20.0	36.9	43.0	42.0	18.8	30.7	34.7	35.5	17.1	32.1	38.8	35.0	21.0	40.5	42.6	41.3
16.9	36.7	37.9	38.1	18.3	34.7	36.5	35.1	26.8	45.4	44.0	44.0	22.9	38.9	40.0	38.6	24.4	48.1	54.2	53.6
.....	31.9	37.2	36.9	.....	33.7	36.8	37.0	.....	38.3	40.0	48.8	.....	30.2	33.5	34.5	.....	31.3	40.7	40.7
9.1	15.0	16.0	16.0	10.0	18.0	20.0	20.0	10.0	14.0	18.0	18.0	8.8	15.0	16.0	16.0	8.0	15.0	16.0	16.0
.....	16.8	15.5	15.6	.....	16.9	16.1	16.4	.....	14.6	13.7	14.0	.....	16.1	15.9	16.3	.....	17.4	17.2	17.2
35.4	63.2	69.5	65.7	39.0	62.7	68.1	67.5	39.5	64.7	69.0	71.0	36.4	63.4	67.3	64.3	37.6	68.3	73.3	73.0
.....	40.7	41.9	41.9	.....	43.7	44.3	43.0	.....	44.9	45.2	44.8	.....	44.6	43.0	43.2	.....	42.1	43.0	43.2
.....	35.8	35.1	35.1	.....	37.3	37.9	37.8	.....	36.4	37.0	36.4	.....	35.0	35.2	35.2	.....	35.3	33.0	33.7
21.8	45.3	43.5	42.0	23.3	43.4	40.4	39.6	19.5	44.5	43.5	43.4	21.7	42.1	37.4	37.3	21.0	42.6	41.0	40.7
16.4	43.5	20.0	29.9	16.3	44.5	29.9	28.8	17.9	39.7	31.8	30.7	16.1	41.0	27.4	26.1	16.2	43.3	28.9	28.0
.....	43.7	38.3	37.1	.....	40.4	38.3	32.6	.....	41.0	35.5	33.1	.....	38.6	35.9	35.0	.....	40.3	37.1	35.5
25.3	52.9	49.9	55.8	28.3	53.3	60.4	56.9	39.0	60.9	57.6	62.7	25.0	48.2	49.6	54.2	35.6	73.3	70.8	79.1
6.0	10.0	13.2	13.4	5.5	10.0	11.0	11.0	6.0	9.4	10.6	10.6	5.7	10.0	11.1	10.4	6.1	9.5	11.3	11.3
3.0	6.9	7.9	7.7	3.5	7.5	8.7	8.5	3.6	7.4	8.2	8.2	3.4	7.4	8.1	7.8	3.4	7.7	9.4	9.1
2.7	7.5	7.9	7.7	2.5	6.5	6.2	6.1	3.3	7.4	8.1	8.1	2.3	6.2	6.0	5.5	3.6	7.0	7.9	8.0
.....	10.7	12.6	13.3	.....	11.0	12.0	12.5	.....	8.9	10.9	11.7	.....	9.0	11.0	11.2	.....	9.5	11.2	11.9
.....	15.0	15.9	15.4	.....	14.8	15.9	14.9	.....	13.4	14.0	13.9	.....	14.4	14.4	14.3	.....	14.8	17.0	16.3
.....	25.0	30.3	30.7	.....	25.4	30.3	31.3	.....	24.3	29.3	29.4	.....	25.6	28.6	29.6	.....	25.3	29.9	30.0
.....	19.1	21.1	23.2	.....	18.6	19.7	21.6	.....	16.8	19.1	19.6	.....	18.8	20.6	20.4	.....	23.2	26.8	27.0
8.7	15.2	19.0	19.0	8.3	15.2	18.1	18.1	7.7	14.7	18.1	17.6	8.1	14.9	18.9	18.4	8.8	15.5	18.9	18.9
.....	12.7	12.5	12.5	.....	14.2	12.4	12.0	.....	10.8	10.4	10.0	.....	12.4	11.9	11.6	.....	12.1	11.7	11.8
1.9	4.7	8.0	4.7	2.0	5.6	6.7	6.7	1.8	3.9	7.9	4.6	1.9	4.2	7.0	4.7	1.9	5.9	8.9	4.5
.....	8.6	7.2	5.9	.....	9.2	7.3	6.5	.....	5.2	4.7	4.6	.....	5.9	4.1	4.1	.....	9.1	5.6	5.2
.....	5.6	5.6	4.5	.....	7.8	8.3	6.5	.....	3.4	4.0	4.7	.....	6.8	5.9	5.4	.....	4.4	13.0	4.4
.....	17.0	17.6	17.1	.....	16.9	16.3	16.3	.....	17.7	18.4	18.2	.....	16.5	15.5	15.2	.....	17.6	17.2	17.6
.....	16.8	16.0	15.6	.....	17.9	18.3	18.0	.....	18.9	18.9	18.9	.....	18.2	17.4	17.8	.....	21.7	21.1	20.8
.....	17.5	16.9	17.3	.....	18.5	19.0	18.7	.....	19.4	19.6	19.5	.....	18.7	16.8	17.8	.....	20.6	22.3	22.3
.....	16.0	15.5	15.6	.....	14.9	14.8	14.8	.....	15.0	15.5	15.4	.....	15.3	14.5	14.2	.....	17.8	15.4	15.4
5.7	11.9	28.8	22.8	5.8	11.6	27.1	22.7	5.6	10.2	24.6	22.1	5.5	11.4	28.5	23.2	5.6	11.0	27.2	24.9
54.0	80.7	83.5	84.1	50.0	89.5	80.9	92.9	54.5	67.9	75.3	75.8	62.5	81.7	86.1	85.4	47.0	61.9	63.0	63.0
27.8	49.0	49.2	47.6	30.8	52.8	53.1	52.0	36.3	44.9	46.4	46.2	27.5	49.8	49.1	48.1	32.0	49.3	51.5	50.8
.....	23.6	29.1	29.2	.....	23.8	28.5	28.0	.....	29.5	29.0	27.8	.....	27.0	27.9	26.3	.....	26.8	28.6	29.2
.....	18.6	31.3	33.2	.....	20.3	25.8	27.2	.....	16.9	25.9	27.1	.....	17.6	27.8	31.9	.....	18.9	30.9	31.3
.....	45.0	55.5	54.0	.....	36.8	45.3	42.3	.....	41.0	57.5	57.5	.....	37.4	43.3	40.0	.....	40.0	47.5	47.5
.....	55.3	66.8	67.2	.....	57.7	63.5	68.8	.....	38.3	41.7	50.0	.....	45.5	57.2	55.7	.....	50.8	72.5	70.6

³ No. 2½ can

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES

Article.	Unit.	Memphis, Tenn.				Milwaukee, Wis.				Minneapolis, Minn.			
		Aug. 15—		July 15, 1920.	Aug. 15, 1920.	Aug. 15—		July 15, 1920.	Aug. 15, 1920.	Aug. 15—		July 15, 1920.	Aug. 15, 1920.
		1913	1919			1913	1919			1913	1919		
Sirloin steak	Pound	Cts. 22.9	Cts. 40.8	Cts. 47.0	Cts. 44.2	Cts. 22.6	Cts. 40.1	Cts. 46.3	Cts. 45.2	Cts. 24.2	Cts. 35.5	Cts. 43.6	Cts. 38.0
Round steak	do.	19.1	38.1	42.6	40.7	21.2	37.8	42.8	42.0	21.7	34.1	39.4	34.8
Rib roast	do.	21.5	32.8	35.7	33.6	18.8	31.3	34.6	33.7	21.0	29.7	34.8	30.4
Chuck roast	do.	15.6	27.1	28.7	26.0	16.4	28.4	29.6	28.5	17.0	23.7	27.4	24.2
Plate beef	do.	11.9	21.6	24.0	23.1	12.0	20.0	18.9	18.3	10.3	15.7	16.2	14.5
Pork chops	do.	20.0	45.0	40.8	43.6	20.2	44.7	43.1	44.3	20.0	43.1	39.0	41.9
Bacon	do.	32.1	61.1	59.3	58.5	28.6	58.1	57.7	58.5	27.7	61.1	58.9	59.0
Ham	do.	30.7	59.4	62.1	60.0	29.0	55.9	56.7	58.7	32.7	60.8	62.8	62.6
Lamb	do.	20.1	38.9	43.7	45.4	20.5	38.2	42.2	41.7	14.4	30.9	36.3	35.1
Hens	do.	20.0	36.6	39.3	38.9	19.8	39.3	39.1	42.3	18.5	34.9	35.7	37.7
Salmon (canned)	do.	35.1	39.6	39.0	39.0	34.6	42.3	42.9	42.9	40.0	46.2	47.4	47.4
Milk, fresh	Quart	10.0	18.0	18.5	18.5	7.0	13.0	13.0	13.0	7.0	13.0	13.0	14.0
Milk, evaporated	15-16 oz. can.	17.4	16.0	16.4	16.4	16.0	13.7	15.4	16.0	16.0	16.8	15.9	16.6
Butter	Pound	37.0	64.1	68.6	66.1	32.2	61.7	64.3	62.7	31.4	58.0	61.3	60.3
Oleomargarine	do.	44.7	42.3	44.3	44.3	42.9	40.2	39.1	39.1	41.1	41.8	42.3	42.3
Nut margarine	do.	42.3	37.6	36.8	36.8	34.7	34.0	34.2	34.2	32.3	33.6	33.3	33.3
Cheese	do.	20.8	43.5	39.1	38.1	21.3	43.5	38.7	36.5	20.8	41.7	38.7	38.1
Lard	do.	16.5	42.6	27.8	27.4	16.3	42.2	29.2	28.1	15.6	40.9	28.4	27.7
Crisco	do.	38.9	36.3	33.9	33.9	38.1	36.0	34.3	34.3	40.5	36.3	34.4	34.4
Eggs, strictly fresh	Dozen	29.3	52.4	52.2	59.6	26.2	51.9	48.1	57.4	25.3	50.1	50.8	55.1
Bread	Pound	6.0	10.0	12.9	13.1	5.6	10.0	10.9	10.9	5.6	9.6	11.1	11.1
Flour	do.	3.4	7.4	8.6	8.4	3.1	7.5	8.7	8.4	3.0	7.2	8.2	7.8
Corn meal	do.	2.2	6.0	5.7	5.5	3.3	6.1	7.2	7.1	2.4	6.5	7.4	7.1
Rolled oats	do.	10.5	12.3	12.3	12.3	8.5	9.4	9.4	9.4	7.1	9.5	9.7	9.7
Corn flakes	8-oz. pkg.	14.1	15.4	14.6	14.6	14.2	14.7	14.1	14.1	14.4	15.4	15.3	15.3
Cream of Wheat	28-oz. pkg.	24.1	30.1	29.6	29.6	25.2	30.0	30.0	30.0	25.4	31.3	31.0	31.0
Macaroni	Pound	18.8	19.5	20.9	20.9	19.4	19.5	19.8	19.8	17.4	18.6	18.6	18.6
Rice	do.	7.5	15.4	17.4	16.5	9.0	15.3	19.0	18.8	9.1	15.6	19.6	19.2
Beans, navy	do.	13.3	12.9	12.5	12.5	11.7	11.1	10.9	10.9	10.8	11.8	11.7	11.7
Potatoes	do.	2.1	5.7	9.7	5.4	1.5	5.5	10.2	5.4	1.0	3.7	8.7	3.5
Onions	do.	8.0	6.6	5.4	5.4	7.3	6.1	5.4	5.4	7.8	6.6	6.4	6.4
Cabbage	do.	6.5	7.1	5.0	5.0	3.8	11.0	4.2	4.2	3.6	5.7	2.8	2.8
Beans, baked	No. 2 can.	18.3	16.9	17.1	17.1	16.4	15.4	15.4	15.4	19.1	18.1	18.2	18.2
Corn, canned	do.	18.5	18.3	18.5	18.5	18.0	17.7	17.6	17.6	17.1	17.1	17.4	17.4
Peas, canned	do.	18.8	19.2	20.1	20.1	17.4	17.1	17.2	17.2	17.3	17.7	17.7	17.7
Tomatoes, canned	do.	16.8	15.1	15.1	15.1	17.5	15.0	14.9	14.9	16.3	16.2	16.4	16.4
Sugar, granulated	Pound	5.7	11.4	28.3	22.5	5.5	11.1	27.2	21.7	5.8	11.2	28.4	21.3
Tea	do.	63.8	88.5	96.2	95.9	50.0	67.5	71.7	72.4	45.0	62.8	65.5	66.1
Coffee	do.	27.5	52.3	53.1	49.3	27.5	45.9	47.0	46.0	30.8	52.9	51.6	51.2
Prunes	do.	28.4	30.5	29.8	29.8	26.6	28.5	28.6	28.6	27.2	30.6	30.2	30.2
Raisins	do.	17.0	25.5	25.5	25.5	18.5	29.8	30.7	30.7	16.9	29.4	29.4	29.4
Bananas	Dozen	40.0	46.8	44.1	44.1	36.3	48.3	45.0	45.0	41.4	56.3	56.7	56.7
Oranges	do.	51.8	61.1	61.0	61.0	54.7	66.9	69.2	69.2	54.7	67.9	69.8	69.8

4 Whole.

PRICES AND COST OF LIVING.

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

Mobile, Ala.			Newark, N. J.				New Haven, Conn.				New Orleans, La.				New York, N. Y.			
Aug. 15, 1919.	July 15, 1920.	Aug. 15, 1920.	Aug. 15—		July 15, 1920.	Aug. 15, 1920.	Aug. 15—		July 15, 1920.	Aug. 15, 1920.	Aug. 15—		July 15, 1920.	Aug. 15, 1920.	Aug. 15—		July 15, 1920.	Aug. 15, 1920.
			1913	1919			1913	1919			1913	1919			1913	1919		
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
34.6	37.4	36.9	29.2	47.7	57.7	55.9	32.8	55.4	62.2	62.1	21.9	33.9	36.0	35.3	26.8	44.0	52.9	51.4
34.6	37.4	36.5	28.4	48.2	57.3	54.9	30.4	50.1	55.4	55.5	18.9	31.1	33.5	32.5	26.1	45.6	52.9	51.7
30.4	31.2	31.3	21.2	38.3	44.4	42.7	24.2	40.3	45.2	44.9	19.4	29.9	31.2	30.5	21.9	38.3	44.4	43.0
25.4	26.6	26.8	18.8	29.9	32.6	29.8	20.0	34.3	37.2	35.7	14.5	22.6	23.2	22.7	16.3	28.9	31.7	30.5
21.4	22.3	22.4	12.0	21.6	18.9	17.1	.....	.....	.....	.....	11.0	18.9	18.4	18.1	14.9	26.0	25.1	24.5
49.6	46.9	49.0	24.2	49.2	46.0	47.8	23.4	49.0	48.0	49.3	23.8	48.9	45.4	49.1	22.2	47.8	44.3	45.9
62.5	60.0	62.7	26.4	50.9	48.9	48.6	29.3	59.9	57.6	57.5	33.1	60.0	57.7	57.9	26.4	53.6	52.4	52.1
55.5	60.1	59.5	22.2	42.9	43.7	43.4	34.0	63.1	67.5	69.7	31.3	57.1	58.2	57.8	30.0	61.3	63.2	62.9
37.1	38.2	36.4	20.0	38.8	44.6	40.5	19.2	41.9	45.7	45.1	21.3	39.1	43.1	43.5	15.8	31.4	36.4	34.7
42.0	46.1	45.6	24.0	44.5	50.5	48.3	24.0	47.1	51.6	51.8	21.7	40.7	44.6	47.5	22.0	41.8	47.0	46.6
32.1	38.2	38.3	.....	34.6	38.2	38.5	.....	33.6	40.5	41.5	.....	36.9	37.4	38.1	.....	37.5	42.9	42.9
18.3	23.5	23.5	9.0	16.5	17.0	17.8	9.0	16.0	16.0	17.0	9.3	16.5	17.6	17.5	9.0	16.0	16.0	17.0
17.9	17.6	18.5	.....	15.2	14.4	14.7	.....	16.3	15.0	15.4	.....	16.1	14.8	15.0	.....	15.4	14.9	15.2
66.5	72.8	71.5	35.8	64.8	69.5	66.5	34.0	63.4	67.5	66.8	34.0	64.0	69.5	68.5	34.3	63.0	66.9	64.8
44.9	42.8	41.0	.....	42.0	41.6	41.2	.....	42.9	43.0	42.3	.....	43.5	44.1	43.8	.....	42.8	43.4	42.8
43.0	40.9	40.8	.....	35.1	36.1	35.7	.....	36.4	35.9	35.9	.....	36.7	36.3	36.3	.....	34.2	35.3	35.3
42.5	41.0	40.4	24.3	44.9	43.1	42.5	22.0	43.5	40.4	40.3	22.0	44.1	40.2	39.3	19.4	42.8	41.7	41.3
43.3	30.2	27.7	16.5	43.8	29.3	27.6	15.8	42.1	28.0	27.2	15.4	42.7	27.1	25.9	16.2	41.6	29.2	28.1
39.3	37.5	36.5	.....	40.0	33.2	32.2	.....	40.3	34.7	33.3	.....	39.2	37.3	35.3	.....	39.1	34.7	32.0
57.4	54.8	61.0	42.2	68.3	66.7	72.9	42.6	76.8	74.1	83.7	30.4	55.6	51.7	59.4	38.6	68.5	66.8	71.9
9.6	11.0	11.0	5.6	9.8	11.5	11.4	6.0	10.5	12.0	12.0	5.1	9.1	10.4	10.4	6.1	10.0	11.9	11.9
7.4	9.1	8.9	3.7	7.6	9.2	8.9	3.3	7.5	9.1	8.9	3.7	7.5	8.8	8.9	3.3	7.8	9.8	9.5
6.5	6.8	6.4	3.6	7.0	7.9	7.9	3.2	7.8	7.9	8.1	2.8	6.0	6.0	6.0	3.4	7.3	8.1	8.1
11.2	12.5	13.1	.....	8.6	9.6	9.7	.....	9.2	11.3	11.5	.....	8.9	11.0	11.7	.....	7.8	9.3	9.8
14.7	16.1	15.2	.....	12.5	13.2	13.3	.....	13.9	14.3	14.5	.....	14.1	14.5	14.6	.....	12.1	13.5	12.9
25.4	31.2	31.3	.....	23.6	28.6	28.6	.....	24.3	29.3	29.2	.....	25.0	30.0	30.0	.....	24.2	28.7	28.7
19.2	21.4	21.7	.....	19.8	25.2	25.2	.....	20.9	22.5	23.0	.....	11.1	11.6	11.6	.....	19.8	24.1	24.3
15.4	17.3	15.9	9.0	16.5	18.5	18.2	9.3	15.7	18.1	18.7	7.4	15.1	15.6	14.4	8.0	16.1	18.4	18.3
13.9	13.6	13.3	.....	12.6	11.8	11.8	.....	12.5	11.7	11.5	.....	11.0	11.1	10.8	.....	12.5	12.5	12.5
6.2	10.8	7.2	2.6	5.2	8.6	4.7	2.1	4.5	8.6	4.1	2.2	4.8	9.4	6.4	2.4	4.9	8.7	4.5
9.1	7.8	6.3	.....	8.4	7.0	5.2	.....	8.5	6.5	5.6	.....	7.6	5.6	5.0	.....	8.6	6.4	5.5
5.5	8.8	5.5	.....	4.4	5.8	4.0	.....	4.2	8.0	4.0	.....	4.8	6.8	3.5	.....	4.0	5.2	3.0
17.6	17.3	16.5	.....	15.3	14.4	14.4	.....	18.2	17.2	16.9	.....	17.5	17.0	17.0	.....	15.5	15.2	15.2
20.0	19.1	19.1	.....	20.6	18.6	18.6	.....	22.1	21.7	21.7	.....	17.4	16.4	16.3	.....	19.4	18.4	18.3
19.7	19.9	19.9	.....	19.7	18.8	18.7	.....	21.5	23.1	23.3	.....	18.2	17.0	17.2	.....	18.2	18.0	18.3
14.9	15.4	15.4	.....	14.7	14.1	14.1	.....	23.3	22.2	22.8	.....	14.7	15.0	14.9	.....	15.3	14.9	14.7
11.3	27.2	25.2	5.3	10.7	25.5	22.7	5.4	11.1	26.8	23.0	5.3	10.8	25.1	22.4	5.0	10.6	25.2	21.7
79.1	80.5	81.2	53.8	56.1	55.3	54.7	55.0	61.4	64.3	64.1	62.1	68.4	73.3	73.8	43.3	55.6	59.1	58.7
44.0	46.9	46.1	29.3	45.2	45.7	44.4	33.8	48.5	51.9	51.6	26.4	43.8	41.0	39.1	27.2	45.4	46.4	44.9
26.9	28.4	29.7	.....	30.4	27.4	27.3	.....	26.8	27.7	27.6	.....	31.5	26.7	27.2	.....	31.9	27.7	27.6
19.5	28.4	28.9	.....	16.8	27.2	28.6	.....	17.7	27.1	27.0	.....	19.0	28.2	28.7	.....	17.3	28.6	29.2
30.0	35.0	31.7	.....	40.0	55.8	54.2	.....	36.4	45.7	43.0	.....	21.3	17.5	17.5	.....	35.5	51.0	45.3
60.0	64.5	57.9	.....	60.3	75.0	73.1	.....	56.2	68.4	63.9	.....	61.0	53.3	52.5	.....	58.1	76.9	72.0

⁵ No. 3 can.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES

Article.	Unit.	Norfolk, Va.			Omaha, Nebr.				Peoria, Ill.		
		Aug. 15, 1919.	July 15, 1920.	Aug. 15, 1920.	Aug. 15—		July 15, 1920.	Aug. 15, 1920.	Aug. 15, 1919.	July 15, 1920.	Aug. 15, 1920.
					1913	1919					
Sirloin steak.....	Pound.....	Cts. 47.5	Cts. 54.6	Cts. 53.8	Cts. 25.4	Cts. 40.5	Cts. 50.9	Cts. 47.8	Cts. 36.6	Cts. 40.1	Cts. 37.9
Round steak.....	do.....	43.2	48.1	47.8	22.8	37.9	48.8	45.8	36.1	39.5	37.0
Rib roast.....	do.....	38.0	43.1	42.1	19.0	29.4	33.1	32.3	27.4	28.8	28.0
Chuck roast.....	do.....	30.8	31.1	30.6	16.2	25.3	27.3	26.7	25.4	25.9	24.6
Plate beef.....	do.....	21.7	19.8	19.7	11.8	18.5	16.7	16.1	18.7	18.1	16.8
Pork chops.....	do.....	45.3	40.3	42.1	20.4	42.6	40.9	42.8	42.0	41.3	41.1
Bacon.....	do.....	58.8	52.2	53.0	28.6	60.3	59.1	59.4	57.6	55.6	56.3
Ham.....	do.....	50.0	51.3	53.8	30.0	60.3	65.6	65.3	57.5	60.9	60.4
Lamb.....	do.....	42.1	47.8	45.0	18.0	35.8	41.9	39.6	37.1	37.6	37.1
Hens.....	do.....	45.3	48.2	47.6	16.4	37.2	39.4	40.3	36.2	40.0	38.3
Salmon (canned).....	do.....	30.5	35.3	34.8	.....	33.1	39.8	40.4	31.1	37.1	37.6
Milk, fresh.....	Quart.....	21.0	21.3	21.3	8.2	14.4	15.2	15.2	14.3	14.3	15.1
Milk, evaporated.....	15-16 oz. can.....	16.0	14.8	15.1	.....	17.3	15.9	17.1	17.6	15.6	15.5
Butter.....	Pound.....	68.9	72.7	71.9	33.0	61.8	64.7	62.8	61.0	61.2	61.1
Oleomargarine.....	do.....	48.0	43.7	42.8	.....	43.8	44.5	44.1	43.8	41.8	40.7
Nut margarine.....	do.....	39.0	35.3	35.3	.....	35.5	36.1	36.4	36.8	35.3	35.1
Cheese.....	do.....	43.5	38.5	39.1	22.9	44.2	41.3	40.6	44.1	41.2	39.6
Lard.....	do.....	43.3	29.5	28.1	17.8	44.3	31.9	31.2	41.9	28.7	28.1
Crisco.....	do.....	39.6	35.6	34.4	.....	41.3	39.3	37.7	41.5	37.9	36.0
Eggs, strictly fresh.....	Dozen.....	55.6	53.8	57.4	23.3	50.1	49.4	54.8	50.5	47.9	53.8
Bread.....	Pound.....	9.9	11.9	11.8	5.2	10.0	12.2	12.2	10.0	12.6	12.6
Flour.....	do.....	7.7	8.7	8.5	2.7	7.0	8.4	7.8	7.8	9.1	9.0
Corn meal.....	do.....	6.2	6.8	6.1	2.4	6.4	6.6	6.4	6.7	6.7	6.6
Rolled oats.....	do.....	10.2	11.0	11.4	.....	8.3	11.5	12.1	9.5	12.0	11.8
Corn flakes.....	8-oz pkg.....	14.4	14.5	14.4	.....	14.7	15.4	15.4	14.9	15.8	15.5
Cream of Wheat.....	28-oz. pkg.....	25.2	29.1	29.0	.....	25.3	31.2	31.8	26.8	31.5	32.1
Macaroni.....	Pound.....	19.9	21.7	22.2	.....	19.8	22.7	23.4	19.6	20.2	19.6
Rice.....	do.....	16.6	19.7	19.7	8.5	15.0	19.6	19.2	14.9	19.5	19.3
Beans, navy.....	do.....	13.3	12.0	11.7	.....	12.5	12.6	12.4	12.3	12.1	11.4
Potatoes.....	do.....	5.4	8.2	5.2	1.7	4.9	8.9	4.3	5.0	9.5	5.0
Onions.....	do.....	8.8	7.1	6.1	.....	7.6	7.5	6.2	9.1	8.4	6.6
Cabbage.....	do.....	5.4	6.1	4.6	.....	5.1	4.1	2.8	4.8	7.1	4.7
Beans, baked.....	No. 2 can.....	14.6	14.0	13.8	.....	19.5	21.1	20.2	18.8	17.6	17.3
Corn, canned.....	do.....	21.9	21.1	21.1	.....	17.5	18.3	18.5	17.6	17.6	17.0
Peas, canned.....	do.....	22.5	21.7	22.2	.....	18.2	19.1	19.2	18.3	18.8	18.1
Tomatoes, canned.....	do.....	15.0	14.7	14.4	.....	16.8	16.3	16.7	15.2	15.5	15.6
Sugar, granulated.....	Pound.....	11.2	26.9	24.0	6.1	11.1	25.8	22.1	11.8	28.2	23.2
Tea.....	do.....	84.3	89.3	88.3	56.0	75.3	82.9	82.2	73.3	72.9	72.7
Coffee.....	do.....	51.1	52.8	52.2	30.0	49.7	52.5	52.5	47.6	47.7	47.4
Prunes.....	do.....	26.2	27.5	27.3	.....	27.0	30.0	30.6	28.5	32.0	31.9
Raisins.....	do.....	16.9	25.5	25.9	.....	18.7	30.4	31.5	18.4	30.4	28.4
Bananas.....	Dozen.....	39.2	48.2	43.5	.....	40.0	50.0	40.0	610.2	613.5	613.5
Oranges.....	do.....	52.3	71.0	70.6	.....	53.5	67.9	66.2	51.0	65.9	64.6

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

PRICES AND COST OF LIVING.

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

Philadelphia, Pa.				Pittsburgh, Pa.				Portland, Me.			Portland, Oreg.				Providence, R. I.				
Aug. 15—		July 15, 1920.	Aug. 15, 1920.	Aug. 15—		July 15, 1920.	Aug. 15, 1920.	Aug. 15, 1919.	July 15, 1920.	Aug. 15, 1920.	Aug. 15—		July 15, 1920.	Aug. 15, 1920.	Aug. 15—		July 15, 1920.	Aug. 15, 1920.	
1913	1919			1913	1919						1913	1919			1913	1919			
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
32.3	152.6	162.6	61.5	28.0	44.8	55.7	53.0	58.2	171.0	169.5	23.9	33.4	33.6	32.4	40.2	166.5	179.7	180.0	
27.5	48.4	57.1	54.3	24.8	40.9	50.0	47.5	52.8	61.4	58.0	21.4	31.8	31.6	31.1	31.6	53.9	63.4	62.7	
22.5	39.6	44.7	43.4	22.5	34.7	40.6	39.0	33.1	36.8	36.7	19.9	29.4	30.2	29.7	24.2	42.3	49.2	47.7	
18.4	32.1	33.6	33.3	17.3	28.9	31.8	29.6	26.2	28.8	28.4	16.4	22.5	21.8	21.5	18.8	36.1	37.7	37.1	
12.3	20.6	18.4	17.4	12.3	19.0	19.4	18.1	.....	.....	.....	13.6	16.7	16.8	16.7	.....	.....	.....	.....
22.4	51.1	46.9	47.8	23.5	49.0	45.4	47.9	48.9	43.4	47.2	24.4	48.2	42.5	44.2	21.6	52.6	50.2	52.4	
28.2	56.5	51.4	50.9	30.1	59.7	57.6	57.5	54.2	50.4	50.8	31.5	61.4	58.2	59.5	23.4	54.5	50.9	50.9	
32.6	63.0	68.0	68.1	31.6	63.0	66.0	66.0	57.0	62.1	65.1	31.2	59.8	59.3	60.3	33.3	66.8	68.2	71.4	
20.2	41.9	48.3	46.0	19.7	39.2	45.4	44.2	37.6	40.6	43.9	17.2	33.2	34.7	34.0	18.7	41.9	49.4	47.0	
23.1	46.0	50.3	50.1	26.0	48.8	49.6	51.0	47.8	53.3	54.1	20.7	38.6	38.2	38.3	24.8	48.3	53.8	53.3	
.....	29.4	36.1	36.1	.....	32.4	40.3	40.4	29.9	38.7	38.6	.....	36.5	43.8	45.9	.....	35.7	41.4	42.2
8.0	14.0	14.0	15.0	8.6	15.0	15.0	16.0	14.3	15.5	16.5	9.3	15.3	15.2	15.2	9.0	15.5	17.0	17.5	
.....	15.6	15.2	15.5	.....	15.8	15.1	15.0	17.2	16.2	16.4	.....	16.7	14.6	14.9	.....	16.8	16.0	15.8
39.4	68.8	74.2	72.7	35.6	65.1	69.0	67.2	69.1	73.5	73.4	39.5	66.5	64.8	67.0	36.0	64.6	68.1	68.3	
.....	44.8	45.4	44.4	.....	41.9	41.1	39.1	43.2	44.0	43.9	.....	40.8	42.0	41.3	.....	40.3	41.1	41.3
.....	37.4	37.5	37.3	.....	35.6	36.0	35.3	35.8	35.6	35.9	.....	36.6	38.5	38.8	.....	34.4	35.2	35.4
25.0	46.1	44.3	44.1	24.5	43.3	43.0	41.9	43.8	43.2	42.3	20.8	45.7	41.3	42.1	21.7	42.7	41.1	40.8	
15.6	41.0	28.0	27.2	15.8	41.9	27.8	27.0	44.0	28.3	27.2	18.6	41.2	34.4	33.6	15.7	42.6	27.9	26.8	
.....	39.0	34.4	32.2	.....	41.4	35.4	32.9	42.5	35.5	34.3	.....	44.0	39.6	38.6	.....	40.6	35.3	33.8
34.3	62.9	59.5	64.7	28.9	57.7	56.0	61.0	74.9	68.5	78.4	33.8	59.8	50.9	60.4	38.4	76.3	73.3	80.3	
4.8	9.4	10.6	10.6	5.4	10.3	12.0	12.0	11.0	12.0	12.0	5.6	9.9	11.3	11.3	5.9	10.7	11.9	12.0	
3.2	7.4	9.1	8.6	3.2	7.6	8.7	8.3	7.5	8.9	8.7	2.9	6.4	7.7	7.5	3.5	8.0	9.3	9.1	
2.7	5.7	6.1	5.9	2.8	7.0	7.9	8.1	6.7	7.2	7.8	3.3	7.3	7.5	7.5	2.8	6.3	6.8	6.9	
.....	7.9	9.8	10.0	.....	8.8	10.8	11.4	7.8	9.3	10.1	.....	8.4	12.6	12.7	.....	8.5	10.7	11.2
.....	12.3	12.6	13.0	.....	13.6	14.3	14.3	14.0	15.3	15.3	.....	14.8	15.3	15.6	.....	13.8	14.6	14.7
.....	24.3	28.9	28.7	.....	25.1	29.6	29.4	25.1	29.7	29.6	.....	29.0	34.3	34.3	.....	24.5	30.5	30.4
.....	20.4	22.5	21.9	.....	18.4	21.3	22.1	22.7	23.9	24.1	.....	16.6	16.8	18.5	.....	21.1	25.2	24.9
9.8	16.6	19.3	19.3	9.2	15.5	19.2	18.9	14.9	19.2	19.5	8.6	15.2	19.8	19.5	9.3	14.6	19.0	18.6	
.....	12.2	11.0	11.4	.....	12.3	11.6	11.6	12.1	11.3	11.3	.....	10.7	10.2	9.8	.....	11.9	11.3	11.3
2.1	5.2	8.2	4.2	1.9	5.2	8.4	4.3	5.6	9.1	3.9	1.3	3.3	8.0	4.2	2.0	5.1	8.9	4.2	
.....	8.9	5.2	3.8	.....	9.1	5.9	5.8	8.0	6.2	5.5	.....	5.9	4.6	4.6	.....	8.0	6.7	5.4
.....	5.2	6.5	2.8	.....	5.2	8.8	4.6	3.9	11.0	3.5	.....	4.7	4.9	3.9	.....	3.9	8.4	3.5
.....	14.3	14.9	15.1	.....	16.3	16.2	16.6	19.1	18.9	19.0	.....	21.8	20.9	21.0	.....	16.7	16.5	16.5
.....	18.6	17.5	18.0	.....	19.1	18.0	17.6	21.5	19.7	19.7	.....	23.3	21.7	22.2	.....	20.2	20.3	20.7
.....	18.2	18.5	18.5	.....	19.0	18.4	17.9	20.8	20.6	20.8	.....	21.9	20.7	20.9	.....	20.1	21.3	21.3
.....	14.3	14.9	15.0	.....	15.0	14.7	14.9	20.3	17.2	17.6	.....	19.1	14.2	14.0	.....	16.9	16.2	15.8
5.0	10.3	25.7	21.5	5.7	11.3	20.0	24.3	10.5	26.7	25.0	6.4	10.7	25.1	23.4	5.2	10.8	26.7	25.1	
54.0	61.0	62.5	61.9	58.0	82.7	79.0	79.1	64.0	63.9	63.7	55.0	63.7	68.3	68.3	48.3	60.7	59.4	57.4	
24.5	43.1	43.8	42.2	30.0	47.6	48.4	48.7	49.6	50.8	51.1	35.0	50.0	50.3	50.0	30.0	52.7	52.2	52.4	
.....	30.7	27.2	27.3	.....	27.2	30.1	30.6	27.3	26.1	25.8	.....	21.9	26.1	26.1	.....	31.1	28.2	28.1
.....	16.7	26.9	27.7	.....	18.7	30.5	31.1	16.6	29.3	28.7	.....	17.7	27.5	28.3	.....	19.1	28.0	27.9
.....	37.0	45.3	39.6	.....	42.5	53.1	48.5	42.0	55.0	55.0	.....	44.0	52.0	52.5	.....	41.3	50.0	47.9
.....	52.7	68.9	64.2	.....	52.7	65.8	63.2	59.6	78.0	74.6	.....	58.3	71.4	71.9	.....	60.8	72.5	74.0

⁶ Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES

Article.	Unit.	Richmond, Va.				Rochester, N. Y.				St. Louis, Mo.			
		Aug. 15—		July 15, 1920.	Aug. 15, 1920.	Aug. 15, 1919.	July 15, 1920.	Aug. 15, 1920.	Aug. 15—		July 15, 1920.	Aug. 15, 1920.	
		1913	1919						1913	1919			
Sirloin steak.....	Pound.....	22.6	44.0	47.2	47.0	41.7	44.5	45.2	25.6	37.0	45.0	43.5	
Round steak.....	do.....	20.0	40.9	43.2	43.1	38.8	40.6	41.5	24.7	37.0	44.3	43.4	
Rib roast.....	do.....	19.3	35.4	35.8	35.5	32.1	34.2	33.3	19.0	30.3	35.0	33.5	
Chuck roast.....	do.....	15.9	30.2	30.5	28.7	29.3	29.8	29.6	15.3	22.6	26.0	24.7	
Plate beef.....	do.....	12.9	24.1	22.4	22.5	20.3	19.4	18.8	11.5	18.8	18.9	18.6	
Pork chops.....	do.....	21.2	45.9	42.0	45.1	47.7	44.0	45.6	20.8	44.6	42.1	42.8	
Bacon.....	do.....	27.0	53.9	50.0	49.3	49.7	46.5	46.4	28.0	54.8	53.0	52.0	
Ham.....	do.....	26.0	54.8	55.8	55.1	56.4	59.8	59.3	28.3	58.7	63.2	61.6	
Lamb.....	do.....	19.3	40.9	46.0	43.9	35.6	39.0	38.2	19.0	34.5	38.5	35.3	
Hens.....	do.....	19.4	43.7	45.4	44.6	45.2	48.0	48.3	17.4	36.9	38.5	38.6	
Salmon, canned.....	do.....	.....	26.4	28.0	27.5	31.0	39.2	39.6	.....	31.5	36.1	37.1
Milk, fresh.....	Quart.....	10.0	15.7	16.0	16.0	14.0	13.5	14.5	8.0	15.0	15.0	16.0	
Milk, evaporated.....	15-16 oz. can.....	.....	17.3	16.7	16.3	16.3	16.3	16.4	.....	15.9	14.7	14.6
Butter.....	Pound.....	38.6	69.4	77.0	76.7	63.2	67.1	66.5	33.8	63.2	68.5	66.5	
Oleomargarine.....	do.....	.....	42.3	45.5	45.5	43.8	43.5	43.3	.....	39.6	39.5	39.8
Nut margarine.....	do.....	.....	36.9	37.9	37.8	34.4	35.4	35.3	.....	34.9	34.7	34.8
Cheese.....	do.....	21.8	43.9	42.1	40.3	41.5	40.5	40.3	19.2	42.5	39.2	38.5	
Lard.....	do.....	15.3	42.2	30.5	28.4	41.6	28.5	27.1	14.5	38.6	23.7	22.1	
Crisco.....	do.....	.....	39.8	37.8	35.6	39.3	35.4	33.0	.....	39.1	34.7	33.1
Eggs, strictly fresh.....	Dozen.....	26.6	57.1	54.7	59.4	61.1	58.5	64.6	23.0	51.3	49.7	56.5	
Bread.....	Pound.....	5.3	10.9	13.1	13.2	10.0	11.4	11.6	5.5	10.0	12.8	13.1	
Flour.....	do.....	3.3	7.6	9.2	8.7	7.4	9.1	8.8	3.0	6.9	8.1	7.8	
Corn meal.....	do.....	2.1	6.3	7.1	7.0	6.7	7.5	7.3	2.2	6.0	6.5	6.2	
Rollod oats.....	do.....	.....	10.5	11.6	11.8	7.0	8.8	8.3	.....	6.5	10.1	10.5
Corn flakes.....	8-oz. pkg.....	.....	14.8	15.3	14.8	13.7	14.8	14.6	.....	13.6	13.7	13.6
Cream of Wheat.....	28-oz. pkg.....	.....	25.4	31.5	30.9	24.6	29.8	29.6	.....	24.2	30.0	30.1
Macaroni.....	Pound.....	.....	19.1	21.9	20.9	19.1	20.8	20.1	.....	18.3	18.1	19.7
Rice.....	do.....	10.0	15.9	20.5	20.6	15.7	19.0	18.7	8.4	15.1	17.6	16.8	
Beans, navy.....	do.....	.....	14.0	13.3	13.7	12.0	11.9	11.8	.....	11.6	11.0	10.8
Potatoes.....	do.....	1.8	4.9	6.9	5.5	5.5	8.4	4.1	1.9	4.3	8.7	6.0	
Onions.....	do.....	.....	6.5	9.2	6.0	8.8	6.0	5.4	.....	6.5	5.8	5.1
Cabbage.....	do.....	.....	5.8	4.3	3.3	5.0	8.3	5.1	.....	5.3	5.2	4.5
Beans, baked.....	No. 2 can.....	.....	15.1	14.6	14.8	15.1	14.4	14.3	.....	15.4	15.6	15.5
Corn, canned.....	do.....	.....	18.9	19.9	19.8	19.2	20.1	19.7	.....	16.6	16.0	16.1
Pears, canned.....	do.....	.....	22.2	21.4	21.4	19.1	20.6	20.5	.....	16.3	15.9	16.1
Tomatoes, canned.....	do.....	.....	17.0	15.2	14.8	16.2	16.3	16.5	.....	14.1	14.7	14.7
Sugar, granulated.....	Pound.....	5.1	11.1	27.4	25.4	10.8	26.6	24.4	5.4	11.9	26.3	19.4	
Tea.....	do.....	56.0	81.3	90.0	88.6	61.0	66.6	67.1	55.0	73.2	74.5	74.7	
Coffee.....	do.....	26.8	45.7	50.7	50.6	44.9	47.6	46.8	24.4	46.3	44.3	42.9	
Prunes.....	do.....	.....	27.5	28.6	28.4	27.9	28.9	28.8	.....	27.5	29.0	28.0
Raisins.....	do.....	.....	16.4	26.9	27.8	16.9	29.4	29.4	.....	18.7	26.4	27.5
Bananas.....	Dozen.....	.....	44.2	53.1	50.9	42.1	50.0	49.4	.....	32.7	39.7	36.9
Oranges.....	do.....	.....	51.1	69.7	65.4	55.4	60.9	65.0	.....	45.2	60.7	57.6

PRICES AND COST OF LIVING.

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

St. Paul, Minn.				Salt Lake City, Utah.				San Francisco, Calif.				Savannah, Ga.		Scranton, Pa.			
Aug. 15—		July 15, 1920.	Aug. 15, 1920.	Aug. 15—		July 15, 1920.	Aug. 15, 1920.	Aug. 15—		July 15, 1920.	Aug. 15, 1920.	July 15, 1920.	Aug. 15, 1920.	Aug. 15—		July 15, 1920.	Aug. 15, 1920.
1913	1919			1913	1919			1913	1919					1913	1919		
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
26.6	38.7	48.4	43.4	23.1	33.9	35.4	34.6	20.7	29.4	31.8	31.4	43.8	40.0	26.8	45.9	55.4	55.2
22.9	34.6	43.7	37.9	20.0	30.7	32.8	31.7	19.3	28.2	29.6	29.3	39.6	37.5	23.3	42.0	48.2	48.0
20.6	31.5	37.6	34.4	20.0	26.7	27.9	26.6	21.0	28.3	30.7	30.2	32.9	31.5	23.8	37.1	41.3	41.4
17.0	25.0	30.3	26.4	15.4	22.6	23.4	22.6	15.0	19.8	20.9	20.5	24.2	24.0	18.0	31.1	34.3	34.1
10.6	16.5	17.5	15.4	12.3	16.3	16.5	16.0	13.3	17.5	17.1	17.0	20.0	20.8	12.5	19.6	20.3	20.0
19.7	41.6	39.7	41.8	23.0	47.5	41.9	44.2	23.7	49.2	45.3	46.5	40.7	44.0	22.3	48.8	46.9	49.0
27.2	57.8	56.3	56.6	32.0	60.0	56.2	56.2	34.7	64.2	63.3	63.3	54.1	55.3	28.0	60.6	58.3	57.9
28.3	58.8	58.9	60.3	30.8	57.9	57.5	58.2	32.0	59.7	61.0	61.5	55.0	55.6	31.7	60.0	66.6	67.9
17.9	30.9	35.6	34.6	18.5	28.5	35.5	33.1	16.5	32.1	35.2	34.4	50.0	43.3	20.0	43.4	49.8	49.3
19.4	35.9	37.9	37.6	25.0	36.4	40.0	40.4	23.8	46.4	46.3	47.3	45.0	48.3	23.3	47.1	52.0	51.0
.....	32.4	41.2	41.7	.....	31.8	40.0	40.4	.....	28.4	35.4	35.3	45.5	46.6	.....	36.4	41.6	41.8
6.9	13.0	13.0	14.0	8.7	12.5	12.5	12.5	10.0	14.0	16.0	16.8	24.7	24.7	8.6	14.0	14.0	15.0
.....	16.8	15.6	15.7	.....	16.5	14.6	14.7	.....	15.0	13.8	14.2	15.3	15.3	.....	15.8	15.1	15.5
32.8	57.3	61.9	60.2	40.0	66.7	65.2	65.4	40.7	63.9	68.0	69.2	72.4	70.4	35.2	63.9	67.2	67.2
.....	40.5	42.3	42.5	.....	42.0	39.5	39.6	.....	36.0	39.2	40.5	44.7	44.2	.....	43.8	43.9	43.4
.....	34.9	35.1	35.1	.....	40.4	38.6	38.8	.....	36.0	35.8	35.7	39.4	39.6	.....	36.3	36.7	36.7
21.0	41.0	40.6	39.4	23.3	43.4	40.4	38.8	19.0	44.2	42.6	43.2	41.7	40.4	18.0	42.8	39.9	39.4
15.0	42.0	29.6	28.3	19.3	44.7	32.0	30.8	18.0	41.2	33.2	31.5	31.7	27.3	16.2	40.0	29.4	28.8
.....	39.4	40.4	39.4	.....	46.3	42.4	40.8	.....	42.3	38.0	35.6	37.0	34.5	.....	44.6	36.4	35.0
24.3	51.4	49.8	57.3	32.9	56.7	58.5	65.2	38.2	62.4	60.6	64.7	52.5	55.8	30.1	65.2	59.7	64.4
5.9	9.3	11.4	11.4	5.9	10.0	12.6	12.6	5.9	10.0	10.9	10.9	12.7	12.7	5.6	10.0	13.9	13.9
3.0	7.3	8.7	8.2	2.6	6.1	7.4	6.5	3.4	7.3	8.5	8.5	8.9	8.7	3.5	7.8	9.3	9.2
2.4	6.5	7.2	7.3	3.3	7.3	7.3	7.4	3.4	6.9	7.4	7.6	5.8	5.4	.....	9.0	9.0	8.5
.....	7.5	10.3	10.5	.....	9.2	11.0	10.7	.....	8.5	11.9	11.2	12.0	12.0	.....	10.3	11.6	11.5
.....	14.5	15.8	15.9	.....	14.8	15.2	15.4	.....	14.1	15.5	15.1	15.5	14.8	.....	14.2	14.4	14.6
.....	25.8	31.4	31.4	.....	25.9	34.0	33.6	.....	24.8	28.9	29.2	31.5	31.6	.....	25.1	29.7	30.0
.....	19.4	20.8	20.8	.....	19.8	21.9	22.5	.....	13.2	14.3	14.4	22.5	22.4	.....	22.0	24.9	26.1
10.0	15.6	19.9	20.0	8.2	16.0	18.3	18.3	8.5	14.9	18.0	17.7	16.7	16.0	8.4	15.9	18.7	18.7
.....	10.8	11.9	11.8	.....	12.4	12.2	12.2	.....	10.4	9.3	9.5	14.2	14.0	.....	14.2	13.7	13.3
1.0	3.3	8.6	3.7	1.2	4.2	6.8	3.4	1.7	3.4	7.7	4.4	10.4	7.0	2.0	5.3	8.8	4.8
.....	6.6	7.2	6.4	.....	7.2	7.5	6.6	.....	4.5	3.2	3.4	8.9	7.0	.....	8.8	7.8	5.7
.....	3.2	6.3	3.7	.....	5.8	8.4	5.1	.....	.....	.....	.....	5.3	6.1	.....	3.9	7.8	3.4
.....	19.1	19.7	19.7	.....	19.8	20.0	20.4	.....	19.1	18.3	18.5	18.7	18.3	.....	16.4	15.5	15.4
.....	17.3	18.4	18.4	.....	18.4	18.6	18.5	.....	19.6	19.0	19.4	19.8	19.5	.....	20.4	18.6	18.4
.....	16.6	18.2	18.1	.....	18.3	17.7	17.7	.....	17.8	18.4	19.5	19.2	19.7	.....	18.8	18.7	18.7
.....	16.2	14.8	14.8	.....	17.0	16.9	16.7	.....	³ 13.9	³ 13.9	³ 14.5	15.7	15.3	.....	17.6	15.4	15.4
5.6	11.1	28.4	22.8	6.1	11.0	26.2	23.8	5.5	10.1	24.9	22.5	24.5	21.5	5.7	10.9	27.4	24.7
45.0	62.7	71.3	72.2	65.7	73.1	79.2	81.2	50.0	57.4	60.2	59.7	82.4	81.1	52.5	66.2	69.5	71.1
30.0	48.4	52.1	52.1	35.8	54.4	58.7	58.8	32.0	44.8	45.9	43.4	47.6	48.3	31.3	48.8	50.8	50.6
.....	25.7	30.8	30.8	.....	23.8	28.2	28.0	.....	24.0	23.1	23.7	28.9	30.7	.....	24.5	27.8	26.9
.....	17.2	29.3	30.1	.....	17.0	29.1	30.0	.....	16.6	26.4	29.4	26.1	28.0	.....	18.3	28.4	29.3
.....	40.0	67.5	67.5	.....	49.0	63.3	65.0	.....	38.8	46.7	47.9	52.3	49.4	.....	37.7	41.6	39.8
.....	55.1	70.3	72.5	.....	55.8	68.2	67.3	.....	54.4	64.5	65.1	100.0	88.3	.....	56.6	65.8	65.8

³No. 2½ can.

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

Article.	Unit.	Seattle, Wash.				Springfield, Ill.			Washington, D. C.			
		Aug. 15—		July	Aug.	Aug.	July	Aug.	Aug. 15—		July	Aug.
		1913	1919	1920.	1920.	1919.	1920.	1920.	1913	1919	1920.	1920.
Sirloin steak	Pound	24.4	37.4	37.7	37.4	36.6	45.3	42.8	27.8	51.3	59.0	56.2
Round steak	do.	21.5	35.4	34.7	34.7	35.9	44.7	42.4	24.5	48.3	54.8	52.4
Rib roast	do.	20.0	29.4	30.1	30.3	27.4	30.4	29.1	21.6	38.2	44.2	42.5
Chuck roast	do.	16.2	23.6	21.7	21.6	24.6	26.9	25.4	17.3	31.3	34.8	31.3
Plate beef	do.	12.7	18.8	17.1	17.1	19.6	19.6	19.1	12.1	19.3	19.6	18.3
Pork chops	do.	24.2	51.2	44.6	47.9	42.5	40.1	42.1	23.0	53.8	50.4	53.2
Bacon	do.	34.2	64.6	64.8	64.6	56.2	51.9	51.6	28.4	57.9	51.0	51.4
Ham	do.	31.7	61.2	61.7	63.4	55.6	59.6	59.1	31.0	61.1	63.1	62.4
Lamb	do.	19.4	34.0	35.6	34.0	32.5	43.6	40.7	19.4	43.3	47.5	45.3
Hens	do.	23.8	41.9	39.9	39.3	36.3	46.2	42.0	21.9	46.8	50.6	49.6
Salmon (canned)	do.	32.4	38.8	39.0	32.7	40.1	40.3	.....	32.1	37.8	39.0	.....
Milk, fresh	Quart.	8.5	15.0	14.0	14.0	14.3	16.7	8.0	15.0	16.0	16.0	.....
Milk, evaporated	15-16oz. can	.....	15.1	14.1	14.4	17.8	17.5	17.5	.....	16.1	1.35	15.3
Butter	Pound	39.0	66.2	64.0	65.5	62.0	65.9	65.9	36.6	67.6	70.8	70.2
Oleomargarine	do.	.....	40.4	41.8	43.3	45.2	43.9	41.5	.....	40.6	43.8	43.0
Nut margarine	do.	.....	36.8	37.1	37.1	35.7	36.1	35.7	.....	36.7	35.8	35.8
Cheese	do.	21.7	43.6	40.8	40.5	44.2	43.0	42.4	23.8	43.8	42.7	41.4
Lard	do.	17.4	42.1	29.8	29.3	42.6	29.1	28.4	15.3	42.6	29.2	28.1
Crisco	do.	.....	43.3	39.6	38.0	42.8	37.8	35.9	.....	40.5	35.0	33.6
Eggs, strictly fresh	Dozen	39.0	67.2	55.2	63.6	50.2	48.6	57.4	30.0	60.1	54.8	59.9
Bread	Pound	5.5	11.7	11.5	11.5	10.0	13.5	13.5	5.7	10.0	12.3	12.1
Flour	do.	2.9	6.5	7.7	7.4	7.5	9.1	8.7	3.8	7.9	9.0	8.8
Corn meal	do.	3.2	7.3	7.4	7.4	6.7	7.9	8.0	2.5	5.8	6.0	6.0
Rolled oats	do.	.....	8.4	10.6	10.8	9.6	12.2	12.9	.....	9.6	11.5	11.5
Corn flakes	8-oz. pkg.	.....	14.9	15.1	15.1	14.9	15.4	15.6	.....	13.8	14.2	14.2
Cream of Wheat	28-oz. pkg.	.....	27.2	32.4	32.1	27.3	31.4	30.9	.....	24.6	29.6	29.8
Macaroni	Pound	.....	17.1	18.7	18.4	19.3	20.6	22.0	.....	20.7	23.6	24.3
Rice	do.	.....	7.7	16.3	19.4	19.7	15.6	19.9	19.8	8.8	16.0	19.3
Beans, navy	do.	.....	11.3	10.3	10.1	12.8	12.9	12.5	.....	13.2	12.1	11.9
Potatoes	do.	1.6	3.7	9.5	4.3	5.1	10.0	5.3	2.0	5.0	8.3	4.7
Onions	do.	.....	6.6	5.3	4.5	8.0	9.5	7.8	.....	8.7	5.8	5.4
Cabbage	do.	.....	5.8	6.2	4.7	5.7	9.5	5.9	.....	6.2	5.1	3.5
Beans, baked	No. 2 can	.....	21.9	20.3	20.0	18.5	17.9	18.4	.....	14.9	14.8	14.8
Corn, canned	do.	.....	20.3	20.1	20.0	16.8	17.1	17.0	.....	19.9	17.8	17.7
Peas, canned	do.	.....	20.8	20.4	20.4	18.5	18.5	18.5	.....	19.4	18.1	18.0
Tomatoes, canned	do.	.....	17.4	18.3	19.3	16.6	15.7	15.9	.....	16.4	15.1	15.1
Sugar, granulated	Pound	6.3	10.7	25.7	23.4	12.3	29.3	24.2	5.2	10.9	25.8	21.7
Tea	do.	50.0	62.8	69.7	71.4	86.0	87.3	88.0	57.5	78.1	78.3	77.8
Coffee	do.	28.0	46.2	49.4	49.2	48.9	51.0	51.1	28.8	48.1	47.5	46.6
Prunes	do.	.....	26.8	27.5	27.2	23.4	30.3	29.2	.....	26.4	28.7	28.6
Raisins	do.	.....	19.1	28.1	28.1	20.9	29.0	29.8	.....	16.7	27.0	28.0
Bananas	Dozen	.....	48.8	62.1	62.1	37.5	48.3	43.3	.....	43.3	50.0	47.8
Oranges	do.	.....	54.1	64.8	64.7	48.3	73.8	68.9	.....	54.4	66.4	66.1

³ No. 2½ can.

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 22 food articles in August, 1920, compared with the average cost in the year 1913, in August, 1919, and in July, 1920. For 11 other cities comparisons are given for the one-year and one-month periods. These cities have been scheduled by the Bureau at different dates since 1913. For Savannah, Ga., the comparison is given only for the month, as this city was first scheduled by the Bureau in 1920. 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.^a

^a The consumption figure used for each article in each city is given in the MONTHLY LABOR REVIEW of November, 1918, pp. 94 and 95.

TABLE 6.—PERCENTAGE CHANGES IN THE RETAIL COST OF 22 FOOD ARTICLES IN AUGUST, 1920, COMPARED WITH THE COST IN JULY, 1920, AUGUST, 1919, AND WITH THE AVERAGE COST IN THE YEAR 1913, BY CITIES.

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

City.	Percentage increase, August, 1920, compared with—		Percentage decrease, August, 1920, compared with July, 1920.	City.	Percentage increase, August, 1920, compared with—		Percentage decrease, August, 1920, compared with July, 1920.
	1913	August, 1919.			1913	August, 1919.	
Atlanta.....	107	6	4	Minneapolis.....	104	5	11
Baltimore.....	113	4	5	Mobile.....	.....	8	4
Birmingham.....	113	6	5	Newark.....	98	8	6
Boston.....	109	11	4	New Haven.....	108	9	4
Bridgeport.....	.....	8	5	New Orleans.....	104	5	3
Buffalo.....	113	6	5	New York.....	104	8	6
Butte.....	.....	14	6	Norfolk.....	.....	4	3
Charleston.....	113	6	1	Omaha.....	110	7	8
Chicago.....	110	6	8	Peoria.....	.....	5	8
Cincinnati.....	106	10	6	Philadelphia.....	104	6	6
Cleveland.....	110	9	8	Pittsburgh.....	105	8	6
Columbus.....	.....	5	6	Portland, Me.....	.....	9	4
Dallas.....	98	5	5	Portland, Oreg.....	89	9	4
Denver.....	97	5	7	Providence.....	115	10	4
Detroit.....	117	4	9	Richmond.....	119	7	2
Fall River.....	109	11	5	Rochester.....	.....	7	5
Houston.....	.....	6	4	St. Louis.....	114	8	6
Indianapolis.....	104	5	8	St. Paul.....	.....	9	10
Jacksonville.....	96	6	2	Salt Lake City.....	87	7	6
Kansas City, Mo.....	105	7	8	San Francisco.....	89	13	4
Little Rock.....	100	6	3	Savannah.....	.....	.....	4
Los Angeles.....	87	16	4	Scranton.....	115	10	4
Louisville.....	98	2	5	Seattle.....	91	5	6
Manchester.....	116	11	5	Springfield, Ill.....	.....	10	8
Memphis.....	108	3	7	Washington, D. C.....	109	3	5
Milwaukee.....	114	6	8				

Effort has been made by the Bureau each month to have perfect reporting cities. For the month of August 95 per cent of all the firms reporting in the 51 cities sent in a report promptly. The report of every baker was received. The following were perfect reporting cities; that is, every merchant in the following-named cities who is cooperating with the Bureau sent in his report in time for his prices to be included in the city averages: Baltimore, Birmingham, Boston, Columbus, Cincinnati, Denver, Houston, Jacksonville, Manchester, Milwaukee, Minneapolis, Newark, New York, Philadelphia, Pittsburgh, Providence, Portland, Me., Rochester, Richmond, St. Louis, St. Paul, Scranton, and Washington.

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

RETAIL PRICE REPORTS RECEIVED DURING AUGUST.

Item.	United States.	Geographical division.				
		North Atlantic.	South Atlantic.	North Central.	South Central.	Western.
Percentage of reports received.....	95	99	95	96	93	91
Number of cities in each section from which every report was received.....	23	10	4	6	2	1

Retail Prices of Coal in the United States.^a

THE following table shows the average retail prices of coal on July 15, 1919, and on January 15, July 15, and August 15, 1920, for the United States and for each of the cities included in the total for the United States. Prices for coal are secured from the cities from which monthly retail prices of food are received.

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

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

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

AVERAGE RETAIL PRICES PER TON, OF 2,000 POUNDS, OF COAL FOR HOUSEHOLD USE, ON JULY 15, 1919, AND ON JAN. 15, JULY 15, AND AUG. 15, 1920.

City, and kind of coal.	July 15, 1919	1920		
		Jan. 15.	July 15.	Aug. 15.
United States:				
Pennsylvania anthracite—				
Stove.....	\$12.143	\$12.588	\$14.282	\$14.366
Chestnut.....	12.174	12.768	14.334	14.449
Bituminous.....	8.101	8.808	10.548	11.035
Atlanta, Ga.:				
Bituminous.....	8.250	9.050	13.250	14.462
Baltimore, Md.:				
Pennsylvania anthracite—				
Stove.....	¹ 11.750	¹ 12.500	¹ 13.750	¹ 13.750
Chestnut.....	¹ 11.850	¹ 12.600	¹ 13.850	¹ 13.850
Bituminous.....	¹ 6.893	¹ 7.500	¹ 8.938	¹ 8.938
Birmingham, Ala.:				
Bituminous.....	7.286	7.496	9.431	9.737
Boston, Mass.:				
Pennsylvania anthracite—				
Stove.....	12.000	12.750	14.500	14.500
Chestnut.....	12.000	12.750	14.500	14.500
Bituminous.....	9.000	9.500	13.250	13.250
Bridgeport, Conn.:				
Pennsylvania anthracite—				
Stove.....	11.750	12.500	15.000	15.800
Chestnut.....	11.750	12.500	15.000	15.800
Bituminous.....	8.000	8.500		
Buffalo, N. Y.:				
Pennsylvania anthracite—				
Stove.....	10.700	10.890	12.080	12.190
Chestnut.....	10.800	10.990	12.080	12.190
Bituminous.....	8.000		12.000	12.000
Butte, Mont.:				
Bituminous.....	9.836	10.381	10.908	11.067
Charleston, S. C.:				
Pennsylvania anthracite—				
Stove.....	¹ 13.400	¹ 13.400	¹ 16.325	¹ 16.200
Chestnut.....	¹ 13.500	¹ 13.500	¹ 16.400	¹ 16.300
Bituminous.....	8.500	8.500	12.000	12.000
Chicago, Ill.:				
Pennsylvania anthracite—				
Stove.....	12.200	12.590	14.675	14.808
Chestnut.....	12.300	12.690	14.788	14.923
Bituminous.....	7.017	8.020	8.946	9.092

¹ Per ton of 2,240 pounds.

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

AVERAGE RETAIL PRICES, PER TON OF 2,000 POUNDS, OF COAL FOR HOUSEHOLD USE, ON JULY 15, 1919, AND ON JAN. 15, JULY 15, AND AUG. 15, 1920—Continued.

City, and kind of coal.	July 15, 1919	1920		
		Jan. 15.	July 15.	Aug. 15.
Cincinnati, Ohio:				
Pennsylvania anthracite—				
Stove.....	\$12.000	\$12.500	\$14.000	\$14.167
Chestnut.....	12.000	12.667	14.000	14.167
Bituminous.....	6.139	6.739	8.000	8.143
Cleveland, Ohio:				
Pennsylvania anthracite—				
Stove.....	11.538	12.300	14.050	14.178
Chestnut.....	11.650	12.233	14.025	14.153
Bituminous.....	7.710	7.911	11.357	11.357
Columbus, Ohio:				
Pennsylvania anthracite—				
Chestnut.....	12.000	12.000	14.650	14.650
Bituminous.....	6.056	6.513	9.458	10.199
Dallas, Tex.:				
Arkansas anthracite—				
Egg.....	14.500	18.500	17.500	19.500
Bituminous.....	11.083	14.583	14.083	15.583
Denver, Colo.:				
Colorado anthracite—				
Stove, 3 and 5 mixed.....	13.150	14.000	14.875	15.525
Furnace, 1 and 2 mixed.....	12.650	13.500	14.875	15.525
Bituminous.....	8.348	8.908	9.469	9.997
Detroit, Mich.:				
Pennsylvania anthracite—				
Stove.....	11.890	12.650	14.625	14.563
Chestnut.....	11.980	12.750	14.625	14.625
Bituminous.....	7.988	8.781	12.417	12.500
Fall River, Mass.:				
Pennsylvania anthracite—				
Stove.....	12.500	13.000	14.500	14.500
Chestnut.....	12.250	12.750	14.250	14.250
Bituminous.....	9.500	10.000	12.875	13.000
Houston, Tex.:				
Bituminous.....	10.000	12.000	11.750	12.200
Indianapolis, Ind.:				
Pennsylvania anthracite—				
Stove.....	12.250	13.000	14.375	14.890
Chestnut.....	12.250	13.167	14.875	15.390
Bituminous.....	7.375	8.188	9.625	9.792
Jacksonville, Fla.:				
Pennsylvania anthracite—				
Stove.....	15.000	17.000	18.000	.....
Chestnut.....	15.000	17.000	18.000	.....
Bituminous.....	10.000	11.000	15.000	17.000
Kansas City, Mo.:				
Pennsylvania anthracite—				
Stove.....	16.210	17.400	.....	.....
Chestnut.....	16.470	17.625	.....	.....
Arkansas anthracite—				
Furnace.....	13.593	15.950	15.750	17.000
Stove or No. 4.....	14.450	16.583	16.500	17.500
Bituminous.....	7.469	8.625	9.600	10.334
Little Rock, Ark.:				
Arkansas anthracite—				
Egg.....	12.500	.....	14.500	15.500
Stove.....	13.250	.....	.....	.....
Bituminous.....	9.250	10.375	12.591	13.085
Los Angeles, Calif.:				
Bituminous.....	14.583	16.000	17.000	17.000
Louisville, Ky.:				
Pennsylvania anthracite—				
Stove.....	12.750	13.750	.....	.....
Chestnut.....	12.750	13.750	.....	15.000
Bituminous.....	6.816	6.836	9.531	10.134
Manchester, N. H.:				
Pennsylvania anthracite—				
Stove.....	12.750	13.417	15.000	16.000
Chestnut.....	12.750	13.417	15.000	16.000
Bituminous.....	10.000	10.000	13.000	14.000
Memphis, Tenn.:				
Pennsylvania anthracite—				
Stove.....	16.000	16.000	18.000	18.000
Chestnut.....	16.000	16.000	18.000	18.000
Bituminous.....	7.528	8.000	9.563	10.600

AVERAGE RETAIL PRICES, PER TON OF 2,000 POUNDS, OF COAL FOR HOUSEHOLD USE, ON JULY 15, 1919, AND ON JAN. 15, JULY 15, AND AUG. 15, 1920—Continued.

City, and kind of coal.	July 15, 1919	1920		
		Jan. 15.	July 15.	Aug. 15.
Milwaukee, Wis.:				
Pennsylvania anthracite—				
Stove.....	\$12.400	\$12.600	\$14.800	\$14.920
Chestnut.....	12.500	12.700	14.900	15.000
Bituminous.....	8.144	8.960	12.167	12.642
Minneapolis, Minn.:				
Pennsylvania anthracite—				
Stove.....	13.800	14.000	16.520	16.600
Chestnut.....	13.900	14.100	16.560	16.640
Bituminous.....	9.189	10.425	12.044	12.309
Mobile, Ala.:				
Pennsylvania anthracite—				
Stove.....	17.000	17.000		
Chestnut.....	17.000	17.000		
Bituminous.....	9.722	10.333	11.900	12.852
Newark, N. J.:				
Pennsylvania anthracite—				
Stove.....	10.050	10.483	11.767	11.908
Chestnut.....	10.050	10.483	11.767	11.908
New Haven, Conn.:				
Pennsylvania anthracite—				
Stove.....	11.333	12.250	14.583	14.782
Chestnut.....	11.333	12.250	14.583	14.782
New Orleans, La.:				
Pennsylvania anthracite—				
Stove.....	16.000	17.500	19.000	19.250
Chestnut.....	16.000	17.500	18.833	19.500
Bituminous.....	8.292	9.269	10.857	12.192
New York, N. Y.:				
Pennsylvania anthracite—				
Stove.....	10.800	11.536	13.067	13.550
Chestnut.....	10.857	11.600	13.067	13.550
Norfolk, Va.:				
Pennsylvania anthracite—				
Stove.....	12.500	13.000	14.500	14.500
Chestnut.....	12.500	13.000	14.500	14.500
Bituminous.....	9.375	9.750	12.125	12.125
Omaha, Nebr.:				
Pennsylvania anthracite—				
Stove.....	16.450	17.275	21.300	21.883
Chestnut.....	16.550	17.450	21.400	22.483
Bituminous.....	8.930	10.108	11.465	12.586
Peoria, Ill.:				
Pennsylvania anthracite—				
Stove.....	11.667	13.000	14.000	14.250
Chestnut.....	11.750	13.000	14.000	14.150
Bituminous.....	5.550	6.000	7.429	7.938
Philadelphia, Pa.:				
Pennsylvania anthracite—				
Stove.....	¹ 10.850	¹ 11.881	¹ 13.469	¹ 13.938
Chestnut.....	¹ 10.950	¹ 11.906	¹ 13.438	¹ 13.938
Pittsburgh, Pa.:				
Pennsylvania anthracite—				
Stove.....	¹ 12.750	¹ 13.750	¹ 15.250	¹ 16.250
Chestnut.....	¹ 12.663	¹ 14.000	¹ 15.175	¹ 16.000
Bituminous.....	5.833	6.179	7.375	7.876
Portland, Me.:				
Pennsylvania anthracite—				
Stove.....	12.200	13.440	15.360	15.360
Chestnut.....	12.200	13.440	15.360	15.360
Bituminous.....	8.573	9.370	14.810	15.190
Portland, Oreg.:				
Bituminous.....	11.493	11.618	11.955	12.457
Providence, R. I.:				
Pennsylvania anthracite—				
Stove.....	² 12.000	² 12.950	² 14.500	² 14.560
Chestnut.....	² 12.000	² 13.000	² 14.500	² 14.500
Bituminous.....	² 9.000	² 10.000	² 13.625	² 14.125
Richmond, Va.:				
Pennsylvania anthracite—				
Stove.....	12.000	12.125	13.500	13.500
Chestnut.....	12.000	12.125	13.500	13.500
Bituminous.....	8.464	8.931	10.882	10.912

¹ Per ton of 2,240 pounds.

² Fifty cents per ton additional is charged for "binning." Most customers require binning or basketing the coal into the cellar.

AVERAGE RETAIL PRICES, PER TON OF 2,000 POUNDS, OF COAL FOR HOUSEHOLD USE, ON JULY 15, 1919, AND ON JAN. 15, JULY 15, AND AUG. 15, 1920—Concluded.

City, and kind of coal.	July 15, 1919	1920		
		Jan. 15.	July 15.	Aug. 15.
Rochester, N. Y.:				
Pennsylvania anthracite—				
Stove.....	\$10.600	\$10.800	\$12.200	\$12.300
Chestnut.....	10.700	10.900	12.300	12.400
St. Louis, Mo.:				
Pennsylvania anthracite—				
Stove.....	12.900	13.100	14.350	14.350
Chestnut.....	12.900	13.225	14.350	14.350
Bituminous.....	5.425	5.970	6.632	7.402
St. Paul, Minn.:				
Pennsylvania anthracite—				
Stove.....	13.800	14.000	16.483	16.567
Chestnut.....	13.900	14.100	16.517	16.600
Bituminous.....	9.875	11.531	13.258	13.642
Salt Lake City, Utah:				
Colorado anthracite—				
Furnace, 1 and 2 mixed.....	16.000	16.313	18.375	18.500
Stove, 3 and 5 mixed.....	16.000	16.583	18.375	18.500
Bituminous.....	7.250	8.236	9.250	9.250
San Francisco, Calif.:				
New Mexico anthracite—				
Cerrillos egg.....	20.500	23.000	24.000	24.750
Colorado anthracite—				
Egg.....	19.400	21.750	23.000	23.000
Bituminous.....	13.591	15.100	16.643	16.786
Savannah, Ga.:				
Pennsylvania anthracite—				
Stove.....		³ 15.100	³ 17.600	³ 17.600
Chestnut.....		³ 15.100	³ 17.600	³ 17.600
Bituminous.....		³ 11.100	³ 14.500	³ 15.700
Scranton, Pa.:				
Pennsylvania anthracite—				
Stove.....	7.683	8.233	9.275	9.383
Chestnut.....	7.783	8.300	9.275	9.383
Seattle, Wash.:				
Bituminous.....	⁴ 9.103	⁴ 9.588	⁴ 9.843	⁴ 10.432
Springfield, Ill.:				
Bituminous.....	3.976	3.950	4.450	4.410
Washington, D. C.:				
Pennsylvania anthracite—				
Stove.....	¹ 11.911	¹ 12.447	¹ 13.793	¹ 14.207
Chestnut.....	¹ 12.011	¹ 12.538	¹ 13.857	¹ 14.143
Bituminous.....	¹ 8.050	¹ 8.267	¹ 9.694	¹ 9.836

¹ Per ton of 2,240 pounds.

³ All coal sold in Savannah is weighed by the city. A charge of 10 cents per ton or half ton is made. This additional charge has been included in the above prices.

⁴ Prices in Zone A. The cartage charge in Zone A is \$1.85, which has been included in the average. The cartage charges in Seattle range from \$1.85 to \$2.90, according to distance.

Retail Prices of Dry Goods in the United States.¹

THE following table gives the average retail prices of 10 articles of dry goods on August 15, 1919, and on February 15, May 15, and August 15, 1920. The averages given are based on the retail prices of standard brands, only.

AVERAGE RETAIL PRICES OF 10 ARTICLES OF DRY GOODS ON AUG. 15, 1919, AND ON FEB. 15, MAY 15, AND AUG. 15, 1920.

Article.	Unit.	Atlanta, Ga.				Baltimore, Md.				Birmingham, Ala.				
		1920				1920				1920				
		Aug. 15, 1919.	Feb. 15.	May 15.	Aug. 15.	Aug. 15, 1919.	Feb. 15.	May 15.	Aug. 15.	Aug. 15, 1919.	Feb. 15.	May 15.	Aug. 15.	
Calico, 24 to 25 inch.....	Yard.					\$ 0.250	\$ 0.356			\$ 0.198			\$ 0.257	\$ 0.250
Percalé.....	do.	0.390	0.513	0.548	0.623	0.407	0.528	0.510	0.535	0.413	0.434	0.474	0.460	
Gingham, apron, 27 to 28 inch.....	do.	0.250	0.344	0.368	0.342	0.279	0.351	0.350	0.336	0.269	0.316	0.324	0.317	
Gingham, dress, 27-inch.....	do.	0.374	0.447	0.454	0.539	0.348	0.423	0.490	0.479	0.346	0.427	0.450	0.506	
Gingham, dress, 32-inch.....	do.	0.536	0.650	0.686	0.714	0.521	0.582	0.668	0.643	0.592	0.662	0.645	0.683	
Muslin, bleached.....	do.	0.328	0.393	0.425	0.464	0.386	0.475	0.529	0.500	0.326	0.385	0.410	0.407	
Sheeting, bleached, 9-4.....	do.	0.826	0.972	1.208	1.139	0.925	1.153	1.237	1.159	0.751	0.873	1.019	1.014	
Sheets, bleached, 81 by 90.....	Each.	2.164	2.572	2.650	2.868	2.292	2.917	3.076	2.988	1.931	2.094	2.548	2.539	
Outing flannel, 27 to 28 inch.....	Yard.	0.376	0.393	0.465	0.553	0.358	0.437	0.488	0.517	0.366	0.369	0.380	0.440	
Flannel, white, wool, 27-inch.....	do.	0.850	0.950	1.250		0.800	1.150	1.213	1.320		1.113	1.070	1.098	
Blankets, cotton, 66 by 80.....	Pair.	6.250	5.320	5.830	5.110	5.725	7.442	7.300	6.225	5.573	6.484	6.600	6.526	
		Boston, Mass.				Bridgeport, Conn.				Buffalo, N. Y.				
Calico, 24 to 25 inch.....	Yard.	\$ 0.217	\$ 0.290	\$ 0.290	\$ 0.298	\$ 0.210	\$ 0.220	\$ 0.250	.....	\$ 0.219	\$ 0.255	\$ 0.290	\$ 0.290	
Percalé.....	do.	0.367	0.456	0.493	0.530	0.385	0.473	0.523	0.530	0.364	0.510	0.553	0.518	
Gingham, apron, 27 to 28 inch.....	do.	0.261	0.320	0.350	0.366	0.250	0.390	0.340	0.323	0.256	0.320	0.380	0.385	
Gingham, dress, 27-inch.....	do.	0.293	0.383	0.443	0.536	0.354	0.433	0.493	0.547	0.344	0.404	0.486	0.500	
Gingham, dress, 32-inch.....	do.	0.491	0.602	0.664	0.718	0.551	0.599	0.635	0.687	0.563	0.545	0.690	0.764	
Muslin, bleached.....	do.	0.367	0.487	0.529	0.451	0.345	0.457	0.491	0.413	0.375	0.447	0.483	0.481	
Sheeting, bleached, 9-4.....	do.	0.802	0.999	1.085	1.022	0.914	1.197	1.220	1.267	0.907	1.089	1.193	1.210	
Sheets, bleached, 81 by 90.....	Each.	2.107	2.662	2.732	2.745	2.322	2.638	2.858	2.960	2.185	2.664	2.828	2.910	
Outing flannel, 27 to 28 inch.....	Yard.	0.323	0.384	0.392	0.495	0.315	0.368	0.430	0.438	0.342	0.392	0.432	0.494	
Flannel, white, wool, 27-inch.....	do.	1.117	1.413	1.370	1.415	0.745	0.625	1.000	1.190	0.776	0.980	1.115	.....
Blankets, cotton, 66 by 80.....	Pair.	4.750	5.230	6.125	6.450	4.375	6.125	.....	6.125	6.363	6.425	5.919	6.325	
		Butte, Mont.				Charleston, S. C.				Chicago, Ill.				
Calico, 24 to 25 inch.....	Yard.	\$ 0.165	\$ 0.250	\$ 0.250	\$ 0.250	\$ 0.218	\$ 0.243	\$ 0.306	.....	\$ 0.198	\$ 0.244	\$ 0.248	\$ 0.253	
Percalé.....	do.	0.350	0.483	0.483	0.517	0.408	0.478	0.520	0.550	0.430	0.519	0.513	.....
Gingham, apron, 27 to 28 inch.....	do.	0.250	0.280	0.303	0.315	0.263	0.301	0.316	0.350	0.252	0.264	0.317	0.340	
Gingham, dress, 27-inch.....	do.	0.353	0.394	0.414	0.454	0.367	0.435	0.468	0.494	0.348	0.431	0.457	0.472	
Gingham, dress, 32-inch.....	do.	0.463	0.500	0.583	0.643	0.513	0.581	0.562	0.620	0.627	0.711	0.758	0.788	
Muslin, bleached.....	do.	0.333	0.408	0.467	0.444	0.394	0.461	0.490	0.431	0.363	0.467	0.432	0.464	
Sheeting, bleached, 9-4.....	do.	0.850	1.131	1.217	1.206	0.800	1.116	1.180	1.093	0.936	1.166	1.244	1.237	
Sheets, bleached, 81 by 90.....	Each.	2.292	3.063	3.000	3.000	2.186	2.587	2.756	2.968	2.301	2.753	2.912	2.972	
Outing flannel, 27 to 28 inch.....	Yard.	0.326	0.372	0.398	0.423	0.353	0.367	0.408	0.455	0.333	0.393	0.447	0.494	
Flannel, white, wool, 27-inch.....	do.	0.800	1.020	1.020	1.020	1.000	1.267	1.010	.....	0.915	1.750	.....	.....
Blankets, cotton, 66 by 80.....	Pair.	6.150	6.800	6.770	6.850	5.000	5.550	.....	.....	5.830	6.194	6.220	6.498	
		Cincinnati, Ohio.				Cleveland, Ohio.				Columbus, Ohio.				
Calico, 24 to 25 inch.....	Yard.	\$ 0.233	\$ 0.243	\$ 0.277	\$ 0.283	\$ 0.200	\$ 0.236	\$ 0.235	\$ 0.243	\$ 0.196	\$ 0.200	\$ 0.288	\$ 0.289	
Percalé.....	do.	0.365	0.470	0.495	0.527	0.431	0.526	0.559	0.532	0.412	0.490	0.646	0.648	
Gingham, apron, 27 to 28 inch.....	do.	0.238	0.293	0.317	0.312	0.301	0.323	0.358	0.342	0.250	0.350	0.393	0.393	
Gingham, dress, 27-inch.....	do.	0.323	0.408	0.458	0.497	0.355	0.457	0.480	0.494	0.367	0.444	0.461	0.501	
Gingham, dress, 32-inch.....	do.	0.572	0.639	0.664	0.712	0.580	0.667	0.738	0.770	0.619	0.644	0.733	0.757	
Muslin, bleached.....	do.	0.351	0.393	0.400	0.435	0.374	0.440	0.461	0.459	0.405	0.461	0.445	0.453	
Sheeting, bleached, 9-4.....	do.	0.826	0.999	1.020	1.113	0.921	1.066	1.148	1.189	0.874	1.170	1.323	1.348	
Sheets, bleached, 81 by 90.....	Each.	2.019	2.499	2.500	2.796	2.200	2.710	2.917	2.856	2.114	2.722	2.991	2.734	
Outing flannel, 27 to 28 inch.....	Yard.	0.319	0.360	0.410	0.488	0.368	0.426	0.468	0.478	0.378	0.510	0.430	0.516	
Flannel, white, wool, 27-inch.....	do.	1.095	1.110	1.000	.....	1.350	.....	1.090	1.250	.....	1.417	.....	.....
Blankets, cotton, 66 by 80.....	Pair.	6.250	6.400	.....	5.950	6.750	6.583	6.636	7.000	5.717	5.817	6.475	6.415	

¹Retail prices of dry goods are published in the April, July, October, and December issues of the MONTHLY LABOR REVIEW.

PRICES AND COST OF LIVING.

AVERAGE RETAIL PRICES OF 10 ARTICLES OF DRY GOODS ON AUG. 15, 1919, AND ON FEB. 15, MAY 15, AND AUG. 15, 1920—Continued.

Article.	Unit.	Dallas, Tex.				Denver, Colo.				Detroit, Mich.			
		1920				1920				1920			
		Aug. 15, 1919.	Feb. 15.	May 15.	Aug. 15.	Aug. 15, 1919.	Feb. 15.	May 15.	Aug. 15.	Aug. 15, 1919.	Feb. 15.	May 15.	Aug. 15.
Calico, 24 to 25 inch.....	Yard.	\$ 0.180	\$ 0.250	\$ 0.250	\$ 0.250	\$ 0.190	\$ 0.250	\$ 0.263	\$ 0.250	\$ 0.198	\$ 0.250	\$ 0.249	\$ 0.237
Percale.....	do.	.366	.434	.455	.530	.429	.520	.630	.695	.363	.472	.520	.529
Gingham, apron, 27 to 28 inch.....	do.	.250	.310	.294	.290	.333	.360	.380	.380	.250	.318	.354	.374
Gingham, dress, 27-inch.....	do.	.337	.431	.461	.477	.364	.443	.482	.567	.335	.396	.469	.470
Gingham, dress, 32-inch.....	do.	.520	.622	.689	.773	.628	.774	.773	.813	.530	.615	.729	.742
Muslin, bleached.....	do.	.324	.391	.418	.395	.420	.472	.520	.500	.316	.456	.512	.478
Sheeting, bleached, 9-4.....	do.	.800	.985	1.033	1.061	1.068	1.245	1.312	1.330	.849	1.090	1.117	1.100
Sheets, bleached, 81 by 90.....	Each.	1.978	2.348	2.683	2.771	2.673	2.864	3.361	3.337	2.079	2.734	2.987	2.909
Outing flannel, 27 to 28 inch.....	Yard.	.335	.361	.411	.433	.366	.425	.503	.528	.317	.365	.420	.468
Flannel, white, wool, 27-inch.....	do.	.756	1.000	1.125	1.067	1.200	1.000	1.250	.....	1.000	.988	.967	.....
Blankets, cotton, 66 by 80.....	Pair.	5.960	6.725	6.950	7.161	6.233	6.343	7.313	7.750	4.930	5.800	6.214	6.246
		Fall River, Mass.				Houston, Tex.				Indianapolis, Ind.			
Calico, 24 to 25 inch.....	Yard.	\$ 0.170	\$.	\$.	\$.	\$ 0.205	\$ 0.250	\$ 0.290	\$ 0.230	\$ 0.181	\$ 0.251	\$ 0.253	\$ 0.258
Percale.....	do.	.390	.430	.453	0.430	.312	.433	.518	.600	.358	.470	.483	.469
Gingham, apron, 27 to 28 inch.....	do.	.270	.350	.343	.325	.245	.290	.338	.333	.253	.303	.345	.342
Gingham, dress, 27-inch.....	do.	.330	.455	.423	.484	.330	.383	.408	.453	.314	.411	.465	.488
Gingham, dress, 32-inch.....	do.	.505	.610	.645	.680	.604	.618	.685	.763	.498	.609	.613	.620
Muslin, bleached.....	do.	.300	.443	.480	.482	.310	.385	.429	.385	.313	.426	.461	.447
Sheeting, bleached, 9-4.....	do.	.820	1.040	1.150	1.083	.792	.975	1.038	.970	.855	1.066	1.207	1.184
Sheets, bleached, 81 by 90.....	Each.	1.993	2.575	2.583	2.663	1.878	2.365	2.664	2.779	2.064	2.595	2.910	2.787
Outing flannel, 27 to 28 inch.....	Yard.	.290	.400	.370	.....	.281	.336	.353	.453	.312	.379	.439	.462
Flannel, white, wool, 27-inch.....	do.	.....	.....	.....	.....	.823	.910	.880	.875	.827	1.250	1.290	1.290
Blankets, cotton, 66 by 80.....	Pair.	5.980	6.173	5.410	5.980	7.225	7.500	6.500	6.543	6.050	6.503	6.858	6.685
		Jacksonville, Fla.				Kansas City, Mo.				Little Rock, Ark.			
Calico, 24 to 25 inch.....	Yard.	\$ 0.180	\$.	\$ 0.250	\$.	\$ 0.196	\$ 0.266	\$ 0.275	\$ 0.296	\$ 0.197	\$ 0.250	\$ 0.270	\$ 0.269
Percale.....	do.	.463	0.523	.643	0.605	.458	.500	.545	.573	.356	.480	.480	.520
Gingham, apron, 27 to 28 inch.....	do.	.290	.390	.390	.320	.316	.350	.364	.360	.250	.295	.298	.283
Gingham, dress, 27-inch.....	do.	.370	.410	.463	.447	.367	.450	.503	.488	.322	.383	.371	.413
Gingham, dress, 32-inch.....	do.	.542	.645	.720	.742	.601	.690	.714	.706	.483	.538	.636	.694
Muslin, bleached.....	do.	.413	.465	.523	.500	.423	.473	.486	.486	.334	.406	.443	.432
Sheeting, bleached, 9-4.....	do.	.950	1.200	1.310	1.243	.943	1.070	1.275	1.200	.899	1.008	1.181	1.156
Sheets, bleached, 81 by 90.....	Each.	2.188	2.743	3.016	2.966	2.500	2.420	3.063	3.100	1.936	2.330	2.818	2.881
Outing flannel, 27 to 28 inch.....	Yard.	.330	.420	.483	.427	.355	.403	.428	.480	.332	.388	.394	.459
Flannel, white, wool, 27-inch.....	do.	.....	1.000	1.000	.800	.....	.....	.....	.....	1.025	1.113	1.348	1.068
Blankets, cotton, 66 by 80.....	Pair.	5.740	6.500	6.500	7.000	5.745	6.250	6.338	6.736	5.125	5.000	5.140	6.175
		Los Angeles, Calif.				Louisville, Ky.				Manchester, N. H.			
Calico, 24 to 25 inch.....	Yard.	\$ 0.218	\$ 0.203	\$ 0.203	\$ 0.228	\$ 0.207	\$ 0.238	\$ 0.246	\$ 0.246	\$ 0.232	\$ 0.286	\$ 0.309	\$ 0.273
Percale.....	do.	.425	.500	.531	.545	.382	.530	.523	.495	.421	.432	.461	.454
Gingham, apron, 27 to 28 inch.....	do.	.279	.350	.368	.350	.258	.335	.322	.320	.254	.303	.303	.335
Gingham, dress, 27-inch.....	do.	.391	.419	.445	.464	.361	.445	.458	.513	.344	.396	.399	.437
Gingham, dress, 32-inch.....	do.	.616	.658	.737	.673	.608	.755	.766	.749	.557	.584	.617	.674
Muslin, bleached.....	do.	.367	.396	.445	.447	.353	.404	.427	.386	.380	.467	.514	.487
Sheeting, bleached, 9-4.....	do.	.806	.956	1.038	1.094	.835	.990	1.042	1.003	.901	1.111	1.127	1.150
Sheets, bleached, 81 by 90.....	Each.	2.025	2.368	2.650	2.816	2.120	2.603	2.725	2.798	2.379	2.684	2.651	2.727
Outing flannel, 27 to 28 inch.....	Yard.	.385	.414	.433	.480	.328	.363	.388	.590	.322	.374	.391	.464
Flannel, white, wool, 27-inch.....	do.	1.300	.....	1.000	1.417	.770	1.175	1.375	.840	.....	1.080	1.095	1.095
Blankets, cotton, 66 by 80.....	Pair.	6.400	6.204	6.388	6.152	6.342	6.993	5.500	6.980	4.794	5.615	5.988	6.188
		Memphis, Tenn.				Milwaukee, Wis.				Minneapolis, Minn.			
Calico, 24 to 25 inch.....	Yard.	\$ 0.199	\$ 0.264	\$ 0.257	\$ 0.290	\$ 0.236	\$ 0.220	\$ 0.270	\$ 0.235	\$ 0.192	\$ 0.237	\$ 0.261	\$ 0.228
Percale.....	do.	.407	.507	.580	.598	.435	.538	.597	.530	.376	.423	.465	.427
Gingham, apron, 27 to 28 inch.....	do.	.260	.355	.283	.350	.270	.350	.350	.374	.250	.306	.326	.314
Gingham, dress, 27-inch.....	do.	.363	.426	.463	.512	.350	.423	.457	.465	.349	.440	.454	.469
Gingham, dress, 32-inch.....	do.	.582	.687	.638	.747	.549	.629	.701	.735	.582	.728	.832	.809
Muslin, bleached.....	do.	.353	.435	.480	.418	.375	.473	.481	.512	.354	.434	.465	.451
Sheeting, bleached, 9-4.....	do.	.909	1.007	1.098	1.108	.860	1.002	1.214	1.210	.855	1.059	1.133	1.091
Sheets, bleached, 81 by 90.....	Each.	2.271	2.669	2.904	2.896	2.227	2.703	2.954	2.924	2.186	2.600	2.650	2.544
Outing flannel, 27 to 28 inch.....	Yard.	.341	.383	.375	.471	.345	.414	.395	.486	.354	.415	.402	.419
Flannel, white, wool, 27-inch.....	do.	.....	1.213	1.310	1.283	1.000	.....	.....	.750	1.000	.....	.....	1.047
Blankets, cotton, 66 by 80.....	Pair.	6.280	6.987	7.067	6.993	6.058	6.593	6.721	6.960	5.920	6.588	6.363	6.402

AVERAGE RETAIL PRICES OF 10 ARTICLES OF DRY GOODS ON AUG. 15, 1919, AND ON FEB. 15, MAY 15, AND AUG. 15, 1920—Continued.

Article.	Unit.	Mobile, Ala.				Newark, N. J.			New Haven, Conn.				
		1920				1920			1920				
		Aug. 15, 1919.	Feb. 15.	May 15.	Aug. 15.	Aug. 15, 1919.	Feb. 15.	May 15.	Aug. 15.	Aug. 15, 1919.	Feb. 15.	May 15.	Aug. 15.
Calico, 24 to 25 inch.....	Yard.	\$ 0.225	\$ 0.253	\$ 0.255	\$ 0.250	\$ 0.198	\$ 0.250	\$ 0.277	\$ 0.250	\$ 0.145	\$ 0.190	\$ 0.250	\$ 0.262
Percale.....	do.	0.350	0.510	0.517	0.520	0.366	0.488	0.504	0.521	0.346	0.436	0.502	0.484
Gingham, apron, 27 to 28 inch.....	do.	0.250	0.316	0.326	0.338	0.250	0.297	0.317	0.317	0.241	0.299	0.336	0.308
Gingham, dress, 27-inch.....	do.	0.347	0.436	0.429	0.475	0.340	0.402	0.482	0.459	0.333	0.391	0.434	0.499
Gingham, dress, 32-inch.....	do.	0.530	0.622	0.624	0.590	0.555	0.608	0.718	0.686	0.531	0.581	0.679	0.720
Muslin, bleached.....	do.	0.346	0.390	0.436	0.422	0.345	0.432	0.475	0.448	0.334	0.423	0.470	0.452
Sheeting, bleached, 9-4.....	do.	0.690	0.930	1.025	1.017	0.839	1.004	1.137	1.157	0.825	0.982	1.094	0.988
Sheets, bleached, 81 by 90.....	Each.	1.827	2.276	2.506	2.583	2.113	2.645	2.870	2.843	2.003	2.314	2.575	2.639
Outing flannel, 27 to 28 inch.....	Yard.	0.290	0.350	0.359	0.420	0.341	0.382	0.480	0.508	0.276	0.304	0.388	0.414
Flannel, white, wool, 27-inch.....	do.	0.675	1.006	0.867	.....	1.220	1.250	1.320	1.250	0.790	0.945	.....	1.250
Blankets, cotton, 66 by 80.....	Pair.	5.500	6.320	6.296	6.994	5.250	5.308	5.370	5.956	4.872	5.354	5.620	6.354
		New Orleans, La.				New York, N. Y.			Norfolk, Va.				
Calico, 24 to 25 inch.....	Yard.	\$ 0.269	\$ 0.242	\$ 0.250	\$ 0.263	\$ 0.270	\$ 0.270	\$ 0.260	\$ 0.282	.....	\$ 0.250	\$ 0.250	\$ 0.270
Percale.....	do.	0.450	0.398	0.435	0.590	0.419	0.466	0.541	0.504	0.460	0.487	0.536	0.533
Gingham, apron, 27 to 28 inch.....	do.	0.250	0.340	0.290	.....	0.290	0.364	0.371	0.365	0.260	0.300	0.350	0.350
Gingham, dress, 27-inch.....	do.	0.312	0.374	0.450	0.490	0.361	0.431	0.453	0.482	0.370	0.404	0.466	0.469
Gingham, dress, 32-inch.....	do.	0.552	0.718	0.732	0.780	0.625	0.718	0.776	0.786	0.607	0.620	0.694	0.702
Muslin, bleached.....	do.	0.324	0.390	0.393	0.350	0.349	0.449	0.459	0.453	0.354	0.427	0.503	0.478
Sheeting, bleached, 9-4.....	do.	0.705	0.967	0.975	0.930	0.892	1.148	1.183	1.198	0.870	1.025	1.136	1.171
Sheets, bleached, 81 by 90.....	Each.	1.735	2.343	2.383	.....	2.199	2.534	2.900	2.788	2.159	2.360	2.632	2.791
Outing flannel, 27 to 28 inch.....	Yard.	0.296	0.373	0.350	0.395	0.304	0.371	0.417	0.465	0.360	0.385	0.453	0.473
Flannel, white, wool, 27-inch.....	do.	0.600	1.250	1.500	.....	0.890	0.944	0.953	1.001	1.125	1.050	1.125	1.180
Blankets, cotton, 66 by 80.....	Pair.	5.500	5.990	.....	6.075	5.238	5.288	6.620	6.200	6.500	6.238	5.487	6.225
		Omaha, Nebr.				Peoria, Ill.			Philadelphia, Pa.				
Calico, 24 to 25 inch.....	Yard.	\$ 0.194	\$ 0.220	\$ 0.232	\$ 0.248	\$ 0.169	\$ 0.203	\$ 0.190	\$ 0.220	.....	\$ 0.250	\$ 0.250	\$ 0.220
Percale.....	do.	0.389	0.432	0.521	0.567	0.330	0.450	.....	0.490	0.382	0.511	0.537	0.523
Gingham, apron, 27 to 28 inch.....	do.	0.270	0.318	0.334	0.336	0.245	0.263	0.360	0.290	0.280	0.323	0.326	0.318
Gingham, dress, 27-inch.....	do.	0.342	0.400	0.489	0.496	0.350	0.412	0.490	0.453	0.343	0.408	0.449	0.494
Gingham, dress, 32-inch.....	do.	0.612	0.703	0.704	0.700	0.580	0.624	0.590	0.490	0.515	0.553	0.691	0.779
Muslin, bleached.....	do.	0.371	0.426	0.439	0.436	0.342	0.410	0.474	0.363	0.348	0.446	0.479	0.453
Sheeting, bleached, 9-4.....	do.	0.888	1.114	1.160	1.163	1.007	1.085	1.288	0.935	0.829	1.065	1.088	1.082
Sheets, bleached, 81 by 90.....	Each.	2.157	2.488	2.795	2.908	2.376	2.616	3.258	2.690	1.990	2.643	2.663	2.699
Outing flannel, 27 to 28 inch.....	Yard.	0.358	0.395	0.419	0.430	0.353	0.385	0.382	0.457	0.325	0.416	0.440	0.481
Flannel, white, wool, 27-inch.....	do.	0.945	1.370	1.250	1.300	.....	0.980	.....	.....	0.854	1.458	1.380	1.210
Blankets, cotton, 66 by 80.....	Pair.	5.886	6.588	6.904	6.429	6.217	5.450	.....	6.700	5.376	5.980	5.333	6.250
		Pittsburgh, Pa.				Portland, Mo.			Portland, Oreg.				
Calico, 24 to 25 inch.....	Yard.	\$ 0.173	\$ 0.218	\$ 0.266	\$ 0.276	\$ 0.390	\$ 0.414	\$ 0.438	\$ 0.450	\$ 0.195	\$ 0.225	\$ 0.235	\$ 0.250
Percale.....	do.	0.350	0.493	0.517	0.552	0.350	0.290	0.290	0.290	0.406	0.464	0.490	0.500
Gingham, apron, 27 to 28 inch.....	do.	0.220	0.281	0.328	0.318	0.250	0.290	0.290	0.290	0.250	0.280	0.287	0.267
Gingham, dress, 27-inch.....	do.	0.340	0.398	0.454	0.509	0.336	0.406	0.490	0.410	0.350	0.392	0.421	0.439
Gingham, dress, 32-inch.....	do.	0.515	0.628	0.727	0.679	0.590	0.646	0.633	0.717	0.663	0.707	0.704	0.805
Muslin, bleached.....	do.	0.298	0.428	0.445	0.423	0.381	0.425	0.426	0.458	0.371	0.447	0.454	0.458
Sheeting, bleached, 9-4.....	do.	0.790	1.063	1.108	1.099	0.785	0.961	0.999	1.024	0.897	0.879	1.071	1.100
Sheets, bleached, 81 by 90.....	Each.	1.797	2.597	2.824	2.719	1.990	2.365	2.467	2.450	2.300	2.255	2.756	2.892
Outing flannel, 27 to 28 inch.....	Yard.	0.333	0.367	0.395	0.439	0.329	0.403	0.424	0.590	0.363	0.378	0.392	0.431
Flannel, white, wool, 27-inch.....	do.	0.875	1.075	1.133	1.083	.....	1.398	1.390	.....	1.125	1.333	1.167	.....
Blankets, cotton, 66 by 80.....	Pair.	5.580	5.783	5.675	5.685	5.400	5.375	5.740	5.803	6.500	6.750	6.639	6.813
		Providence, R. I.				Richmond, Va.			Rochester, N. Y.				
Calico, 24 to 25 inch.....	Yard.	\$ 0.270	\$ 0.277	\$ 0.285	.....	\$ 0.205	\$ 0.234	\$ 0.248	\$ 0.250	\$ 0.188	\$ 0.221	\$ 0.205	\$ 0.213
Percale.....	do.	0.343	0.473	0.482	0.482	0.405	0.499	0.485	0.499	0.387	0.486	0.500	0.500
Gingham, apron, 27 to 28 inch.....	do.	0.270	0.337	0.363	0.343	0.254	0.290	0.320	0.310	0.205	0.290	0.300	0.318
Gingham, dress, 27-inch.....	do.	0.321	0.419	0.437	0.497	0.315	0.389	0.391	0.443	0.322	0.384	0.424	0.447
Gingham, dress, 32-inch.....	do.	0.500	0.590	0.654	0.689	0.489	0.603	0.639	0.678	0.627	0.664	0.652	0.676
Muslin, bleached.....	do.	0.349	0.448	0.489	0.460	0.369	0.460	0.483	0.444	0.346	0.431	0.486	0.430
Sheeting, bleached, 9-4.....	do.	0.922	0.986	1.102	1.117	0.908	1.050	1.077	1.052	0.889	1.029	1.177	1.133
Sheets, bleached, 81 by 90.....	Each.	2.435	2.556	2.930	2.847	2.210	2.493	2.601	2.647	2.153	2.504	2.820	2.963
Outing flannel, 27 to 28 inch.....	Yard.	0.284	0.417	.....	0.465	0.348	0.354	0.399	0.497	0.325	0.346	0.370	0.416
Flannel, white, wool, 27-inch.....	do.	0.900	.....	.....	0.795	1.036	1.094	1.070	1.250	.....	1.375	.....	.....
Blankets, cotton, 66 by 80.....	Pair.	5.495	6.240	6.276	6.577	5.903	5.684	5.892	6.125	5.517	7.142	6.990	7.118

AVERAGE RETAIL PRICES OF 10 ARTICLES OF DRY GOODS ON AUG. 15, 1919, AND ON FEB. 15, MAY 15, AND AUG. 15, 1920—Concluded.

Article.	Unit.	St. Louis, Mo.				St. Paul, Minn.				Salt Lake City, Utah.			
		1920				1920				1920			
		Aug. 15, 1919.	Feb. 15.	May 15.	Aug. 15.	Aug. 15, 1919.	Feb. 15.	May 15.	Aug. 15.	Aug. 15, 1920.	Feb. 15.	May 15.	Aug. 15.
Calico, 24 to 25 inch.....	Yard.	0.220	0.250	0.257	0.252	0.216	0.255	0.277	0.256	0.190	0.220	0.250	0.273
Percale.....	do.	.430	.490	.490	.490	.378	.491	.483	.494	.384	.520	.545	.600
Gingham, apron, 27 to 28 inch.....	do.	.280	.300	.300	.300	.240	.320	.314	.305	.262	.298	.312	.317
Gingham, dress, 27-inch.....	do.	.387	.448	.455	.465	.359	.427	.459	.457	.377	.409	.448	.471
Gingham, dress, 32-inch.....	do.	.685	.728	.741	.797	.597	.645	.666	.696	.586	.709	.708	.712
Muslin, bleached.....	do.	.362	.440	.445	.425	.354	.469	.521	.457	.377	.467	.468	.445
Sheeting, bleached, 9-4.....	do.	.895	.994	1.075	1.068	.895	1.028	1.115	1.093	.871	1.078	1.110	1.185
Sheets, bleached, 81 by 90.....	Each.	2.281	2.535	2.563	2.691	2.230	2.507	2.638	2.587	2.152	2.691	3.003	2.942
Outing flannel, 27 to 28 inch.....	Yard.	.367	.372	.410	.457	.322	.398	.398	.419	.361	.441	.438	.487
Flannel, white, wool, 27-inch.....	do.	.800	1.050	.....	1.050	.....	1.027	.980	.....	1.750	1.590	1.450	1.570
Blankets, cotton, 66 by 80.....	Pair.	5.245	6.425	6.161	6.322	6.675	6.613	6.554	6.850	7.596	7.410	6.912	7.613
		San Francisco, Calif.				Savannah, Ga.				Scranton, Pa.			
Calico, 24 to 25 inch.....	Yard.	0.367	.....	.....	.....	.....	.....	.....	.....	0.207	0.273	0.263	0.270
Percale.....	do.	.400	.510	0.567	0.620	.....	0.505	0.490	0.490	.390	.415	.450	.485
Gingham, apron, 27 to 28 inch.....	do.	.320	.325	.350	.325	.....	.336	.366	.333	.290	.297	.320	.340
Gingham, dress, 27-inch.....	do.	.360	.400	.414	.445	.....	.429	.436	.466	.330	.402	.441	.467
Gingham, dress, 32-inch.....	do.	.525	.621	.642	.693	.....	.659	.613	.683	.594	.598	.608	.670
Muslin, bleached.....	do.	.355	.417	.430	.481	.....	.462	.459	.447	.347	.416	.471	.456
Sheeting, bleached, 9-4.....	do.	.865	.983	1.207	1.221	.....	1.077	1.116	1.108	.771	1.022	1.101	1.144
Sheets, bleached, 81 by 90.....	Each.	2.122	2.479	3.050	2.926	.....	2.593	2.783	2.873	2.053	2.378	2.619	2.646
Outing flannel, 27 to 28 inch.....	Yard.	.408	.425	.444	.467	.....	.419	.430	.484	.326	.404	.451	.494
Flannel, white, wool, 27-inch.....	do.	1.000	1.083	1.500	1.375	.....	1.250	1.000	.....	.....	.980	1.125	1.247
Blankets, cotton, 66 by 80.....	Pair.	6.529	7.017	6.125	6.488	.....	7.284	6.500	6.500	6.653	6.615	5.863	6.892
		Seattle, Wash.				Springfield, Ill.				Washington, D. C.			
Calico, 24 to 25 inch.....	Yard.	0.200	0.200	0.250	0.317	0.192	0.235	0.254	0.250	0.175	0.250	0.370	0.350
Percale.....	do.	.418	.475	.540	.571	.330	.431	.441	.436	.354	.503	.601	.580
Gingham, apron, 27 to 28 inch.....	do.	.250	.350	.350	.358	.247	.296	.330	.333	.293	.313	.350	.356
Gingham, dress, 27-inch.....	do.	.328	.397	.419	.443	.341	.397	.414	.438	.371	.495	.538	.507
Gingham, dress, 32-inch.....	do.	.558	.655	.700	.741	.435	.593	.594	.673	.587	.637	.705	.762
Muslin, bleached.....	do.	.403	.458	.500	.481	.311	.366	.397	.412	.344	.473	.472	.450
Sheeting, bleached, 9-4.....	do.	1.090	1.204	1.177	1.175	.820	.900	1.028	1.073	.858	1.141	1.258	1.186
Sheets, bleached, 81 by 90.....	Each.	2.850	3.011	3.118	3.005	2.081	2.350	2.730	2.549	2.347	2.946	2.909	2.768
Outing flannel, 27 to 28 inch.....	Yard.	.385	.429	.441	.456	.321	.383	.392	.447	.339	.397	.425	.469
Flannel, white, wool, 27-inch.....	do.	.925	1.675	1.467	1.575	.....	.750	.850	.....	1.250	1.000	1.250	1.245
Blankets, cotton, 66 by 80.....	Pair.	6.083	6.092	6.079	5.790	5.196	6.000	5.175	5.134	6.156	6.590	6.527	6.440

Index Numbers of Wholesale Prices in the United States.

A PRONOUNCED drop in the general level of wholesale prices in the United States from July to August is shown by information collected in representative markets by the Bureau of Labor Statistics. Measured by changes in the Bureau's weighted index number, in which each commodity has an influence proportionate to its importance in the country's markets, the decrease was over 4½ per cent.

Food articles showed the greatest price recessions, the decrease for the group as a whole being over 12 per cent. Farm products, containing many basic food materials, declined nearly 6 per cent. Cloths and clothing followed closely, with a decrease of approximately 5¾ per cent from the July level. Smaller decreases were recorded for the groups of building materials, chemicals and drugs, and miscellaneous

ous commodities, the latter including, among others, such important articles as bran, cottonseed meal and oil, jute, rubber and soya-bean oil.

Fuel and lighting materials, on the other hand, continued upward, with an increase of over 6½ per cent. Metals and house-furnishing goods also showed a net advance from the preceding month. Some of the more important price changes occurring between July and August, as measured by average prices in each month, are as follows:

IMPORTANT ARTICLES INCREASING OR DECREASING IN AVERAGE PRICE IN AUGUST AS COMPARED WITH JULY, 1920, BY GROUPS OF COMMODITIES.

Increases.

Commodity.	Per cent.	Commodity.	Per cent.	Commodity.	Per cent.
<i>Farm products.</i>		<i>Fuel and lighting.—Con.</i>		<i>Building materials.</i>	
Hay, alfalfa, Kansas City..	6.6	Coal, bituminous:		Cement, New York.....	6.3
Cattle, Chicago.....	2.6	Mine run, Chicago.....	18.9	Glass, plate, Pittsburgh..	2.6
Poultry, Chicago.....	8.1	Prepared, sizes, Chicago.	20.1	Douglas fir, No. 2, mill..	9.8
<i>Food, etc.</i>		Screenings, Chicago.....	20.8	Shingles, red cedar, mill..	8.5
Eggs:		Coke, Pittsburgh.....	8.2	Poplar, New York.....	2.9
Chicago.....	11.3	Petroleum, crude, California.....	3.3	<i>Chemicals and drugs.</i>	
New York.....	9.7	<i>Metals and metal products.</i>		Alum, lump, New York...	6.4
San Francisco.....	6.2	Lead, pig, New York.....	4.4	Ammonia, anhydrous,	
Fruit, oranges, Chicago....	15.5	Lead, pipe, New York.....	6.3	New York.....	3.0
Poultry, Chicago.....	8.9	Nails, wire, Pittsburgh....	6.1	Carbonate of soda, New	
Veal, New York.....	8.1	Pig iron:		York.....	4.1
Milk:		Basic, valley.....	5.1	<i>House-furnishing goods.</i>	
Chicago.....	14.3	Bessemer, Pittsburgh....	4.2	Glassware, pitchers, factory.....	8.0
New York.....	12.2	Foundry No. 2, northern, Pittsburgh.....	7.6	<i>Miscellaneous.</i>	
Salt, Chicago.....	8.3	Silver, bar, New York.....	3.5	Lubricating oil, paraffin,	
<i>Fuel and lighting.</i>		Tin plate, Pittsburgh.....	20.0	New York.....	1.3
Coal, anthracite:		Wire, plain, annealed,		Paper, wrapping, New	
Chestnut, New York....	1.7	Pittsburgh.....	3.4	York.....	9.7
Egg, New York.....	1.5			Coconut oil, Pacific coast..	3.1
Stove, New York.....	1.6				

Decreases.

<i>Farm products.</i>		<i>Food, etc.—Con.</i>		<i>Cloths and clothing—Con.</i>	
Cotton:		Meat:		Worsted yarn, Boston....	3.8
New Orleans.....	14.4	Bacon, Chicago.....	3.8	<i>Metals and metal products.</i>	
New York.....	12.3	Lamb, Chicago.....	10.7	Steel billets, Bessemer,	
Flaxseed, Chicago.....	5.7	Mutton, New York.....	18.2	Pittsburgh.....	2.4
Barley, Chicago.....	10.6	Rice:		Steel plates, Pittsburgh..	3.8
Oats, Chicago.....	25.2	Blue Rose, New Orleans.	13.6	Tin, pig, New York.....	3.9
Rye, Chicago.....	12.0	Honduras, New Orleans.	18.6	<i>Building materials.</i>	
Wheat:		Sugar, raw, New York....	23.9	Oak, white, plain, New	
No. 1, northern spring,		Potatoes, Chicago.....	41.3	York.....	5.0
Chicago.....	10.4	Vinegar, New York.....	11.1	Yellow pine siding, Nor-	
No. 2, hard winter,		<i>Cloths and clothing.</i>		folk.....	9.4
Kansas City.....	10.8	Shoes, factory:		Linseed oil, New York....	7.1
Bluestem, Portland....	11.8	Men's, vici kid.....	7.5	<i>Chemicals and drugs.</i>	
Hides, Chicago:		Women's, Goodyear welt	6.9	Acid, sulphuric, 66°, New	
Calfskins, No. 1.....	25.1	Drillings, Massachusetts		York.....	4.4
Packers, heavy Texas		D, Standard, New		Soda, caustic, New York..	5.5
steers.....	10.0	York.....	4.4	Soda, nitrate of, New York	3.6
Hops:		Print cloths, Boston.....	17.7	Soda ash, light, New York.	3.8
New York State, New		Sheeting, brown, New		<i>Miscellaneous.</i>	
York.....	10.6	York.....	13.8	Bran, Minneapolis.....	13.8
Pacifc, Portland.....	18.1	Shirting:		Cottonseed meal, New	
Sheep, lambs, Chicago....	9.6	New York.....	12.9	York.....	4.3
Peanuts, Norfolk, Va....	2.4	Mill.....	10.5	Cottonseed oil, New York.	5.8
<i>Food, etc.</i>		Ticking, New York.....	18.1	Jute, New York.....	10.5
Butter:		Yarn, carded, 10/1, Boston.	10.0	Rubber, New York.....	14.3
Chicago.....	2.3	Yarn, twisted, 20/2, Boston	13.6	Hemp, New York.....	2.5
New York.....	2.4	Leather:		Mill feed, middlings, Min-	
Coffee, New York.....	28.3	Sole, oak, Boston.....	2.8	neapolis.....	3.9
Flour, rye, Minneapolis....	12.0	Glazed kid, Boston.....	19.5	Sisal, New York.....	2.7
Flour, wheat:		Sole, hemlock, Boston..	2.5	Tankage, Chicago.....	3.3
Kansas City.....	7.8	Trousing, New York....	14.5	Soya-bean oil, New York..	10.1
Minneapolis.....	10.5	Broadcloth, New York....	8.3		
Fruit:		Wool, Boston:			
Bananas, New York.....	31.3	Fine delaine.....	12.5		
Lemons, Chicago.....	6.4	¼ and ½ grades.....	4.0		
Corn meal, Philadelphia..	14.0				

Measured by changes in the index numbers from August, 1919, to August, 1920, food articles increased $3\frac{1}{2}$ per cent, metals and metal products 17 per cent, fuel and lighting 53 per cent, and building materials nearly $57\frac{3}{4}$ per cent. In the same time, chemicals and drugs increased $25\frac{1}{2}$ per cent and house-furnishing goods over 40 per cent. Farm products, on the contrary, were nearly $8\frac{3}{4}$ per cent lower in average price in August, 1920, than in the corresponding month of 1919. Cloths and clothing also showed a decline from the year before. All commodities, considered in the aggregate, increased about $10\frac{1}{2}$ per cent in average price.

INDEX NUMBERS OF WHOLESALE PRICES IN SPECIFIED YEARS AND MONTHS, 1913 TO AUGUST, 1920, BY GROUPS OF COMMODITIES.

[1913=100.

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

INDEX NUMBERS OF WHOLESALE PRICES IN SPECIFIED YEARS AND MONTHS, 1913 TO AUGUST, 1920, BY GROUPS OF COMMODITIES—Concluded.

[1913=100.]

Year and month.	Farm products.	Food, etc.	Cloths and clothing.	Fuel and lighting.	Metals and metal products.	Build- ing materials.	Chemicals and drugs.	House furnishing goods.	Miscel- laneous.	All com- modities.
1920:										
January.....	246	253	350	184	177	268	189	324	227	248
February.....	237	244	356	187	189	300	197	329	227	249
March.....	239	246	356	192	192	324	205	329	230	253
April.....	246	270	353	213	195	341	212	331	238	265
May.....	244	287	347	235	193	341	215	339	246	272
June.....	243	279	335	246	190	337	218	362	247	269
July.....	236	268	317	252	191	333	217	362	243	262
August ¹	222	235	299	268	193	328	216	363	240	250

¹ Preliminary.

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

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

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

[July, 1914=100.]

Year and month.	United States: 22 foodstuffs; 45 cities (variable). Weighted.	Australia: 46 foodstuffs; 30 towns. Weighted.	Belgium: 54 articles (variable); Brussels. Not weighted.	Canada: 29 foodstuffs; 60 cities. Weighted.	Denmark: Family food budget; 5 persons. Weighted.	France: Family budget, 13 articles.		Great Britain: 21 foodstuffs; 600 towns. Weighted.
						Cities over 10,000 population (except Paris). Weighted.	Paris only. Weighted.	
1914.								
July.....	100	100	¹ 100	100	100	² 100	100	100
October.....	103	99	.....	108	.....	.....	.....	112
1915.								
January.....	101	107	.....	107	.....	² 110	120	118
April.....	97	113	.....	105	.....	.....	114	124
July.....	98	131	.....	105	128	² 123	120	132½
October.....	101	133	.....	105	.....	.....	118	140
1916.								
January.....	105	129	.....	112	.....	² 133	134	145
April.....	107	131	.....	112	.....	² 137	132	149
July.....	109	130	.....	114	146	² 141	129	161
October.....	119	125	.....	125	.....	² 146	135	168
1917.								
January.....	125	125	.....	138	.....	² 154	139	187
February.....	130	123	.....	141	158	.....	.....	189
March.....	130	126	.....	144	.....	.....	.....	192
April.....	142	127	.....	145	.....	² 171	147	194
May.....	148	127	.....	159	.....	.....	.....	198
June.....	149	127	.....	160	.....	.....	.....	202
July.....	143	126	.....	157	166	² 184	183	204
August.....	146	129	.....	157	.....	.....	.....	202
September.....	150	129	.....	157	.....	.....	.....	206
October.....	154	129	.....	159	.....	² 200	184	197
November.....	152	129	.....	163	.....	.....	.....	206
December.....	154	128	.....	165	.....	.....	.....	205
1918.								
January.....	157	129	.....	167	.....	² 211	191	206
February.....	158	130	.....	169	173	.....	.....	208
March.....	151	131	.....	170	.....	.....	.....	207
April.....	151	131	.....	169	.....	² 232	218	206
May.....	155	132	.....	171	.....	.....	.....	207
June.....	159	132	.....	172	.....	.....	.....	208
July.....	164	131	.....	175	187	² 244	206	210
August.....	168	128	.....	181	.....	.....	.....	218
September.....	175	128	.....	179	.....	.....	.....	216
October.....	177	131	.....	182	.....	² 250	238	229
November.....	179	133	.....	182	.....	.....	.....	233
December.....	183	134	.....	184	.....	.....	.....	229
1919.								
January.....	181	140	639	186	186	² 277	248	230
February.....	169	141	534	181	.....	.....	227	230
March.....	172	143	424	176	.....	.....	248	220
April.....	178	145	374	180	.....	² 293	257	213
May.....	181	146	351	182	.....	.....	268	207
June.....	180	147	344	185	.....	.....	264	204
July.....	186	147	354	186	212	² 288	261	209
August.....	188	148	348	195	.....	.....	238	217
September.....	184	148	342	193	.....	.....	259	216
October.....	184	156	337	192	.....	² 301	283	222
November.....	188	158	341	192	.....	.....	280	231
December.....	193	158	359	198	.....	.....	285	234
1920.								
January.....	197	160	410	206	251	² 320	290	236
February.....	196	163	445	212	.....	.....	297	235
March.....	196	163	473	215	.....	.....	339	233
April.....	207	173	488	215	.....	² 378	358	235
May.....	211	176	492	224	.....	.....	379	246
June.....	215	187	.....	228	.....	.....	369	255

¹ April, 1914.

² Quarter beginning month specified.

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

Year and month.	Italy.		Netherlands: 27 foodstuffs; Amsterdam. Not weighted.	New Zealand: 59 foodstuffs; 25 towns. Weighted.	Norway: Family food budget. Weighted.	Spain: 12 foodstuffs; provincial capitals. Not weighted.	Sweden: 21 articles; 44 towns. Weighted.	Switzerland: 9 groups of foodstuffs. Not weighted.
	7 foodstuffs; 40 cities (variable). Not weighted.	Rome: Family food budget; 5 persons. Weighted.						
1914.								
July.....	100	³ 100	⁴ 100	100	100	⁵ 100	100	⁶ 100
October.....	104			102			7 107	⁶ 103
1915.								
January.....	108	95		111		⁸ 101	7 113	⁶ 107
April.....	113	107		113			7 121	⁶ 114
July.....	120	95		112		⁶ 106	7 124	⁶ 119
October.....	127	100		112			7 128	⁶ 120
1916.								
January.....	133	111		116		⁸ 110	7 130	⁶ 126
April.....	132	116		118			7 134	⁶ 129
July.....	132	111		119	⁹ 160	⁵ 113	7 142	⁶ 140
October.....	132	111		120			7 152	⁶ 144
1917.								
January.....	144	124		127		⁸ 116	160	⁶ 148
February.....	154	127		126			166	
March.....	161	121		126			170	158
April.....	164	120		127			175	
May.....	167	123		128			175	
June.....	171	136		128			175	179
July.....	172	137		127		⁵ 127	177	
August.....	178	143		127	214		181	
September.....	188	142		129			187	192
October.....	188	148		130			192	
November.....	197	166		130			200	
December.....	199	157		132			212	197
1918.								
January.....	191	177		133		⁸ 136	221	
February.....	221	181		134			227	
March.....	247	199		134			235	204
April.....	236	200		137			247	
May.....		202		139			258	
June.....	239	199		139			261	230
July.....	253	203		139	279	⁵ 151	268	
August.....		208		141			280	
September.....	267	219		141			284	251
October.....		235		142			310	
November.....		249		144	275		320	
December.....		254		150	275		330	252
1919.								
January.....		259	195	145	279	⁸ 157	339	
February.....		258	212	142	278		334	
March.....		243	205	141	278		331	257
April.....	251	230	196	142	276		337	
May.....		232	186	142	283		328	
June.....		225	204	143	290		319	261
July.....		206	210	144	289	⁵ 168	310	
August.....		207	207	146	291		313	
September.....		214	203	148	298		309	
October.....		241	204	150	300		307	
November.....		246	202	153	297		309	
December.....		252	199	155	299		307	245
1920.								
January.....		275	203	158	299		298	
February.....		299	205	160	297		290	
March.....		300	205	162	298		291	244
April.....		310	206	162	305		297	
May.....		325	203	163	311		294	
June.....			210	163	311			

³ January-July.⁴ Year 1913.⁵ April-September.⁶ Previous month.⁷ Quarter beginning month specified.⁸ October-March.⁹ August.

Changes in Cost of Living in the United States, 1913 to June, 1920.

THE following table shows the increase in the cost of living in the United States from 1913 to June, 1920. These figures are averages based on the prices secured in 18 cities up to December, 1917, and in 31 cities from December, 1917, to June, 1920, the results of which appeared in the September REVIEW.

The first column in the table shows the per cent that the average expenditure for each group of items is of the average total expenditure per family, and each column that follows shows the per cent of increase, at the date given, over the average cost of each item in 1913.

It will be noted that the total increase from an average for the year 1913 to June, 1920, is 116.5 per cent, the largest increase being in furniture and furnishings, 192.7 per cent, and the next highest, clothing, 187.5 per cent. The total increase for the six-month period from December, 1919, to June, 1920, is 8.6 per cent.

CHANGES IN COST OF LIVING IN THE UNITED STATES FROM 1913 TO JUNE, 1920.

Item of expenditure.	Per cent of total expenditure. ¹	Per cent of increase from 1913 (average) to—							
		Dec., 1914.	Dec., 1915.	Dec., 1916.	Dec., 1917.	Dec., 1918.	June, 1919.	Dec., 1919.	June, 1920.
Food.....	38.2	5.0	5.0	26.0	57.0	87.0	84.0	97.0	119.0
Clothing.....	16.6	1.0	4.7	20.0	49.1	105.3	114.5	188.7	187.5
Housing.....	13.4	(²)	1.5	2.3	.1	9.2	14.2	25.3	34.9
Fuel and light.....	5.3	1.0	1.0	8.4	24.1	47.9	45.6	56.8	71.9
Furniture and furnishings.....	5.1	4.0	10.6	27.8	50.6	113.6	125.1	163.5	192.7
Miscellaneous.....	21.3	3.0	7.4	13.3	40.5	65.8	73.2	90.2	101.4
Total.....	100.0	3.0	3.6	18.3	42.4	74.4	77.3	99.3	116.5

¹ Based on survey of 22 cities, covering yearly periods ending between July 31 and November 30, 1918.
² No change.

Changes in Cost of Living in the District of Columbia.

THE following table shows the changes in the cost of living in the District of Columbia from December, 1914, to June, 1920.

The figures are based on the prices for December, 1914, and show that the increase from that date to June, 1920, is 101.3 per cent. The increase over November, 1919, based upon the prices for that date, is 7.3 per cent.

CHANGES IN COST OF LIVING IN THE DISTRICT OF COLUMBIA FROM DECEMBER, 1914, TO JUNE, 1920.

Item of expenditure.	Per cent of total expenditure.	Per cent of increase from December, 1914, to—						
		Dec., 1915.	Dec., 1916.	Dec., 1917.	Dec., 1918.	April, 1919.	Nov., 1919.	June, 1920.
Food.....	38.2	0.6	15.7	61.1	90.9	84.6	93.3	108.4
Clothing.....	16.6	3.7	23.2	60.1	112.6	109.5	165.9	184.0
Housing.....	13.4	¹ 1.5	¹ 3.7	¹ 3.4	¹ 1.5	¹ 1.4	5.4	15.6
Fuel and light.....	5.3	(²)	7.3	24.9	40.9	41.8	42.8	53.7
Furniture and furnishings.....	5.1	6.3	30.5	72.1	127.4	126.0	159.3	196.4
Miscellaneous.....	21.3	.4	15.3	44.3	55.9	57.4	62.7	68.2
Total.....	100.00	1.0	14.6	47.3	73.8	71.2	87.6	101.3

¹Decrease.

²No change.

The first column in the table shows the per cent that the average expenditure for each group of items is of the average total expenditure per family, and each column that follows shows the per cent of increase at the date given over the average cost of each item in December, 1914.

Summary of Important Facts Relating to Production and Prices of Commodities.

IT HAS been suggested to the Bureau of Labor Statistics that a brief statement from time to time of the principal facts concerning the production and available supplies of a few of the more important basic commodities, as reported by various Government agencies, would be of popular interest in connection with the Bureau's studies of wholesale and retail prices. With this end in view, it is purposed to publish periodically in the MONTHLY LABOR REVIEW a summary of such facts for a few selected articles. While definite conclusions can not be drawn from the limited information thus presented, it is believed that the figures will be found indicative, to some extent at least, of the relation between prices and the quantities of commodities on hand or in prospect at a particular date.

Sugar.

INFORMATION compiled by the Bureau of Foreign and Domestic Commerce of the Department of Commerce shows that the production of cane sugar in continental United States in the fiscal year 1919-20 was about 241,998,400 pounds and of beet sugar about 1,452,902,000 pounds. Imports from foreign countries and receipts from noncontiguous territories, added to the domestic production, give a total of 11,180,628,037 pounds available in the markets of the United States. Deducting from this amount the exports of domestic sugar, the reexports of foreign sugar, and shipments to noncontiguous American territories, leaves the net amount retained for consumption in the United States 9,721,943,011 pounds. Using the revised figures of August 1, 1920, issued by the Treasury Department, of the estimated population of continental United States, 107,239,000, there is found to be a per capita consumption of 90.6 pounds, as against 82 pounds in 1919.

The average import price of sugar increased from 2 cents per pound in the fiscal year 1913-14 to 5.3 cents in 1918-19 and 9 cents in 1919-20. This represents an increase in 1920 of 70 per cent over 1919 and of 350 per cent over 1914. The average export price of sugar was stated to be 9 cents per pound in 1919-20, compared with 7.3 cents in 1918-19 and 3.6 cents in 1913-14.

According to the United States Tariff Commission, the average cost of raw sugar to 12 refineries reporting for the first six months of 1919 was 7.203 cents per pound, compared with 6.219 cents in 1918 and 3.52 cents in 1914. Labor costs, averaged by refineries, were 0.237 cents per pound of refined sugar produced in the first half of 1919, compared with 0.273 cents in 1918 and 0.105 cents in 1914. Total refinery costs were 0.856 cents a pound in the first half of 1919,

compared with 0.931 cents in 1918 and 0.431 cents in 1914. These items represent averages for the 12 refineries reporting. Profits, averaged by refineries, were 0.316 cents a pound in 1919, as against 0.130 cents in 1918 and 0.106 cents in 1914. The percentage return on productive investment represented by profits averaged 18.37 in 1919, compared with 7.56 in 1918 and 6.16 in 1914.

The Bureau of Crop Estimates reports an area of 533,500 acres under sugar cane in the United States in 1920, compared with 481,000 acres in 1919. The acreage planted to sugar beets is estimated at 978,500, as against 890,400 in 1919. The production of sugar beets in 1920 (July 1 indications) is estimated at 8,920,000 tons, compared with 6,421,478 tons in 1919. A total production of 2,004,000,000 pounds of beet sugar is estimated for the crop of 1920-21.

Information gathered by the Bureau of Labor Statistics shows that raw sugar (96° centrifugals) averaged above 17½ cents a pound in the New York market in July, 1920, compared with 7.28 cents in July, 1919. Wholesale prices of granulated sugar in New York averaged above 19 cents a pound in July, compared with 8.82 cents in July of last year. The average retail price per pound of granulated sugar in four important cities on July 15 of each year were as follows:

	1919 (cents). 1920 (cents).	
New York.....	10.0	25.2
Chicago.....	10.9	26.5
New Orleans.....	10.7	25.1
San Francisco.....	10.2	24.9

Bituminous Coal.

THE production of bituminous coal in the United States during the present calendar year up to July 3, as estimated by the Geological Survey, amounted to 262,359,000 net tons, compared with 218,099,000 tons in the same period of 1919. The daily average for the first half of each year was 1,393,000 tons in 1919 and 1,665,000 tons in 1920. Production during the first 193 working days of each year was 276,595,000 net tons in 1919 and 324,877,000 net tons in 1920.

Imports of bituminous coal in the 12 months ending with June, as reported by the Bureau of Foreign and Domestic Commerce, were 1,008,250 gross tons in 1919 and 1,062,889 gross tons in 1920. Exports in the same period were 18,152,337 gross tons in 1919, compared with 22,976,325 gross tons in 1920.

Reports made to the Federal Trade Commission by 680 operators for the month of May, 1920, show an average cost f. o. b. at the mine of \$2.77 per net ton. Of this amount \$2.07 was charged to labor, 31 cents to supplies, and 39 cents to general expense. The reported sales realization averaged \$3.31 per net ton, leaving a margin of 54 cents per ton. Not all of the margin is profit, since the cost figures do not include selling expenses, interest on borrowed capital, nor allowance for income and excess profits taxes.

The wholesale price of mine-run coal from the southern Illinois field at Chicago, as reported to the Bureau of Labor Statistics, ranged from \$4.90 to \$7.55 per net ton in the first week of July, 1920, compared with \$4.10 in the corresponding week of 1919. Mine-run coal from the Kanawha field was quoted at \$6 per net ton at Cincinnati in the first week of July, 1920, compared with \$4 in 1919. Prepared

sizes coal from the Pittsburgh field averaged \$5.50 per net ton at Pittsburgh in July, 1920, as against \$3.42 in July of last year.

Retail prices of bituminous coal to the family trade averaged \$8.95 per net ton in Chicago on July 15 of the present year, compared with \$7.02 in July, 1919. In Cincinnati the average was \$8 for July 15, 1920, and \$6.14 for the corresponding date in 1919. Average retail prices of bituminous coal in Pittsburgh were \$7.38 per net ton on July 15, 1920, and \$5.83 on July 15, 1919.

Anthracite Coal.

THE Geological Survey estimates the production of anthracite coal in the United States in the calendar year to July 3, 1920, at 43,642,000 net tons, compared with 40,049,000 net tons in the corresponding period of 1919. The cumulative production to August 14 was 54,117,000 net tons as against 50,817,000 net tons in the same period of last year, an increase of 3,300,000 tons.

Imports of anthracite coal in the 12 months ending with June varied but little in the two years, being 62,098 gross tons in 1919 and 62,950 gross tons in 1920. Exports were 4,285,930 gross tons in 1919 and 4,717,462 gross tons in 1920. Export values increased from \$30,927,815 in 1919 to \$40,667,538 in 1920.

Company prices at the mine in Pennsylvania for July shipments, per gross ton, as reported in trade journals, were as follows: Egg, \$6.25 in 1919 and \$7.40 in 1920; stove, \$6.50 in 1919 and \$7.65 in 1920; chestnut, \$6.60 in 1919 and \$7.75 in 1920; pea, \$5.15 in 1919 and \$5.95 in 1920.

The average retail price of anthracite coal to the family trade in three important cities, as shown by the records of the Bureau of Labor Statistics, on July 15 of each year was as follows:

Philadelphia (per gross ton):	1919.	1920.
Stove.....	\$10.85	\$13.47
Chestnut.....	10.95	13.44
Baltimore (per gross ton):		
Stove.....	11.75	13.75
Chestnut.....	11.85	13.85
New York (per net ton):		
Stove.....	10.80	13.07
Chestnut.....	10.86	13.07

Government Control Over Prices.¹

A COOPERATIVE effort on the part of the statistical divisions of the War Industries Board and the War Trade Board has resulted in the preparation and publication of a volume setting forth the Government control over prices during the war. It is designated as Bulletin No. 3 in a series of 57 reports, forming a "History of Prices during the War," issued by the War Industries Board. A paragraph in the introduction states that "the uppermost aims of this inquiry have been to present an analysis and a documentary record of all price regulation exercised by the Government during the World War." The bulletin covers all price regulations of which record was found, but it is pointed out that "other informal controls were agreed upon by word of mouth of which no record remains."

¹Cf. Price fixing by the Government during the war, in MONTHLY LABOR REVIEW for May, 1920, pp. 21-45.

The work is divided into two parts, Books I and II, the first containing data of a descriptive or analytical character and the second showing in compact form all known regulations relating to prices, either formal or otherwise, issued by the Government during the war. Three sections of Book I show: (1) The problems that led the Government into price control, (2) the administration of price control during the war, and (3) various statistical devices for measuring the effects of price control.

In the chapter on problems that led to price control by the Government is given a comparison of prices during the Civil War and the present war, made by taking the medians of relative prices of 92 commodities at wholesale. The general prewar price level is represented by 100 in each instance. The table follows:

MEDIANS OF RELATIVE WHOLESALE PRICES, 1860 TO 1865 AND 1913 TO 1918.

Year and month.	All commodities.		Foods.		Building materials.		Chemicals.		Cotton.		Copper, ingot.	
	Civil War.	Present war.	Civil War.	Present war.	Civil War.	Present war.	Civil War.	Present war.	Civil War.	Present war.	Civil War.	Present war.
Number of commodities..	92	92	36	36	19	19	15	15	2	2	1	1
1860 and 1913:												
January.....	100	100	100	100	100	100	100	100	101	98	100	117
April.....	100	100	100	100	100	100	100	100	101	95	98	101
July.....	100	100	98	100	100	100	100	100	98	95	89	97
October.....	100	100	99	100	100	100	100	100	99	106	90	110
1861 and 1914:												
January.....	100	100	98	100	100	100	100	100	112	98	81	99
April.....	96	100	94	100	100	100	100	100	117	101	81	96
July.....	96	100	88	100	100	100	100	100	136	101	77	89
October.....	97	100	91	105	102	100	100	100	197	53	87	78
1862 and 1915:												
January.....	100	100	99	107	106	100	117	100	336	62	113	87
April.....	100	100	96	105	112	100	107	100	253	76	94	106
July.....	100	102	93	105	107	100	109	115	346	69	98	132
October.....	111	102	100	102	116	100	125	126	515	94	119	120
1863 and 1916:												
January.....	125	114	116	110	133	104	130	138	618	94	132	152
April.....	137	115	125	113	143	109	142	187	668	92	130	179
July.....	134	119	117	117	139	110	142	187	631	100	130	177
October.....	135	130	125	127	145	117	133	156	773	135	138	190
1864 and 1917:												
January.....	156	142	152	142	160	124	153	152	741	134	161	197
April.....	169	157	161	162	177	137	161	175	695	152	172	227
July.....	194	169	184	169	189	152	189	177	1,410	196	198	212
October.....	200	174	194	193	200	152	200	196	1,101	209	200	157
1865 and 1918:												
January.....	216	178	232	188	200	161	222	192	1,096	243	209	157
April.....	190	182	189	199	196	172	182	197	343	250	145	157
July.....	158	187	156	194	171	181	153	193	430	232	121	170
October.....	175	.....	170	.....	200	.....	170	.....	426	.....	138	.....

It is pointed out that no control of prices was instituted during the Civil War, although prices of staple commodities more than doubled. Nor was any effort made to arrest the phenomenal rise in 1916 and 1917 provoked by European war buying until this country itself entered the struggle. The increased demands upon domestic production resulting from this step were the first problem of great magnitude to be solved. The productive capacity of the country was largely under contract to allied Governments, whose requirements kept mounting by leaps and bounds. The heavy demands on the

railroads for the transportation of war materials caused a coal shortage at consuming points, which forced prices upward despite the large mine output. A shortage of available ships for transporting supplies, due to losses from submarines and other causes, had to be met by diverting vessels from commercial to war purposes, thus vitally affecting the prices of many commodities normally imported and others awaiting exportation. With a view both to stimulating production and protecting the public against further increases Congress finally set up the machinery for a control over food and fuel prices in the summer of 1917. The experience of other countries, particularly England and France, helped greatly to overcome the conservative prejudice against Government control of prices in this country.

The authority to exercise price control during the war was delegated in various degrees to the Food Administration, the Fuel Administration, the War Industries Board, the Price Fixing Committee, the War Trade Board, the War Department, the Navy Department, the Federal Trade Commission, and the Department of Agriculture. The Food Administration, created under the act of August 10, 1917, was gradually given war-time control over virtually the whole food group. The Fuel Administration, also authorized by the food and fuel control act, exercised full control over the prices of anthracite and bituminous coal and coke. The War Industries Board, originally a division within the Council of National Defense, and made a separate board in May, 1918, was given control over the prices of the great basic raw materials until the Price Fixing Committee was appointed by the President, and even thereafter controlled certain important products. The War Trade Board exercised control over imports and exports and at times used its licensing power indirectly to regulate prices, especially of rubber, foreign wool, silk, quebracho, castor beans, and castor oil. The War and Navy Departments, by their power to requisition and commandeer, controlled prices in part for their own purchases. The Federal Trade Commission controlled certain paper prices, while lesser controls were also exercised by the Department of Agriculture. A full account of the functioning of each of these agencies is given in the second section of Book I, as is also a brief history of the lifting of Government control over prices following the signing of the armistice.

Among the statistical devices for measuring the effects of price control, contained in the third section of Book I, are given a tabulation of the commodities controlled and uncontrolled each month, showing the gradual extension of control; index numbers of controlled and uncontrolled prices by groups and subclasses, running, by months, from 1913 to 1918 and showing their relative movements away from prewar levels; chain indexes of controlled and uncontrolled prices by groups and subclasses for the months from April, 1917, to the end of 1918, and showing in each month the rise or fall from the preceding month; the relative monthly prices of 50 important commodities from 1913 to 1918, arranged to show the prewar base price, the market price when control began, and the price fixed by the Government; a comparison of controlled raw-material prices with prices of their uncontrolled manufactures; a comparison of controlled prices of manufactured goods with prices of their uncontrolled raw materials; a comparison of controlled raw-material prices with

prices of their controlled manufactures; a comparison of controlled wholesale prices with corresponding controlled retail prices; and finally a comparison of war prices in the United States, England, France, and Canada.

Increase in Cost of Weekly Family Budget in Canada, 1913 to 1920.

THE Canadian Labor Gazette for August, 1920, gives a table showing the cost per week of a family budget in terms of average prices in 60 cities in Canada. The same information is also shown by Provinces, the items making up the budget, however, not being given.

COST PER WEEK OF A FAMILY BUDGET OF STAPLE FOODS, FUEL AND LIGHTING, AND RENT IN TERMS OF THE AVERAGE PRICES IN 60 CITIES IN CANADA.

Commodities.	Unit.	1913	July, 1914.	July, 1915.	July, 1916.	July, 1917.	July, 1918.	July, 1919.	June, 1920.	July, 1920.
Beef:		<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>
Sirloin, steak.....	2 lbs.	44.4	49.4	49.2	52.6	63.6	79.6	79.8	83.0	84.0
Shoulder, roast.....	do.	29.6	33.6	33.4	35.2	43.5	57.8	55.2	54.2	54.4
Veal, roast, forequarter.....	1 lb.	15.7	17.4	17.3	19.2	22.8	28.3	28.3	27.7	28.1
Mutton, roast, hindquarter.....	do.	19.1	20.9	21.3	23.9	28.9	36.8	36.3	38.4	37.3
Pork:										
Fresh, roast ham.....	do.	19.5	20.2	19.5	22.4	30.0	37.7	42.1	40.4	40.7
Salt, mess.....	2 lbs.	35.2	37.4	34.4	38.8	54.1	70.4	75.2	72.2	74.0
Bacon, breakfast.....	1 lb.	24.7	25.5	26.6	28.7	39.8	51.0	56.3	55.8	57.0
Lard, pure leaf.....	2 lbs.	38.4	36.8	35.8	40.4	62.3	73.8	83.8	76.4	75.8
Eggs:										
Fresh.....	1 doz.	33.7	26.9	25.3	31.0	38.9	49.3	52.7	56.0	59.2
Storage.....	do.	23.1	24.9	24.9	28.0	35.9	43.1	48.1	50.1	52.6
Milk.....	6 qts.	51.6	51.0	52.2	45.0	59.3	70.8	78.6	88.8	88.2
Butter:										
Dairy, solid.....	2 lbs.	58.0	49.8	56.2	60.4	75.5	91.4	106.2	119.4	118.8
Creamery, prints.....	1 lb.	33.9	30.0	32.6	34.5	42.5	51.7	60.4	66.8	66.3
Cheese:										
Old.....	do.	20.5	21.1	24.6	25.6	33.4	33.4	40.3	40.4	40.6
New.....	do.	19.1	19.4	22.6	23.6	30.3	30.6	38.8	38.2	38.4
Bread, plain, white.....	15 lbs.	61.5	63.0	73.5	70.5	110.4	117.0	120.0	144.0	144.0
Flour, family.....	10 lbs.	32.0	33.0	41.0	37.0	69.9	68.0	67.0	84.0	84.0
Rollod oats.....	5 lbs.	22.0	21.5	26.0	24.0	31.4	40.5	37.0	42.5	44.0
Rice, good, medium.....	2 lbs.	11.4	11.6	11.8	13.4	16.8	23.2	24.6	33.6	34.2
Beans, hand picked.....	do.	12.4	11.8	14.8	19.4	31.5	34.2	22.6	24.0	22.2
Apples, evaporated.....	1 lb.	12.0	13.1	11.9	13.4	15.8	22.9	24.6	29.2	29.1
Prunes, medium size.....	do.	11.9	12.4	13.1	13.1	15.5	18.0	22.0	27.5	27.2
Sugar:										
Granulated.....	4 lbs.	23.6	22.0	31.9	38.4	39.5	43.6	47.2	90.4	93.6
Yellow.....	2 lbs.	11.0	10.2	14.6	17.6	18.3	20.4	22.2	42.0	43.4
Tea:										
Black, medium.....	½ lb.	8.9	9.1	9.5	9.9	11.6	14.6	15.4	16.5	16.4
Green, medium.....	do.	9.3	9.3	9.8	10.3	11.3	14.1	15.6	16.9	16.8
Coffee, medium.....	do.	9.4	9.4	9.8	10.0	10.1	11.2	13.4	15.2	15.4
Potatoes.....	2 pks.	36.0	50.3	29.3	58.6	118.2	66.0	62.7	216.9	197.4
Vinegar, white wine.....	½ pt.	.8	.7	.8	.8	.8	.9	1.0	1.0	1.0
All foods.....		\$7.34	\$7.42	\$7.74	\$8.46	\$11.62	\$13.00	\$13.77	\$16.92	\$16.84
Starch, laundry.....	½ lb.	<i>Cents.</i> 3.2	<i>Cents.</i> 3.2	<i>Cents.</i> 3.3	<i>Cents.</i> 3.3	<i>Cents.</i> 4.0	<i>Cents.</i> 4.7	<i>Cents.</i> 4.6	<i>Cents.</i> 4.9	<i>Cents.</i> 5.0
Coal:										
Anthracite.....	½ ton	55.0	53.2	52.1	54.7	63.2	73.8	71.9	101.6	105.0
Bituminous.....	do.	38.7	38.0	35.8	38.0	53.8	58.7	61.8	72.6	76.6
Wood:										
Hard.....	½ cord	42.5	42.5	41.7	41.9	52.0	69.2	74.7	81.7	82.2
Soft.....	do.	30.6	31.8	30.6	30.2	39.7	50.8	57.8	62.1	63.3
Coal oil.....	1 gal.	23.7	23.5	23.4	22.8	25.6	27.8	28.9	36.6	37.2
Fuel and lighting.....		\$1.91	\$1.90	\$1.84	\$1.88	\$2.34	\$2.80	\$2.95	\$3.55	\$3.64
Rent.....	¼ mo.	4.75	4.83	4.10	4.04	4.37	4.81	5.25	6.30	6.38
Total.....		14.02	14.16	13.71	14.41	18.37	20.66	22.02	26.81	26.92

¹ At times when the price of an article heavily weighted for this purpose rises (or falls) abnormally the increase (or decrease) in food prices so indicated is exaggerated and this should be taken into account in using the budget as an indicator of changes in the cost of living.

Retail Price Changes in Great Britain.

THE following table gives for Great Britain the increase over July, 1914, in the cost of food and general family expenditure for September of each year, 1914 to 1920, and for each month in 1920. The food items included in this report are: Ribs and thin flanks of beef, both British and chilled or frozen; legs and breast of mutton, British and chilled or frozen; bacon; fish; flour; bread; tea; sugar; milk; butter, fresh and salt; cheese; margarine; eggs; and potatoes.

The table gives percentage of increase and is not one of relative prices, as is the table given for the United States. When making comparisons this should be borne in mind, and to obtain the relative prices it is necessary to add 100 to the percentage as given, e. g., for January, 1920, the increase in cost of food is 136 per cent, the relative price being 236.

The figures represent two comparisons: First, the increase in prices, based on the same kinds and quantities as used in July, 1914; second, the increase, based on the change in the standard of living, resulting from a substitution of one kind of food for another to meet war-time conditions.

The table shows that retail prices of food were 167 per cent higher in September, 1920, than in July, 1914, and that the increased cost of all items in the family budget was 161 per cent.

PER CENT INCREASE IN COST OF FOOD AND ALL ITEMS IN FAMILY BUDGET IN GREAT BRITAIN, BASED ON JULY, 1914.

[Compiled from the British Labor Gazette.]

Year and month.	Food.		All items in family budget.	
	Retail prices (assuming same kinds and quantities).	Expenditures (allowing for estimated changes in consumption).	Cost (assuming same kinds and quantities).	Expenditure (allowing for estimated changes in consumption).
September—				
1914.....	10			
1915.....	35			
1916.....	165		245	
1917.....	106	67	85	
1918.....	116	84	110	90
1919.....	116	103	115	105
1920.				
January.....	136	115	125	115
February.....	135	112	130	115
March.....	133	107	130	115
April.....	135	(6)	130-135	(6)
May.....	146	(6)	141	(6)
June.....	155	(6)	150	(6)
July.....	159	(6)	152	(6)
August.....	162	(6)	155	(6)
September.....	167	(6)	161	(6)

¹ Including tax on sugar and tea.² Not including taxes.³ Including taxes.⁴ Based on change in standard of food consumption adopted by the Ministry of Food.⁵ The increase, excluding additional taxation, is 7 per cent less.⁶ No longer calculable, mainly owing to decontrol.

Prices of Food in London in July, 1920.

THE following quotations taken from the Evening News (London) of July 14, 1920, indicate the prices of food current in London on that date.

RETAIL PRICES OF FOOD IN LONDON IN JULY, 1920.

[1 shilling at par=24.3 cents; 1 pence=2.03 cents.]

Article.	Unit.	Price.
Beef:		
Top side.....	Pound....	2s. 4d. to 2s. 6d.
Silverside (with bone).....	do.....	1s. 10d. to 2s. 3d.
Aitchbone.....	do.....	1s. 2d. to 1s. 6d.
Sirloin.....	do.....	2s. to 2s. 4d.
Wing rib.....	do.....	2s. to 2s. 4d.
Top ribs.....	do.....	1s. 6d. to 1s. 8d.
Brisket.....	do.....	1s. 4d.
Rump steak.....	do.....	2s. 6d. to 3s.
Fillet steak.....	do.....	2s. 6d. to 3s.
Suet.....	do.....	1s. 4d. to 1s. 8d.
Mutton:¹		
Leg, whole.....	do.....	1s. 11d. to 2s. 3d.
Loin, whole.....	do.....	1s. 9d. to 2s. 6d.
Saddles.....	do.....	1s. 9d. to 2s. 6d.
Shoulders.....	do.....	1s. 8d. to 2s. 2d.
Loin chops (untrimmed).....	do.....	2s. 2d. to 3s.
Fish:		
Prime Scotch salmon.....	do.....	3s. to 4s. 3d.
Cod, prime.....	do.....	8d. to 1s.
Fresh haddock.....	do.....	5d. to 10d.
Mackerel.....	do.....	8d.
Brill.....	do.....	8d.
Fresh herrings.....	do.....	8d.
Scotch kippers.....	do.....	8d. to 1s.
Dover soles.....	do.....	1s. 8d. to 2s. 6d.
Vegetables:		
Broad beans.....	do.....	3d.
Cabbages.....	Each.....	3d.
Carrots.....	Bunch.....	5d. to 8d.
Cucumbers.....	Each.....	7d. and 8d.
Peas.....	Pound.....	4d. to 6d.
Potatoes.....	do.....	2½d. and 3d.
Tomatoes.....	do.....	8d. to 1s. 3d.
Turnips.....	Bunch.....	1s. to 1s. 3d.
Marrows.....	Each.....	7d. to 1s.
Fruit:		
Cherries.....	Pound....	1s. 6d.
Red currants.....	do.....	10d. to 1s. 3d.
Plums.....	do.....	8d. to 1s.

¹ Lamb is 2d. or 3d. per pound dearer than mutton in most of the stores.

Retail Price Regulations in Lima, Peru.¹

A LIST of prices to prevail in Lima, Callao, and suburbs has been prepared by the governmental "Dirección de Subsistencias." Stores selling any of the articles listed below must display signs quoting these prices, and anyone reporting a violation of this regulation or a charge in excess of these prices will receive as reward 75 per cent of the fine imposed, which may not be less than 20 nor more than 50 Peruvian pounds (\$97.33 and \$243.34, par, respectively).

¹ Data are taken from Commerce Reports, Aug. 26, 1920, p. 965, Washington.

RETAIL PRICES FIXED BY PERUVIAN GOVERNMENT.

[1 sol at par=48.7 cents.]

Article.	Unit.	Price.	Article.	Unit.	Price.
Native edible oil.....	Liter (1.056 qts.).	<i>Soles.</i> 1.50	Flour:		<i>Soles.</i>
Bran:			Wholesale.....	Quintal (220.5 lbs.)..	17.00
Wholesale.....	Quintal (220.5 lbs.)..	3.00	Retail.....	Kilo (2.205 lbs.).....	.37
Retail.....	Kilo (2.205 lbs.).....	.10	Evaporated milk.....	Liter (1.057 qts.).....	.40
Sugar:			Corn.....	Kilo (2.205 lbs.).....	.20
Brand "T".....	do.....	.24	Lard.....	do.....	1.85
White, ordinary.....	do.....	.30	Lima beans.....	do.....	.35
White, extra.....	do.....	.36	Potatoes.....	do.....	.20
Coffee, ground.....	do.....	2.20	Sweet potatoes.....	do.....	.10
Wood charcoal.....	do.....	.12	Salt:		
Native beans.....	do.....	.30	Grain.....	do.....	.10
Vermicelli.....	do.....	.62	Ground.....	do.....	.12
Matches:			Bottled.....	Bottle.....	.70
Per 10 packets.....	do.....	.35	Yuccas.....	Kilo (2.205 lbs.).....	.10
Per packet.....	do.....	.04			

WAGES AND HOURS OF LABOR.

Changes in Union Scale of Wages and Hours of Labor, 1913 to 1920.^a

THE Bureau of Labor Statistics during the past summer has collected information concerning the union scale of wages and hours of labor in the principal time-work trades in the leading industrial centers of the United States, and a full compilation of the material is now in progress.

An abridged compilation has been made for certain trades and cities, and the rates and hours of labor as of May 15, 1920, are brought into comparison in the following table with like figures for preceding years back to 1913.

The union wage scale figures here published represent the minimum wage of union members employed in the trades stated, but these figures do not always represent the maximum wage that is paid, as in some instances part or even all of the organized workers in the trades receive more than the scale.

In cases where scales have been revised since May 15, 1920, and made retroactive to that date or earlier the changes have been included in the tabulation, in so far as information has been received.

Double quotations of rates and hours are shown for some occupations in some cities. Such quotations indicate that there were two or more agreements with different employers and possibly made also by different unions. The figures are the highest and lowest contractual terms in the city.

UNION SCALE OF WAGES AND HOURS OF LABOR, 1913 TO 1920, BY OCCUPATIONS.

Blacksmiths, manufacturing shops.

City.	Rate per hour (cents).								Hours per week.							
	1913	1914	1915	1916	1917	1918	1919	1920	1913	1914	1915	1916	1917	1918	1919	1920
Atlanta.....	37.5	37.5	37.5	37.5	39.0	55.0	68.0	75.0	54	54	54	60	60	54	54	48
Buffalo.....	40.0	50.0	50.0	55.0	55.0	65.0	72.5	87.5	54	54	54	50	50	44	44	44
Charleston, S. C.	36.0	36.0	36.0	41.7	41.7	72.5	80.0	90.0	54	54	54	54	54	48	48	48
Chicago.....	43.2	43.2	43.2	46.2	56.0	75.0	90.0	110.0	49½	49½	49½	49½	48	48	44	44
Jacksonville.....	.....	.....	.....	.....	.....	.....	80.0	80.0	.....	.....	.....	.....	.....	.....	48	48
Los Angeles.....	.....	.....	.....	.....	.....	.....	75.0	75.0	.....	.....	.....	.....	.....	.....	48	48
Manchester.....	.....	.....	.....	.....	.....	.....	70.0	70.0	.....	.....	.....	.....	.....	.....	48	48
New Orleans.....	36.1	36.1	36.1	36.1	36.1	68.8	80.0	80.0	54	54	54	54	54	48	48	48
New York.....	44.4	44.4	44.4	53.1	53.1	72.5	80.0	80.0	2 53	2 53	2 53	48	48	48	48	48
Philadelphia.....	.....	.....	.....	.....	44.4 { 50.0}	72.5	80.0	110.0	.....	.....	.....	.....	54 { 48}	44	44	44
Pittsburgh.....	37.5	37.5	37.5	37.5	46.9	57.5	70.0	80.0	48	48	48	48	48	48	48	48
Portland, Oreg.	45.0	45.0	45.0	45.0	50.0	72.2	80.0	88.0	54	54	54	54	48	48	44	44
Richmond, Va.	32.5	32.5	32.5	35.0	40.0 { 52.0}	52.0	68.0	75.0	55	55	55	55	48 { 50}	48	48	48
St. Louis.....	33.3	33.3	33.3	33.3	40.0	50.0	80.0	90.0	54	54	54	54	54	54	48	48
Salt Lake City	44.7	44.7	44.7	45.7	56.3	62.5	75.0	87.5	48	48	48	48	48	48	48	48
San Francisco.....	50.0	50.0	50.0	.....	50.0	72.5	80.0	90.0	48	48	48	.....	48	48	44	44
Seattle.....	.....	.....	.....	.....	.....	75.0	80.0	88.0	.....	.....	.....	.....	.....	48	44	44

¹ 44 hours per week, June to August, inclusive.

² Worked 53 hours, paid for 54.

³ For jobbing shops.

^a A brief summary of the changes from 1907 to 1919 is given in the MONTHLY LABOR REVIEW for February, 1920, and an abridged compilation, 1913 to 1919, similar to this table is printed in the MONTHLY LABOR REVIEW for November, 1919.

UNION SCALE OF WAGES AND HOURS OF LABOR, 1913 TO 1920, BY OCCUPATIONS—
Continued.*Boiler makers, manufacturing and jobbing shops.*

City.	Rate per hour (cents).								Hours per week.							
	1913	1914	1915	1916	1917	1918	1919	1920	1913	1914	1915	1916	1917	1918	1919	1920
Atlanta.....	40.0	35.0	35.0	35.0	44.0	55.0	68.0	72.0	54	54	54	54	50	50	50	50
Baltimore.....	30.6	30.6	30.6	30.6	48.0	50.0	80.0	80.0	54	54	54	54	49½	44	44	44
Birmingham....	40.0	40.0	40.0	42.5	47.5	67.5	80.0	90.0	60	60	60	60	60	48	48	48
Boston.....							70.0	80.0							48	44
Buffalo.....	36.0	36.0	36.0	40.0	46.0	70.0	80.0	80.0	54	54	54	54	54	54	48	48
Charleston, S.C.	36.1	36.1	36.1		42.8	72.5	80.0	90.0	54	54	54		54	48	48	48
Chicago.....	40.0	40.0	40.0	40.0	42.0	52.0	60.0	74.0	54	54	54	54	54	54	54	54
Cincinnati.....	40.0	35.0	35.0	35.0	38.0	40.0	55.0	100.0	54	49½	49½	49½	49½	49½	49½	48
Cleveland.....	35.0	35.0	35.0	40.0	50.0	60.0	70.0	85.0	54	54	54	54	54	54	54	54
Dallas.....		43.5	43.5	43.5	50.0	68.0	68.0	87.5		54	54	54	54	54	54	54
Denver.....	41.0	41.0	41.0	41.0	42.5	52.0	68.0	72.0	54	54	54	54	51	48	48	48
Detroit.....	40.0	40.0	40.0	40.0	40.0	62.5	85.0	100.0	55	55	55	55	55	54	54	54
Indianapolis....	35.0	35.0	35.0	37.5	42.0	50.0	55.0	75.0	50	50	50	50	50	48	48	48
Jacksonville....	40.0	40.0	40.0	40.0	40.0	50.0	70.0	75.0	54	54	54	54	54	54	48	48
Kansas City, Mo.	38.0	40.0	40.0	40.0	45.0	45.0	68.8	100.0	54	54	54	54	54	54	44	44
Little Rock.....	41.0	42.5	42.5	42.5	45.0	58.0	68.0	72.0	60	60	60	60	60	60	45	48
Los Angeles....								71.9								48
Louisville.....	32.0	32.0	32.0	32.0	35.0	45.0	65.0	76.0	54	54	54	54	50	50	50	48
Memphis.....	41.0	41.0	41.0	41.0	45.0	55.0	70.0	75.0	54	54	54	54	54	54	54½	51½
Milwaukee.....								105.0								44
New Orleans....	38.9	38.9	38.9	38.9	43.8	62.5	80.0	80.0	54	54	54	54	48	48	48	48
New York.....	41.7	41.7	41.7	46.9	49.4	70.0	80.0	80.0	54	54	54	48	48	48	48	48
Philadelphia....	33.3	33.3	33.3	33.3	50.0	65.0	65.0	80.0	49	49	49	49	48	48	48	36
Pittsburgh.....	40.0	40.0	40.0	44.0	46.0	60.0	66.0	75.0	54	54	54	50	50	50	50	50
Portland, Oreg.	44.4	44.4	44.4	44.4	53.0	72.5	80.0	88.0	54	54	54	54	48	48	44	44
St. Louis.....	40.0	40.0	40.0	40.0	40.0	50.0	70.0	90.0	7 49½	7 49½	7 49½	7 49½	7 49½	48	48	44
Salt Lake City..	43.0	43.0	43.0	44.0	56.3	62.5	75.0	87.5	54	54	54	54	48	48	44	48
San Francisco..	50.0	50.0	50.0	53.1	53.1	72.5	80.0	90.0	48	48	48	48	48	48	44	44
Seattle.....	50.0	50.0	50.0	50.0	56.3	75.0	80.0	88.0	48	48	48	48	48	48	44	44
Washington....					53.7	68.8	75.6	80.6					48	48	44	44

Bricklayers.

Atlanta.....	45.0	45.0	45.0	50.0	60.0	60.0	70.0	112.5	53	50	50	50	50	50	44	44
Baltimore.....	62.5	62.5	70.0	70.0	75.0	75.0	100.0	125.0	8 45	8 45	8 45	8 45	14 44	44	45	45
Birmingham....	70.0	70.0	70.0	70.0	70.0	87.5	87.5	100.0	9 44	9 44	44	44	44	44	44	44
Boston.....	65.0	65.0	65.0	65.0	70.0	80.0	80.0	100.0	44	44	44	44	44	44	44	44
Buffalo.....	65.0	65.0	65.0	65.0	70.0	75.0	85.0	100.0	48	48	48	48	10 44	10 44	10 44	10 44
Charleston, S.C.	40.0	40.0	40.0	40.0	40.0	50.6	75.0	100.0	11 53	11 53	11 53	11 53	11 53	48	48	48
Chicago.....	75.0	75.0	75.0	75.0	75.0	75.0	87.5	125.0	44	44	44	44	44	44	44	44
Cincinnati.....	65.0	65.0	70.0	70.0	75.0	90.0	90.0	125.0	45	45	45	45	45	45	45	45
Cleveland.....	65.0	70.0	70.0	70.0	75.0	90.0	90.0	125.0	48	44	44	44	44	44	44	44
Dallas.....	87.5	87.5	87.5	87.5	87.5	100.0	100.0	112.5	44	44	44	44	44	44	44	44
Denver.....	75.0	75.0	75.0	87.5	87.5	100.0	100.0	125.5	44	44	44	44	44	44	44	44
Detroit.....	65.0	65.0	65.0	65.0	75.0	80.0	90.0	125.0	13 48	13 48	14 44	15 44	15 44	15 44	15 44	44
Fall River.....	55.0	60.0	60.0	60.0	65.0	75.0	85.0	115.0	48	48	48	44	44	44	44	44
Indianapolis....	75.0	75.0	75.0	75.0	75.0	85.0	85.0	125.0	44	44	44	44	44	44	44	44
Jacksonville....	62.5	62.5	62.5	62.5	62.5	62.5	75.0	87.5	48	48	48	48	48	48	44	44

- ⁴ 44 hours per week, June to August, inclusive.
⁵ 54 hours per week, October to April, inclusive.
⁶ Work 36 hours per week, paid for 48.
⁷ 54 hours per week, September to April, inclusive.
⁸ 44 hours per week, November to March, inclusive.
⁹ 48 hours per week, October to December, inclusive.
¹⁰ 48 hours per week, November 16 to March 15, inclusive.
¹¹ Work 53 hours, paid for 54.
¹² 48 hours per week, September to April, inclusive.
¹³ 44 hours per week, October to April, inclusive.
¹⁴ 48 hours per week, November to April, inclusive.
¹⁵ 48 hours per week, December to February, inclusive.

WAGES AND HOURS OF LABOR.

77

UNION SCALE OF WAGES AND HOURS OF LABOR, 1913 TO 1920, BY OCCUPATIONS—
Continued.

Bricklayers—Concluded.

City.	Rate per hour (cents).								Hours per week.							
	1913	1914	1915	1916	1917	1918	1919	1920	1913	1914	1915	1916	1917	1918	1919	1920
Kansas City, Mo.	75.0	75.0	75.0	75.0	75.0	87.5	100.0	112.5	44	44	44	44	44	44	44	44
Little Rock	75.0	75.0	75.0	75.0	87.5	87.5	100.0	125.0	17 44	17 44	17 44	17 44	17 44	17 44	17 44	17 44
Los Angeles	75.0	75.0	75.0	62.5	62.5	75.0	87.5	125.0	44	44	44	44	44	44	44	44
Louisville	65.0	65.0	65.0	65.0	70.0	75.0	85.0	115.0	48	48	44	44	44	44	44	44
Manchester	55.0	60.0	60.0	60.0	65.0	75.0	90.0	112.5	48	44	44	44	44	44	44	44
Memphis	75.0	75.0	75.0	75.0	82.5	87.5	87.5	125.0	44	44	44	44	44	44	44	44
Milwaukee	67.5	67.5	67.5	67.5	72.5	72.5	90.0	125.0	44	44	44	44	44	44	44	44
Minneapolis	65.0	70.0	70.0	70.0	75.0	75.0	87.5	125.0	48	48	48	17 44	17 44	17 44	17 44	17 44
Newark, N. J.	65.0	65.0	65.0	70.0	75.0	75.0	87.5	125.0	44	44	44	44	44	44	44	44
New Haven	60.0	60.0	60.0	60.0	65.0	70.0	82.5	100.0	44	44	44	44	44	44	44	44
New Orleans	62.5	62.5	62.5	62.5	62.5	62.5	75.0	100.0	44	44	44	44	44	44	44	44
New York	70.0	75.0	75.0	75.0	75.0	81.3	87.5	125.0	44	44	44	44	44	44	44	44
Omaha	70.0	70.0	70.0	75.0	75.0	75.0	87.5	125.0	44	44	44	44	44	44	44	44
Philadelphia	62.5	65.0	65.0	65.0	70.0	80.0	80.0	130.0	44	44	44	44	44	44	44	44
Pittsburgh	70.0	70.0	70.0	70.0	75.0	75.0	90.0	112.5	44	44	44	44	44	44	44	44
Portland, Oreg.	75.0	75.0	75.0	75.0	75.0	87.5	100.0	125.0	44	44	44	44	44	44	44	44
Providence	65.0	65.0	65.0	65.0	70.0	70.0	80.0	115.0	44	44	44	44	44	44	44	44
St. Louis	70.0	75.0	75.0	75.0	75.0	85.0	100.0	125.0	44	44	44	44	44	44	44	44
St. Paul	65.0	70.0	70.0	70.0	75.0	75.0	87.5	125.0	48	48	48	44	44	17 44	17 44	17 44
Salt Lake City	75.0	80.0	80.0	80.0	87.5	87.5	100.0	125.0	44	44	44	44	44	44	44	44
San Francisco	87.5	87.5	87.5	87.5	87.5	100.0	112.5	125.0	44	44	44	44	44	44	44	44
Scranton	60.0	60.0	60.0	65.0	70.0	75.0	75.0	112.5	18 44	18 44	17 44	17 44	17 44	17 44	17 44	17 44
Seattle	75.0	75.0	75.0	75.0	81.3	100.0	112.5	125.0	44	44	44	44	44	44	44	40
Washington	62.5	66.7	66.7	70.0	70.0	75.0	87.5	100.0	19 45	19 45	19 45	19 45	19 45	19 45	19 45	44

Building laborers.

Baltimore					48.3	56.3	75.0	75.0						44	44	44	44
Boston	35.0	35.0	35.0	35.0	37.5	40.0	40.0	67.5	48	48	48	48	48	48	48	44	44
Chicago	40.0	40.0	40.0	42.5	45.0	50.0	57.5	100.0	44	44	44	44	44	44	44	44	44
Cincinnati		25.0	25.0	25.0	30.0	35.0	40.0	45.0		50	50	50	50	50	50	50	50
Cleveland			31.3	31.3	40.0	55.0	57.5	87.5			48	48	44	44	44	44	44
Dallas								50.0									48
Denver								50.0									44
Detroit			30.0	30.0			65.0	75.0			54	54				44	44
Kansas City, Mo.	27.5	30.0	35.0	35.0	37.5	37.5	37.5	75.0	48	48	48	48	48	48	48	48	48
Little Rock								50.0									49½
Los Angeles	34.4	34.4	34.4	34.4	34.4	43.8	50.0	62.5	44	44	44	44	44	44	44	44	44
Louisville	27.9	27.9	22.2	22.2	22.2	30.0	35.0	50.0	48	48	54	54	54	54	50	50	44
Milwaukee								65.0									44
New York	22.5	22.5	25.0	25.0	30.0	40.5	40.5	75.0	48	48	44	44	44	44	44	48	48
Omaha				30.0	30.0	45.0	50.0	60.0				44	44	54	54	48	48
Pittsburgh	25.0	25.0	25.0	30.0	30.0	45.0	45.0	70.0	54	54	54	48	48	48	48	44	44
Portland, Oreg.	37.5	37.5	37.5	37.5	37.5	50.0	50.0	62.5	48	48	48	48	48	48	48	44	44
Providence	25.0	25.0	25.0	25.0	30.0	35.0	47.5	70.0	50	50	50	50	50	50	50	50	44
St. Louis	25.0	25.0	25.0	25.0	30.0	33.3	40.0	54.0	44	44	44	44	44	44	44	44	44
St. Paul							40.0	45.0	67.5								44
								61.3									
Salt Lake City							50.0	68.8									48
San Francisco	27.8	31.3	31.3	31.3	37.5	43.8	62.5	75.0	54	48	48	48	48	48	48	48	48
Scranton	25.0	25.0	22.5	30.0	30.0	30.0	50.0	58.5	54	54	54	48	48	48	48	48	48
Seattle	37.5	37.5	37.5	37.5	43.8	56.3	68.8	75.0	44	44	44	44	44	44	44	40	44
Washington	25.0	25.0	25.0	25.0	31.3	40.0	50.0	50.0	48	48	48	48	44	44	44	44	44

¹⁷ 48 hours per week, October to April, inclusive.

¹⁸ 48 hours per week, September to April, inclusive.

¹⁹ 44½ hours per week, October to April, inclusive.

UNION SCALE OF WAGES AND HOURS OF LABOR, 1913 TO 1920, BY OCCUPATIONS—
Continued.*Carpenters.*

City.	Rate per hour (cents).								Hours per week.							
	1913	1914	1915	1916	1917	1918	1919	1920	1913	1914	1915	1916	1917	1918	1919	1920
Atlanta.....	40.0	40.0	40.0	40.0	50.0	50.0	60.0	80.0	50	50	50	50	50	50	44	44
Baltimore.....	43.8	43.8	43.8	43.8	50.0	62.5	80.0	90.0	48	²⁰ 44	²⁰ 44	²⁰ 44	44	44	44	44
Birmingham.....	52.5	45.0	45.0	45.0	45.0	55.0	65.0	75.0	48	48	48	48	48	48	44	44
Boston.....	50.0	55.0	55.0	57.0	60.0	65.0	75.0	100.0	44	44	44	44	44	40	40	40
Buffalo.....	50.0	50.0	50.0	50.0	62.5	70.0	70.0	100.0	48	48	²¹ 48	²¹ 48	44	44	44	44
Charleston, S.C.....	33.3	33.3	33.3	33.3	33.3	$\left. \begin{matrix} 37.5 \\ 50.0 \end{matrix} \right\}$	70.0	80.0	²² 53	²² 53	²² 53	²² 53	²² 53	48	48	48
Chicago.....	65.0	65.0	65.0	70.0	70.0	70.0	80.0	125.0	44	44	44	44	44	44	44	44
Cincinnati.....	50.0	50.0	55.0	60.0	62.5	65.0	70.0	100.0	44 $\frac{1}{2}$	44 $\frac{1}{2}$	44 $\frac{1}{2}$	44 $\frac{1}{2}$	44 $\frac{1}{2}$	44 $\frac{1}{2}$	44 $\frac{1}{2}$	44 $\frac{1}{2}$
Cleveland.....	50.0	55.0	55.0	60.0	70.0	80.0	85.0	125.0	48	44	44	44	44	44	44	44
Dallas.....	55.0	55.0	60.0	60.0	62.5	62.5	87.5	100.0	44	44	44	44	44	44	44	44
Denver.....	60.0	60.0	60.0	60.0	70.0	75.0	87.5	112.5	44	44	44	44	44	44	44	44
Detroit.....	50.0	50.0	50.0	50.0	60.0	60.0	80.0	100.0	48	48	44	44	44	44	44	44
Fall River.....	42.0	44.0	44.0	45.0	50.0	62.5	75.0	100.0	48	48	44	44	44	44	44	44
Indianapolis.....	50.0	50.0	55.0	55.0	57.5	60.0	75.0	100.0	44 $\frac{1}{2}$	44 $\frac{1}{2}$	44	44	44 $\frac{1}{2}$	44 $\frac{1}{2}$	44 $\frac{1}{2}$	44 $\frac{1}{2}$
Jacksonville.....	31.3	37.5	37.5	37.5	37.5	$\left. \begin{matrix} 40.0 \\ 45.0 \end{matrix} \right\}$	65.0	80.0	48	48	48	48	48	48	48	44
Kansas City, Mo.....	55.0	60.0	65.0	65.0	65.0	65.0	85.0	100.0	44	44	44	44	44	44	44	44
Little Rock.....	50.0	50.0	50.0	50.0	60.0	60.0	80.0	92.5	48	48	48	44	44	44	44	44
Los Angeles.....	50.0	50.0	50.0	50.0	60.0	62.5	75.0	87.5	48	48	48	44	48	48	44	44
Louisville.....	45.0	45.0	45.0	45.0	50.0	60.0	60.0	80.0	44	44	44	44	44	44	44	44
Manchester.....	40.0	40.0	40.0	40.0	50.0	60.0	60.0	100.0	48	48	48	48	44	44	44	44
Memphis.....	50.0	50.0	50.0	50.0	55.0	65.0	75.0	100.0	44	44	44	44	44	44	44	44
Milwaukee.....	50.0	50.0	50.0	50.0	56.3	56.3	70.0	70.0	44	44	44	44	44	44	44	44
Minneapolis.....	50.0	50.0	50.0	50.0	55.0	60.0	75.0	100.0	48	48	48	48	48	44	44	44
Newark, N. J.....	50.0	50.0	50.0	56.3	65.0	70.0	80.0	100.0	44	44	44	44	44	44	44	44
New Haven.....	47.5	50.0	50.0	50.0	55.0	55.0	65.0	100.0	44	44	44	44	44	44	44	44
New Orleans.....	40.0	40.0	40.0	40.0	40.0	50.0	60.0	75.0	48	48	48	48	48	48	48	48
New York.....	62.5	62.5	62.5	62.5	68.8	68.8	75.0	112.5	44	44	44	44	44	44	44	44
Omaha.....	50.0	50.0	50.0	50.0	57.5	60.0	75.0	112.5	44	44	44	44	44	44	44	44
Philadelphia.....	50.0	55.0	55.0	55.0	60.0	70.0	80.0	112.5	44	44	44	44	44	44	44	44
Pittsburgh.....	55.0	56.3	62.5	62.5	71.0	71.0	80.0	90.0	44	44	44	44	44	44	44	44
Portland, Oreg.....	50.0	50.0	50.0	50.0	56.3	75.0	86.0	100.0	44	44	44	44	44	44	44	44
Providence.....	50.0	50.0	50.0	50.0	50.0	60.0	70.0	100.0	44	44	44	44	44	44	44	44
Richmond, Va.....	37.5	37.5	37.5	37.5	43.8	62.5	62.5	72.5	48	48	48	48	48	48	48	47
St. Louis.....	62.5	62.5	62.5	62.5	65.0	70.0	82.5	100.0	44	44	44	44	44	44	44	44
St. Paul.....	50.0	50.0	50.0	50.0	55.0	60.0	75.0	100.0	48	48	48	48	48	44	44	44
Salt Lake City.....	62.5	62.5	62.5	62.5	75.0	75.0	100.0	112.5	44	44	44	44	44	44	44	44
San Francisco.....	62.5	62.5	62.5	62.5	68.8	75.0	87.5	106.3	44	44	44	44	44	44	44	44
Scranton.....	42.5	47.5	47.5	50.0	50.0	60.0	70.0	87.5	48	48	44	44	44	44	44	44
Seattle.....	56.3	56.3	56.3	56.3	65.0	82.5	93.8	100.0	44	44	44	44	44	44	40	44
Washington.....	50.0	50.0	55.0	55.0	62.5	62.5	87.5	95.0	44 $\frac{1}{2}$	44 $\frac{1}{2}$	44 $\frac{1}{2}$	44 $\frac{1}{2}$	44 $\frac{1}{2}$	44 $\frac{1}{2}$	44	44

Cement finishers.

Baltimore.....	.....	.....	.....	50.0	50.0	62.5	75.0	100.0	.....	.....	.....	48	48	44	44	44
Birmingham.....	50.0	50.0	50.0	62.5	62.5	62.5	75.0	75.0	48	48	48	48	48	48	48	48
Boston.....	62.5	62.5	62.5	62.5	62.5	70.0	75.0	100.0	48	44	44	44	44	44	44	44
Buffalo.....	.....	.....	50.0	50.0	50.0	65.0	65.0	100.0	.....	.....	48	48	48	48	48	44
Chicago.....	65.0	65.0	65.0	65.0	67.5	75.0	80.0	125.0	44	44	44	44	44	44	44	44
Cincinnati.....	50.0	50.0	50.0	50.0	55.0	57.5	60.0	90.0	50	50	50	50	50	50	50	44 $\frac{1}{2}$
Cleveland.....	60.0	60.0	60.0	60.0	65.0	77.5	80.0	90.0	48	²³ 48	²³ 48	44	44	44	44	44
Dallas.....	50.0	55.0	55.0	62.5	62.5	62.5	87.5	100.0	48	48	48	48	48	48	48	44
Denver.....	68.8	68.8	.....	.....	75.0	75.0	87.5	100.0	44	44	.....	.....	44	44	44	44
Detroit.....	50.0	50.0	50.0	50.0	55.0	60.0	80.0	125.0	54	54	54	54	48	44	44	44

²⁰ 48 hours per week, November to March, inclusive.²¹ 44 hours per week, June to August, inclusive.²² Work 53 hours, paid for 54.²³ 44 hours per week, June to September, inclusive.

WAGES AND HOURS OF LABOR.

UNION SCALE OF WAGES AND HOURS OF LABOR, 1913 TO 1920, BY OCCUPATIONS—Continued.

Cement finishers—Concluded.

City.	Rate per hour (cents).								Hours per week.							
	1913	1914	1915	1916	1917	1918	1919	1920	1913	1914	1915	1916	1917	1918	1919	1920
Fall River.....				60.0	65.0	75.0	85.0	115.0				44	44	44	44	44
Indianapolis.....	50.0	55.0	57.5	57.5	60.0	62.5	70.0	90.0	50	50	50	50	50	50	50	50
Kansas City, Mo.....	62.5	65.0	65.0	65.0	65.0	75.0	87.5	107.5	44	44	44	44	44	44	44	44
Little Rock.....	55.6	55.6	55.6	55.6	75.0	75.0	87.5	100.0	54	54	54	54	54	54	54	54
Los Angeles.....								100.0								44
Louisville.....	45.0	45.0	45.0	45.0	60.0	70.0	80.0	112.5	60	60	60	60	44	44	44	44
Manchester.....				60.0	60.0	75.0	90.0	112.5				44	44	44	44	44
Memphis.....								87.5								44
Milwaukee.....	45.0	45.0	45.0	45.0	50.0	60.0	70.0	85.0	48	48	48	48	48	44	44	44
Minneapolis.....		50.0	50.0	50.0	55.0	55.0	75.0	100.0		48	48	48	48	48	48	44
Newark, N. J.....	62.5	62.5	65.0	70.0	75.0	75.0	87.5	125.0	44	44	44	44	44	44	44	44
New Haven.....				60.0	65.0	70.0	82.5	100.0				44	44	44	44	44
New York.....	62.5	62.5	62.5	62.5	70.0	70.0	75.0	112.5	44	44	44	44	44	44	44	44
Omaha.....		55.0	62.5	62.5	62.5	62.5	75.0	112.5		44	44	44	44	44	44	44
Philadelphia.....	45.0	47.5	50.0	50.0	55.0	65.0	72.5	100.0	49½	48	44	44	44	44	44	44
Pittsburgh.....		50.0	50.0	50.0	56.3	75.0	75.0	82.5		48	48	44	44	44	44	44
Portland, Oreg.....	62.5	62.5	62.5	62.5	62.5	87.5	87.5	100.0	48	48	48	48	44	44	44	44
Providence.....		50.0	50.0	62.5	62.5	62.5	80.0	100.0		44	44	44	44	44	44	44
St. Louis.....	60.0	60.0	60.0	65.0	65.0	75.0	82.5	125.0	44	44	44	44	44	44	44	44
St. Paul.....	50.0	50.0	55.0	60.0	60.0	60.0	75.0	100.0	48	48	48	48	48	48	44	44
Salt Lake City.....	62.5	62.5	62.5	62.5	75.0	75.0	87.5	112.5	48	48	48	48	48	48	48	48
San Francisco.....	75.0	75.0	75.0	75.0	75.0	87.5	100.0	112.5	44	44	44	44	44	44	44	44
Seattle.....	62.5	62.5	62.5	62.5	68.8	81.3	100.0	112.5	48	48	48	48	48	48	48	40
Washington.....				62.5	70.0	70.0	87.5	90.0				44	44	44	44	44

Compositors: Book and job.

Atlanta.....	34.4	37.5	37.5	37.5	37.5	37.5	43.8	57.5	48	48	48	48	48	48	48	48
Baltimore.....	37.5	37.5	37.5	37.5	43.8	43.8	54.2	81.3	48	48	48	48	48	48	48	48
Birmingham.....	40.6	40.6	40.6	40.6	44.8	44.8	44.8	76.0	48	48	48	48	48	48	48	48
Boston.....	41.7	43.8	43.8	43.8	45.8	50.0	55.2	72.9	48	48	48	48	48	48	48	48
Buffalo, N. Y.....	39.6	39.6	41.7	41.7	43.8	45.8	59.4	71.9	48	48	48	48	48	48	48	48
Charleston, S. C.....	33.3	33.3	33.3	33.3	37.5	37.5	37.5	37.5	48	48	48	48	48	48	48	48
Chicago.....	46.9	50.0	50.0	50.0	50.0	57.3	75.0	95.8	48	48	48	48	48	48	48	48
Cincinnati.....	40.6	43.8	43.8	43.8	46.9	46.9	51.0	75.0	48	48	48	48	48	48	48	48
Cleveland.....	39.6	41.7	41.7	41.7	43.8	50.0	62.5	87.5	48	48	48	48	48	48	48	48
Dallas.....	52.1	52.1	52.1	52.1	52.1	57.3	70.8	88.5	48	48	48	48	48	48	48	48
Denver.....	54.2	54.2	54.2	54.2	54.2	59.4	65.6	81.3	48	48	48	48	48	48	48	48
Detroit.....	38.5	39.6	43.8	45.8	50.0	54.7	72.9	92.7	48	48	48	48	48	48	48	48
Fall River.....	33.3	33.3	33.3	35.4	37.5	39.6	41.7	62.5	48	48	48	48	48	48	48	48
Indianapolis.....	43.8	43.8	45.8	45.8	45.8	52.1	54.2	75.0	48	48	48	48	48	48	48	48
Jacksonville.....	37.5	43.8	43.8	43.8	43.8	43.8	52.1	75.0	48	48	48	48	48	48	48	48
Kansas City, Mo.....	41.7	41.7	43.8	43.8	45.8	50.0	54.2	72.9	48	48	48	48	48	48	48	48
Little Rock.....	37.5	37.5	41.7	41.7	43.8	43.8	43.8	72.9	48	48	48	48	48	48	48	48
Los Angeles.....	46.9	50.0	50.0	50.0	50.0	52.1	58.3	75.0	48	48	48	48	48	48	48	48
Louisville.....	37.5	39.6	39.6	39.6	39.6	43.8	45.8	45.8	48	48	48	48	48	48	48	48
Manchester.....	35.4	35.4	35.4	35.4	37.5	39.6	41.7	66.7	48	48	48	48	48	48	48	48
Memphis.....	40.0	40.0	45.0	45.0	47.1	48.1	55.4	93.8	48	48	48	48	48	48	48	48
Milwaukee.....	41.7	43.8	45.8	45.8	47.9	47.9	47.9	54.2	48	48	48	48	48	48	48	48
Minneapolis.....	43.8	43.8	43.8	43.8	45.8	45.8	54.0	87.5	48	48	48	48	48	48	48	48
Newark, N. J.....	47.9	47.9	47.9	50.0	50.0	56.3	72.9	91.7	48	48	48	48	48	48	48	48
New Haven.....	40.6	40.6	40.6	40.6	40.6	44.8	45.8	58.3	48	48	48	48	48	48	48	48
New Orleans.....	43.8	43.8	43.8	43.8	43.8	43.8	50.0	71.9	48	48	48	48	48	48	48	48
New York.....	50.0	50.0	50.0	52.1	52.1	58.3	75.0	93.8	48	48	48	48	48	48	48	48
Omaha.....	37.5	37.5	43.8	45.8	46.9	53.1	68.8	87.5	48	48	48	48	48	48	48	48
Philadelphia.....	39.6	41.7	41.7	41.7	43.8	50.0	60.4	93.8	48	48	48	48	48	48	48	48
Pittsburgh.....	39.6	41.7	41.7	43.8	43.8	47.9	60.4	81.3	48	48	48	48	48	48	48	48

²⁴48 hours per week, October to March, inclusive.

UNION SCALE OF WAGES AND HOURS OF LABOR, 1913 TO 1920, BY OCCUPATIONS—
Continued.*Compositors: Book and job—Concluded.*

City.	Rate per hour (cents).								Hours per week.							
	1913	1914	1915	1916	1917	1918	1919	1920	1913	1914	1915	1916	1917	1918	1919	1920
Portland, Oreg.	53.1	53.1	53.1	53.1	53.5	59.4	75.0	85.4	48	48	48	48	48	48	48	48
Providence.....	37.5	37.5	37.5	37.5	37.5	45.8	50.0	72.9	48	48	48	48	48	48	48	48
Richmond, Va.	33.3	33.3	37.5	37.5	37.5	37.5	48.5	56.3	48	48	48	48	48	48	48	48
St. Louis.....	43.8	43.8	43.8	45.8	47.9	52.7	52.7	79.2	48	48	48	48	48	48	48	48
St. Paul.....	43.8	43.8	43.8	43.8	45.8	45.8	54.0	83.3	48	48	48	48	48	48	48	48
Salt Lake City.	50.0	50.0	52.1	54.2	54.2	54.2	62.5	75.0	48	48	48	48	48	48	48	48
San Francisco..	50.0	50.0	54.5	55.5	56.5	54.2	58.3	81.3	48	48	48	48	48	48	48	48
Scranton.....	43.8	43.8	43.8	43.8	47.9	47.9	52.1	71.9	48	48	48	48	48	48	48	48
Seattle.....	53.1	53.1	53.1	53.1	56.3	59.4	75.0	87.5	48	48	48	48	48	48	48	48
Washington....	40.0	40.0	40.0	43.8	47.9	50.0	62.5	83.3	48	48	48	48	25 48	25 48	25 48	25 48

Compositors, daywork: Newspaper.

Atlanta.....	43.8	43.8	43.8	43.8	43.8	50.0	60.6	63.8	48	48	48	48	48	48	48	48
Baltimore.....	50.0	57.1	59.5	59.5	61.9	61.9	65.5	93.3	42	42	42	42	42	42	42	45
Birmingham..	52.5	53.0	54.5	55.5	56.5	57.5	67.5	67.5	26 42	26 42	26 42	26 42	26 42	26 42	26 42	26 42
Boston.....	63.0	63.0	63.0	63.0	68.0	68.0	83.0	95.0	26 42	26 42	26 42	26 42	26 42	26 42	26 42	26 42
Buffalo.....	50.0	50.0	50.0	50.0	53.1	59.4	65.6	71.9	48	48	48	48	48	48	48	48
Charleston, S.C.	33.3	33.3	33.3	33.3	42.9	42.9	42.9	42.9	48	48	48	48	26 42	26 42	26 42	26 42
Chicago.....	62.0	62.0	62.0	62.0	62.0	66.0	79.0	79.0	27 45	27 45	27 45	27 45	27 45	26 45	26 45	26 45
Cincinnati....	52.1	54.2	56.3	56.3	56.3	56.3	87.5	100.6	28 47 3/4	48	48	48	48	48	48	48
Cleveland....	53.8	53.8	53.8	53.8	62.5	62.5	68.8	87.5	48	48	48	48	48	48	48	48
Dallas.....	55.0	55.0	59.4	59.4	59.4	62.5	76.0	88.5	48	48	48	48	48	48	48	48
Denver.....	63.3	63.3	63.3	63.3	63.3	72.7	72.7	97.8	45	45	45	45	45	45	45	45
Detroit.....	55.0	55.0	55.0	55.0	60.5	60.5	74.5	87.0	48	48	29 48	29 48	29 48	29 48	29 48	29 48
Fall River....	37.5	40.6	43.8	43.8	44.8	45.8	49.0	75.0	48	48	48	48	48	48	48	48
Indianapolis..	50.0	50.0	50.0	50.0	56.3	56.3	60.4	81.3	48	48	48	48	48	48	48	48
Jacksonville..	37.5	46.9	46.9	46.9	46.9	52.1	65.6	83.3	48	48	48	48	48	48	48	48
Kansas City, Mo.	59.4	59.4	59.4	59.4	59.4	59.4	68.8	90.6	48	48	48	48	48	48	48	48
Little Rock...	47.9	50.0	50.0	50.0	52.1	52.1	62.5	72.9	48	48	48	48	48	48	48	48
Los Angeles...	62.2	64.4	64.4	64.4	66.7	66.7	75.6	86.7	45	45	45	45	45	45	45	45
Louisville....	49.0	50.0	50.0	50.0	54.2	54.2	62.5	87.5	48	48	48	48	48	48	48	48
Manchester....	35.4	35.4	35.4	35.4	37.5	39.6	41.7	66.7	48	48	48	48	48	48	48	48
Memphis.....	57.8	57.8	57.8	57.8	57.8	60.0	66.7	86.7	45	45	45	45	45	26 45	26 45	26 45
Milwaukee....	45.8	47.9	50.0	50.0	54.2	56.3	56.3	77.1	48	48	48	48	48	48	48	48
Minneapolis..	54.0	54.0	54.0	54.0	54.0	54.0	62.5	87.5	48	48	48	48	48	48	48	48
Newark, N. J..	60.9	60.9	60.9	60.9	63.0	69.6	76.1	89.1	46	46	46	46	46	46	46	46
New Haven....	46.9	46.9	47.9	47.9	50.0	50.0	50.0	72.9	48	48	48	48	48	48	48	48
New York.....	66.7	66.7	66.7	66.7	66.7	71.1	96.7	122.2	45	45	45	45	45	45	45	45
Omaha.....	50.0	50.0	53.1	53.1	53.1	53.1	68.8	87.5	48	48	48	48	48	48	48	48
Philadelphia..	41.7	41.7	41.7	41.7	41.7	50.0	66.7	81.3	48	48	48	48	48	48	48	48
Pittsburgh...	55.0	60.0	60.0	60.0	61.0	65.0	77.0	87.5	48	26 45	26 45	26 45	45	26 45	26 45	48
Portland, Oreg.	68.3	68.3	68.3	68.3	68.3	72.7	100.0	100.0	45	45	45	45	45	45	45	45
Providence....	47.9	47.9	50.0	50.0	50.0	52.1	66.7	87.5	48	48	48	48	48	48	48	48
Richmond, Va.	33.3	33.3	37.5	37.5	37.5	45.8	45.8	58.3	48	48	48	48	48	48	48	48
St. Louis.....	58.7	58.7	58.7	58.7	63.4	63.4	63.4	91.3	46	46	46	46	46	46	46	46
St. Paul.....	54.5	54.5	54.5	54.5	54.5	54.5	63.0	94.0	48	48	48	48	29 48	29 48	29 48	29 48
Salt Lake City	62.5	62.5	62.5	62.5	62.5	62.5	71.9	87.5	48	48	48	48	48	48	48	48
San Francisco..	64.4	64.4	69.0	69.0	69.0	68.9	75.6	93.3	45	45	42	42	42	45	45	45
Scranton.....	47.9	47.9	47.9	47.9	52.1	52.1	60.4	81.3	48	48	48	48	48	48	48	48
Seattle.....	75.0	75.0	75.0	75.0	78.6	78.6	100.0	114.3	42	42	42	42	42	42	42	42
Washington....	60.7	60.7	60.7	60.7	60.7	69.8	92.9	104.0	42	42	42	42	42	42	42	42

²⁶ 44 hours per week, for 3 months, between June 1 and September 30.

²⁷ Minimum; maximum, 8 hours per day, 48 per week.

²⁸ Hours actually worked: Minimum 7 hours per day, 42 per week; maximum 8 hours per day, 48 per week.

²⁹ Worked 47 3/4 hours, paid for 48.

³⁰ Maximum; minimum 7 hours per day, 42 per week.

WAGES AND HOURS OF LABOR.

UNION SCALE OF WAGES AND HOURS OF LABOR, 1913 TO 1920, BY OCCUPATIONS—
Continued.

Electrotypers: Finishers.

City.	Rate per hour (cents).								Hours per week.							
	1913	1914	1915	1916	1917	1918	1919	1920	1913	1914	1915	1916	1917	1918	1919	1920
Atlanta.....	45.8	50.0	50.0	50.0	50.0	50.0	57.3	88.5	48	48	48	48	48	48	48	48
Baltimore.....	41.7	43.8	45.8	45.8	47.9	47.9	50.0	77.1	48	48	48	48	48	48	48	48
Birmingham.....	50.0	50.0	50.0	50.0	50.0	50.0	50.0	72.9	48	48	48	48	48	48	48	48
Boston.....	50.0	50.0	50.0	50.0	50.0	50.0	52.5	78.1	48	48	48	48	48	48	48	48
Buffalo.....	43.8	43.8	43.8	43.8	43.8	50.0	56.3	72.9	48	48	48	48	48	48	48	48
Chicago.....	49.0	52.1	52.1	52.1	56.3	58.3	77.1	104.2	48	48	48	48	48	48	48	48
Cincinnati.....	43.8	45.8	45.8	45.8	45.8	47.9	52.1	66.7	48	48	48	48	48	48	48	48
Cleveland.....	41.7	44.8	47.9	47.9	47.9	52.1	58.3	83.3	48	48	48	48	48	48	48	48
Dallas.....	37.5	37.5	37.5	37.5	37.5	43.8	65.6	72.9	48	48	48	48	48	48	48	48
Denver.....	43.8	43.8	43.8	43.8	47.9	47.9	54.2	62.5	48	48	48	48	48	48	48	48
Detroit.....	37.5	47.9	47.9	52.1	52.1	56.3	56.3	93.8	48	48	48	48	48	48	48	48
Indianapolis.....	43.8	45.8	45.8	47.9	50.0	50.0	63.6	63.6	48	48	48	44	44	44	44	44
Kansas City, Mo.....	43.8	43.8	46.9	46.9	50.0	50.0	62.5	90.6	48	48	48	48	48	48	48	48
Los Angeles.....	50.0	50.0	50.0	56.3	56.3	56.3	70.8	86.4	48	48	48	48	48	48	48	44
Memphis.....	45.8	45.8	45.8	45.8	45.8	45.8	62.5	62.5	48	48	48	48	48	48	48	48
Milwaukee.....	43.8	43.8	43.8	43.8	50.0	50.0	56.3	75.0	48	48	48	48	48	48	48	48
Minneapolis.....	36.1	43.8	43.8	45.8	50.0	50.0	59.4	81.3	54	48	48	48	48	48	48	48
Newark, N. J.....							75.0	109.1							44	44
New Haven.....	37.4	39.6	40.7	40.7	44.9	44.9	46.7	62.5	54	53	54	54	53½	53½	53½	44
New Orleans.....				40.0	40.0	40.0	55.0	88.9				45	45	26 45	26 45	26 45
New York.....	62.5	62.5	65.6	68.8	68.8	68.8	75.0	109.1	44	44	44	44	44	44	44	44
Omaha.....	43.8	43.8	43.8	43.8	52.1	52.1	66.7	113.6	48	48	48	48	48	48	48	44
Philadelphia.....	41.7	47.9	47.9	50.0	52.1	64.2	70.0	103.1	48	48	48	48	48	48	48	48
Pittsburgh.....	43.8	43.8	43.8	43.8	45.8	45.8	45.8	79.2	48	48	48	48	48	48	48	48
Portland, Oreg.....	50.0	50.0	50.0	50.0	56.3	56.3	90.9	104.5	48	48	48	48	48	48	44	44
Richmond, Va.....			46.3	46.3	52.1	57.3	60.4	78.1			54	54	48	48	48	48
St. Louis.....	45.8	45.8	45.8	45.8	47.9	55.0	55.0	85.4	48	48	48	48	48	48	48	48
St. Paul.....	43.8	43.8	43.8	45.8	50.0	50.0	59.4	81.3	48	48	48	48	48	48	48	48
San Francisco.....	56.3	56.3	56.3	56.3	56.3	62.5	62.5	79.2	48	48	48	48	48	48	48	48
Scranton.....	41.7	41.7	41.7	41.7	43.8	43.8	50.0	75.0	48	48	48	48	48	48	48	48
Seattle.....	52.1	52.1	52.1	52.1	52.1	66.7	77.8	104.5	48	48	48	48	48	45	45	44
Washington.....	50.0	50.0	50.0	54.2	56.3	58.3	58.3	72.9	44	44	48	48	48	48	48	48

Electrotypers: Molders.

Atlanta.....	45.8	50.0	50.0	50.0	50.0	50.0	57.3	88.5	48	48	48	48	48	48	48	48
Baltimore.....	43.8	45.8	50.0	50.0	52.1	52.1	54.2	83.3	48	48	48	48	48	48	48	48
Birmingham.....	50.0	50.0	50.0	56.3	50.0	50.0	50.0	72.9	48	48	48	48	48	48	48	48
Boston.....	50.0	50.0	50.0	50.0	50.0	52.5	52.5	78.1	48	48	48	48	48	48	48	48
Buffalo.....	43.8	43.8	43.8	50.0	50.0	50.0	56.3	72.9	48	48	48	48	48	48	48	48
Chicago.....	54.2	56.3	56.3	56.3	60.4	60.4	77.1	104.2	48	48	48	48	48	48	48	48
Cincinnati.....	47.9	50.0	50.0	50.0	50.0	52.1	52.1	70.8	48	48	48	48	48	48	48	48
Cleveland.....	43.8	52.1	52.1	52.1	52.1	56.3	60.4	83.3	48	48	48	48	48	48	48	48
Dallas.....	43.8	43.8	41.7	41.7	41.7	43.8	65.6	72.9	48	48	48	48	48	48	48	48
Denver.....	52.1	52.1	52.1	52.1	54.2	54.2	60.4	69.8	48	48	48	48	48	48	48	48
Detroit.....	37.5	47.9	47.9	52.1	52.1	56.3	56.3	93.8	48	48	48	48	48	48	48	48
Indianapolis.....	45.8	47.9	47.9	50.0	52.3	52.3	65.9	65.9	48	48	48	44	44	44	44	44
Kansas City, Mo.....	43.8	43.8	46.9	46.9	50.0	50.0	62.5	90.6	48	48	48	48	48	48	48	48
Los Angeles.....	50.0	50.0	50.0	50.0	56.3	56.3	70.8	86.4	48	48	48	48	48	48	48	44
Memphis.....	45.8	45.8	45.8	45.8	45.8	45.8	62.5	62.5	48	48	48	48	48	48	48	48
Milwaukee.....	43.8	43.8	43.8	43.8	50.0	50.0	56.3	75.0	48	48	48	48	48	48	48	48
Minneapolis.....	36.1	50.0	50.0	52.1	56.3	56.3	59.4	81.3	54	48	48	48	48	48	48	48
Newark.....							75.0	109.1							44	44
New Haven.....	37.4	39.6	40.7	40.7	44.9	44.9	46.7	62.5	54	53	54	54	53½	53½	53½	48
New Orleans.....					40.0	40.0	55.6	88.9					32 45	32 45	32 45	32 45
New York.....	62.5	62.5	65.6	68.8	68.8	68.8	75.0	109.1	44	44	44	44	44	44	44	44
Omaha.....	43.8	43.8	43.8	43.8	52.1	52.1	66.7	113.6	48	48	48	48	48	48	48	48
Philadelphia.....	45.8	52.1	52.1	54.2	56.3	64.2	70.0	103.1	48	48	48	48	48	48	48	44
Pittsburgh.....	50.0	50.0	50.0	50.0	52.1	53.1	53.1	79.2	48	48	48	48	48	48	48	48

²⁶ Minimum; maximum, 8 hours per day, 48 per week.

²² Hours actually worked; maximum, 48 per week.

UNION SCALE OF WAGES AND HOURS OF LABOR, 1913 TO 1920, BY OCCUPATIONS—Continued.

Electrotypers: Molders—Concluded.

City.	Rate per hour (cents).								Hours per week.							
	1913	1914	1915	1916	1917	1918	1919	1920	1913	1914	1915	1916	1917	1918	1919	1920
Portland, Oreg.	50.0	50.0	50.0	50.0	56.3	56.3	90.9	104.5	48	48	48	48	48	48	44	44
Richmond, Va.	.....	.....	46.3	46.3	52.1	57.3	60.4	78.1	.....	.....	54	54	48	48	48	48
St. Louis.....	47.9	47.9	47.9	47.9	50.0	57.3	57.3	85.4	48	48	48	48	48	48	48	48
St. Paul.....	50.0	50.0	50.0	52.1	56.3	56.3	59.4	81.3	48	48	48	48	48	48	48	48
San Francisco.	56.3	56.3	56.3	56.3	56.3	62.5	62.5	79.2	48	48	48	48	48	48	48	48
Scranton.....	47.9	47.9	47.9	47.9	50.0	50.0	56.3	75.0	48	48	48	48	48	48	48	48
Seattle.....	52.1	52.1	52.1	52.1	52.1	66.7	77.8	104.5	48	48	48	48	48	45	45	44
Washington....	50.0	50.0	52.1	54.2	56.3	58.3	58.3	72.9	44	44	48	48	48	48	48	48

Granite cutters, inside.

Atlanta.....	41.3	41.3	41.3	50.0	50.0	60.0	70.0	75.0	45	45	45	44	44	44	44	44
Baltimore.....	50.0	50.0	50.0	50.0	50.0	62.5	75.0	100.0	44	44	44	44	44	44	44	44
Boston.....	45.6	45.6	45.6	50.0	50.0	60.0	75.0	100.0	44	44	44	44	44	44	44	44
Buffalo.....	43.8	43.8	50.0	52.1	53.1	63.1	75.0	100.0	44	44	44	44	44	44	44	44
Charleston, S. C.	45.0	45.0	45.0	45.0	45.0	50.0	69.0	87.5	44	44	44	44	44	44	44	44
Chicago.....	50.0	50.0	50.0	53.1	56.3	66.3	76.3	86.3	44	44	44	44	44	44	44	44
Cincinnati.....	.....	50.0	50.0	50.0	50.0	62.5	75.0	100.0	.....	45	44	44	44	44	44	44
Cleveland.....	50.0	50.0	50.0	50.0	50.0	62.5	81.3	100.0	44	44	44	44	44	44	44	44
Dallas.....	.....	50.0	50.0	50.0	50.0	62.5	81.3	100.0	.....	44	44	44	44	44	44	44
Denver.....	57.0	57.0	57.0	57.0	57.0	68.8	85.0	100.0	44	44	44	44	44	44	44	44
Detroit.....	45.0	45.0	45.0	50.0	51.3	62.5	75.0	100.0	44½	44½	44½	44	44	44	44	44
Fall River.....	43.0	43.0	43.0	50.0	50.0	62.5	75.0	100.0	45	45	45	44	44	44	44	44
Los Angeles.....	62.5	62.5	62.5	66.3	67.5	70.0	87.5	100.0	48	48	44	44	44	44	44	44
Louisville.....	45.0	45.0	47.5	50.0	50.0	60.0	75.0	100.0	45	45	45	44	44	44	44	44
Manchester.....	40.6	40.6	40.6	50.0	50.0	50.0	72.5	82.5	44	44	44	44	44	44	44	44
Newark, N. J.	50.0	50.0	50.0	50.0	50.0	62.5	79.0	100.0	44	44	44	44	44	44	44	44
New Haven.....	41.0	41.0	45.5	50.0	50.0	60.0	72.5	87.5	44	44	44	44	44	44	44	44
New Orleans.....	45.0	45.0	45.0	50.0	50.0	50.0	75.0	80.0	45	45	45	44	44	44	44	44
New York.....	50.0	50.0	50.0	50.0	50.0	68.8	79.0	100.0	44	44	44	44	44	44	44	44
Philadelphia....	50.0	50.0	56.3	56.3	56.3	65.0	80.0	100.0	44	44	44	44	44	44	44	44
Pittsburgh.....	50.0	50.0	50.0	53.1	54.4	62.5	81.3	100.0	44	44	44	44	44	44	44	44
Providence.....	40.6	40.6	40.6	50.0	50.0	60.0	70.0	70.0	44	44	44	44	44	44	44	44
Richmond, Va.	43.8	45.0	45.0	50.0	50.0	50.0	70.0	82.5	44	44	44	44	44	44	44	44
St. Louis.....	50.0	50.0	50.0	50.0	50.0	60.0	75.0	100.0	44	44	44	44	44	44	44	44
Salt Lake City.	62.5	62.5	62.5	62.5	62.5	75.0	81.3	100.0	44	44	44	44	44	44	44	44
San Francisco..	62.5	62.5	62.5	66.3	67.5	70.0	87.5	100.0	44	44	44	44	44	44	44	44
Seattle.....	62.5	62.5	62.5	62.5	62.5	75.0	87.5	100.0	44	44	44	44	44	44	44	44
Washington....	45.0	45.0	45.0	50.0	50.0	62.5	87.5	100.0	44	44	44	44	44	44	44	44

Hod carriers.

Baltimore.....	31.3	31.3	34.4	34.4	40.0	56.3	75.0	87.5	³³ 45	³³ 45	³³ 45	³³ 45	44	44	44	44
Boston.....	35.0	35.0	35.0	35.0	40.0	40.0	42.5	50.0	44	44	44	44	44	44	44	44
Buffalo.....	.....	.....	.....	30.0	40.0	45.0	55.0	60.0	.....	.....	51	51	51	³⁴ 44	³⁴ 44	
Chicago.....	40.0	40.0	40.0	42.5	45.0	50.0	57.5	100.0	44	44	44	44	44	44	44	44
Cincinnati.....	42.5	42.5	42.5	42.5	45.0	50.0	55.0	65.0	85.0	45	45	45	45	45	45	45
Cleveland.....	31.3	^{32.5} 31.3	31.3	31.3	40.0	55.0	57.5	87.5	48	³⁵ 44	³⁵ 44	35	44	44	44	44
Dallas.....	^{25.0} 28.1	^{30.0} 35.0	35.0	.....	.....	35.0	35.0	50.0	44	44	44	.....	.....	48	48	44
Denver.....	^{37.5} 40.6	^{37.5} 40.6	^{37.5} 40.6	^{37.5} 40.6	^{43.8} 46.9	^{53.1} 56.3	65.6	^{75.0} 78.2	44	44	44	44	44	44	44	44
Detroit.....	35.0	35.0	^{35.0} 40.0	35.0	40.0	48.0	50.0	65.0	100.0	48	³⁶ 48	^{49½} 49½	44	³⁷ 44	44	44
Indianapolis...	^{40.0} 42.5	40.0	40.0	40.0	40.0	42.5	47.5	55.0	^{72.5} 75.0	44	44	44	44	44	44	44

³³ 44 hours per week, November to March, inclusive.

³⁴ 43 hours per week, November 16 to March 14, inclusive.

³⁵ 48 hours per week, September to April, inclusive.

³⁶ 44 hours per week, October to April, inclusive.

³⁷ 48 hours per week, December to February, inclusive.

WAGES AND HOURS OF LABOR.

UNION SCALE OF WAGES AND HOURS OF LABOR, 1913 TO 1920, BY OCCUPATIONS—Continued.

Hod carriers—Concluded.

City.	Rate per hour (cents).								Hours per week.							
	1913	1914	1915	1916	1917	1918	1919	1920	1913	1914	1915	1916	1917	1918	1919	1920
Kansas City, Mo	37.5	37.5	45.0	45.0	47.5	50.0	62.5	90.0	44	44	44	44	44	44	44	44
Little Rock					30.0	40.0	50.0	62.5					54	54	49½	49½
Los Angeles	34.4	34.4	34.4	34.4	40.6	50.0	53.1	75.0	44	44	44	44	44	44	44	44
Louisville	35.0	35.0	35.0	35.0	45.0	45.0	50.0	55.0	48	48	44	44	44	50	50	44
Memphis	38.0	38.0	38.0	38.0	37.5	50.0	50.0	75.0	44	44	44	44	44	44	44	44
Milwaukee	32.5	35.0	35.0	35.0	40.0	50.0	55.0	70.0	48	48	48	48	48	48	38	44
Newark, N. J.	35.0	35.0	35.0	37.5	45.0	45.0	50.0	87.5	44	44	44	44	44	44	44	44
New York	37.5	37.5	37.5	37.5	42.5	47.0	50.0	87.5	44	44	44	44	44	44	44	44
Omaha				40.0	40.0	50.0	55.0	75.0				44	44	44	44	44
Philadelphia	35.0	35.0	35.0	25.0	45.0	60.0	70.0	100.0	44	44	44	44	44	44	44	44
Pittsburgh	25.0	25.0	25.0	30.0	30.0	45.0	45.0	60.0	90.0	44	44	44	44	44	44	44
Portland, Oreg.	40.0	40.0	40.0	45.0	45.0	55.0	62.5	75.0	48	48	48	48	48	48	44	44
Providence	50.0	50.0	50.0	50.0	50.0	62.5	75.0	93.8	48	48	48	48	48	48	44	44
Richmond, Va.	28.1	28.1	28.1	30.0	35.0	38.0	50.0	75.0	50	50	50	50	50	50	50	44
St. Louis	30.0	30.0	30.0	30.0	30.0	50.0	50.0	50.0							45	45
St. Paul	42.5	47.5	47.5	47.5	47.5	46.9	62.5	62.5	70.0	44	44	44	44	44	44	44
Salt Lake City	45.0	50.0	50.0	50.0	50.0	55.0	65.0	80.0	44	44	44	44	44	44	44	44
San Francisco	37.5	37.5	37.5	37.5	43.8	56.3	62.5	87.5	44	44	44	44	44	44	44	44
Scranton	50.0	50.0	50.0	50.0	56.3	62.5	75.0	93.8	44	44	44	44	44	44	44	44
Seattle	50.0	50.0	50.0	50.0	50.0	62.5	75.0	93.8	48	48	48	48	48	48	44	44
Washington	30.0	30.0	30.0	35.0	35.0	35.0	50.0	58.5	48	48	48	48	48	48	44	44
	43.8	43.8	43.8	43.8	50.0	62.5	75.0	75.0	44	44	44	44	44	44	40	40
	23.1	23.1	28.1	28.1	31.3	50.0	62.5	75.0	40	45	40	45	40	45	40	45
	28.1	28.1														

Inside wiremen.

Atlanta	44.5				38.9	55.0	75.0	90.0	54				54	48	44	44
Baltimore	43.8	43.8	43.8	43.8	50.0	70.0	70.0	92.5	48	48	48	48	48	48	44	44
Birmingham	62.5	62.5	60.0	50.0	50.0	62.5	80.0	100.0	44	44	44	44	44	44	44	44
Boston	55.0	55.0	60.0	62.5	65.0	70.0	77.5	100.0	44	44	44	44	44	44	44	44
Buffalo	45.0	46.9	50.0	56.3	62.5	70.0	70.0	90.0	48	48	42	48	42	48	44	44
Charleston, S.C.	33.3	33.3		33.3	33.3	57.0	80.0	80.0	54	54	45	54	43	54	44	48
Chicago	75.0	75.0	75.0	75.0	75.0	81.3	87.5	125.0	44	44	44	44	44	44	44	44
Cincinnati	50.0	50.0	53.1	56.3	62.5	68.8	71.9	100.0	44½	44½	44½	44½	44½	44½	44½	44½
Cleveland	57.5	60.0	68.8	70.0	75.0	81.3	90.0	125.0	48	44	44	44	44	44	44	44
Dallas	56.3	56.3	62.5	62.5	65.0	80.0	87.5	100.0	44	44	44	44	44	44	44	44
Denver	56.3	56.3	56.3	60.0	62.5	82.5	82.5	100.0	44	44	44	44	44	44	44	44
Detroit	46.9	50.0	53.1	59.4	66.9	75.0	93.8	125.0	48	45	48	48	48	44	44	44
Fall River	37.5	37.5	37.5	41.0	50.0	60.0	70.0	85.0	48	48	48	44	44	44	44	44
Indianapolis	47.5	47.5	47.5	53.0	57.0	67.5	72.0	100.0	45	48	45	48	44	44	44	44
Jacksonville	45.0	45.0	45.0	45.0	45.0	65.0	85.0	100.0	48	45	45	48	48	48	44	44
Kansas City, Mo	62.5	62.5	68.8	65.0	68.8	75.0	87.5	100.0	48	48	44	44	44	44	44	44
Little Rock	50.0	50.0	50.0	50.0	50.0	55.0	75.0	100.0	48	48	48	48	48	48	48	44
Los Angeles	50.0	50.0	50.0	50.0	50.0	62.5	80.0	100.0	48	48	48	48	48	48	48	44
Louisville	40.0	40.0	40.0	40.0	45.0	50.0	75.0	75.0	48	48	48	48	48	48	44	44
Manchester	31.3	34.4	34.4	37.5	42.5	60.0	75.0	100.0	48	48	48	48	48	44	44	44
Memphis	45.0	50.0	50.0	50.0	56.3	62.5	75.0	100.0	48	44	44	44	44	44	44	44
Milwaukee	45.0	50.0	50.0	50.0	56.3	56.3	75.0	85.0	44	44	44	44	44	44	44	44
Minneapolis	50.0	50.0	56.3	56.3	56.3	68.8	68.8	81.3	48	44	44	44	44	44	44	44
Newark, N. J.	56.3	62.5	62.5	62.5	62.5	68.8	75.0	100.0	44	44	44	44	44	44	44	44
New Haven				44.5	50.0	60.0	75.0	82.5				44	44	44	44	44

³⁸ 48 hours per week, November to April, inclusive.

³⁹ 48 hours per week, October to April, inclusive.

⁴⁰ 44½ hours per week, October to April, inclusive.

⁴¹ 44 hours per week, August to December, inclusive.

⁴² 44 hours per week, June to August, inclusive.

⁴³ 49½ hours per week, June 15 to Sept. 15.

⁴⁴ 44 hours per week, June 15 to Sept. 15.

⁴⁵ 44 hours per week, June to September, inclusive.

⁴⁶ 44 hours per week, July to September, inclusive.

UNION SCALE OF WAGES AND HOURS OF LABOR, 1913 TO 1920, BY OCCUPATIONS—Continued.

Inside wiremen—Concluded.

City.	Rate per hour (cents).								Hours per week.							
	1913	1914	1915	1916	1917	1918	1919	1920	1913	1914	1915	1916	1917	1918	1919	1920
New Orleans...	45.0	50.0	50.0	50.0	50.0	56.3	70.0	90.0	48	48	48	48	48	48	48	44
New York.....	56.3	60.0	60.0	60.0	65.0	65.0	75.0	112.5	44	44	44	44	44	44	44	44
Omaha.....	50.0	50.0	50.0	57.5	57.5	70.0	87.5	112.5	44	44	44	44	44	44	44	44
Philadelphia...	45.0	45.0	45.0	50.0	56.3	65.0	75.0	100.0	44	44	44	44	44	44	44	44
Pittsburgh.....	57.5	57.5	57.5	62.5	62.5	68.8	75.0	100.0	48	48	44	44	44	44	44	44
Portland, Oreg.	56.3	56.3	56.3	56.3	56.3	72.2	80.0	100.0	44	44	44	44	44	44	44	44
Providence.....	43.8	50.0	50.0	50.0	55.0	60.0	70.0	85.0	44	44	44	44	44	44	44	44
Richmond, Va.	43.8	43.8	43.8	43.8	50.0	60.0	75.0	75.0	48	48	48	48	48	48	48	44
St. Louis.....	65.0	70.0	75.0	75.0	75.0	75.0	87.5	100.0	44	44	44	44	44	44	44	44
St. Paul.....	46.9	50.0	53.1	56.3	62.5	68.8	68.8	81.3	44	44	44	44	44	44	44	44
Salt Lake City.	56.3	56.3	62.5	62.5	62.5	75.0	87.5	112.5	44	44	44	44	44	44	44	44
Providence.....	62.5	62.5	62.5	62.5	75.0	75.0	87.5	112.5	44	44	44	44	44	44	44	44
Scranton.....	46.9	46.9	46.9	50.0	60.0	62.5	75.0	95.0	48	48	48	44	44	44	44	44
Seattle.....	62.5	62.5	62.5	62.5	75.0	87.5	100.0	112.5	44	44	44	44	44	44	40	40
Washington.....	55.0	60.0	60.0	60.0	60.0	75.0	100.0	100.0	44	44	44	44	44	44	44	44

Linotype operators: Book and job.

Atlanta.....	43.8	46.9	46.9	46.9	46.9	46.9	46.9	57.5	48	48	48	48	48	48	48	48
Baltimore.....	46.9	46.9	46.9	46.9	50.0	50.0	60.4	81.3	48	48	48	48	48	48	48	48
Birmingham...	52.5	52.5	54.5	54.5	57.3	57.3	57.3	78.1	48	48	48	48	48	48	48	48
Boston.....	45.8	47.9	47.9	47.9	50.0	54.2	59.4	77.1	48	48	48	48	48	48	48	48
Buffalo.....	50.0	50.0	50.0	50.0	53.1	59.4	59.4	71.9	48	48	48	48	48	48	48	48
Charleston, S.C.	.....	37.5	37.5	37.5	50.0	50.0	50.0	50.0	.....	48	48	48	48	48	48	48
Chicago.....	50.0	50.0	50.0	50.0	50.0	60.2	77.9	98.8	48	48	48	48	48	48	48	48
Cincinnati.....	49.0	52.1	52.1	52.1	54.2	54.2	58.3	81.3	48	48	48	48	48	48	48	48
Cleveland.....	53.8	53.8	53.8	53.8	62.5	62.5	68.8	87.5	48	48	48	48	48	48	48	48
Dallas.....	⁴⁷ 12.5	⁴⁷ 12.5	⁴⁷ 12.5	⁴⁷ 12.5	⁴⁷ 12.0	⁴⁷ 12.0	⁴⁷ 12.0	⁴⁷ 15.0	48	48	48	48	48	48	48	48
Denver.....	54.2	54.2	54.2	54.2	54.2	59.4	65.6	81.3	48	48	48	48	48	48	48	48
Detroit.....	55.0	55.0	55.0	55.0	60.5	60.5	85.0	100.0	48	48	48	48	48	48	48	48
Fall River.....	.....	.....	.....	.....	45.8	46.9	46.9	62.5	.....	.....	.....	.....	.....	48	48	48
Indianapolis...	50.0	50.0	50.0	50.0	56.3	56.3	60.4	81.3	48	48	48	48	48	48	48	48
Jacksonville...	43.8	52.1	52.1	52.1	53.1	53.1	58.3	75.0	48	48	48	48	48	48	48	48
Kansas City, Mo	55.2	55.2	57.3	57.3	57.3	62.5	69.8	78.1	48	48	48	48	48	48	48	48
Little Rock...	50.0	50.0	50.0	50.0	50.0	50.0	50.0	72.9	48	48	48	48	48	48	48	48
Los Angeles...	58.3	60.4	60.4	60.4	60.4	62.5	70.8	81.3	48	48	48	48	48	48	48	48
Louisville.....	49.0	50.0	50.0	50.0	50.0	52.1	54.2	54.2	48	48	48	48	48	48	48	48
Manchester.....	35.4	35.4	35.4	35.4	37.5	39.6	41.7	66.7	48	48	48	48	48	48	48	48
Memphis.....	62.5	62.5	56.3	56.3	56.3	56.3	68.8	93.8	48	48	48	48	48	48	48	48
Milwaukee.....	47.9	50.0	52.1	52.1	54.2	54.2	60.4	75.0	48	48	48	48	48	48	48	48
Minneapolis...	50.0	50.0	50.0	50.0	52.1	52.1	61.5	87.5	48	48	48	48	48	48	48	48
Newark, N. J.	47.9	47.9	47.9	50.0	50.0	56.3	72.9	91.7	48	48	48	48	48	48	48	48
New Haven.....	45.8	45.8	45.8	45.8	45.8	45.8	45.8	58.3	48	48	48	48	48	48	48	48
New Orleans...	.....	.....	53.3	53.3	53.3	53.3	53.3	76.7	.....	.....	45	45	45	45	45	45
New York.....	54.2	54.2	54.2	54.2	54.2	58.3	75.0	93.8	48	48	48	48	48	48	48	48
Omaha.....	50.0	50.0	53.1	53.1	53.1	53.1	68.8	87.5	48	48	48	48	48	48	48	48
Philadelphia...	43.8	45.8	45.8	45.8	47.9	54.2	64.6	100.0	48	48	48	48	48	48	48	48
Pittsburgh.....	47.9	50.0	50.0	52.1	52.1	56.3	68.8	87.5	48	48	48	48	48	48	48	48
Portland, Oreg.	65.6	65.6	65.6	65.6	65.6	68.8	100.0	100.0	48	48	48	48	48	48	48	48
Providence.....	47.9	47.9	47.9	47.9	47.9	52.1	54.2	79.2	48	48	48	48	48	48	48	48
Richmond, Va.	41.7	41.7	45.8	45.8	45.8	45.8	54.2	62.5	48	48	48	48	48	48	48	44
St. Louis.....	50.0	50.0	50.0	52.1	54.2	59.6	63.8	87.5	48	48	48	48	48	48	48	48
St. Paul.....	50.0	50.0	50.0	50.0	52.1	52.1	61.5	87.5	48	48	48	48	48	48	48	48
Salt Lake City.	56.3	56.3	56.3	56.3	56.3	56.3	64.6	75.0	48	48	48	48	48	48	48	48
San Francisco.	64.4	64.4	64.4	65.0	65.0	68.8	68.8	81.3	45	45	45	48	48	48	48	48
Scranton.....	45.8	45.8	45.8	45.8	50.0	50.0	54.2	81.3	48	48	48	48	48	48	48	48
Seattle.....	.....	.....	75.0	75.0	78.6	⁴⁹ 85.7	⁴⁹ 107.1	⁴⁹ 121.4	.....	.....	42	42	42	42	42	42
Washington.....	50.0	50.0	50.0	50.0	56.3	56.3	75.0	87.5	48	48	48	48	48	48	60	60

⁴⁷ Per 1,000 ems nonpareil.

⁴⁸ 45 hours per week, June to August, inclusive.

⁴⁹ For machinist operators.

⁵⁰ 44 hours per week, for 3 moths, between June 1 and Sept. 30.

WAGES AND HOURS OF LABOR.

UNION SCALE OF WAGES AND HOURS OF LABOR, 1913 TO 1920, BY OCCUPATIONS—Continued.

Linotype operators, daywork: Newspaper.

City.	Rate per hour (cents).								Hours per week.							
	1913	1914	1915	1916	1917	1918	1919	1920	1913	1914	1915	1916	1917	1918	1919	1920
Atlanta.....	⁵¹ 8.5	⁵¹ 8.5	⁵¹ 8.5	⁵¹ 8.5	⁵¹ 8.5	⁵¹ 8.5	⁵¹ 8.5	⁵¹ 9.0	48	48	48	48	48	48	48	48
Baltimore.....	53.6	57.1	59.5	59.5	61.9	61.9	65.5	93.3	42	42	42	42	42	42	42	45
Birmingham.....	52.5	53.0	54.5	55.5	56.5	57.5	67.5	67.5	⁵² 42	⁵² 42	⁵² 42	⁵² 42	⁵² 42	⁵² 42	⁵² 42	⁵² 42
Boston.....	63.0	63.0	63.0	63.0	68.0	68.0	83.0	95.0	⁵² 42	⁵² 42	⁵² 42	⁵² 42	⁵² 42	⁵² 42	⁵² 42	⁵² 42
Buffalo.....	50.0	50.0	50.0	50.0	53.1	59.4	65.6	71.9	48	48	48	48	48	48	48	48
Charleston, S.C.	⁵¹ 9.0	⁵¹ 9.0	⁵¹ 9.0	⁵¹ 9.0	⁵¹ 9.0	⁵¹ 9.0	⁵¹ 9.0	64.1	⁵² 39	⁵² 39	⁵² 39	⁵² 39	⁵² 39	⁵² 39	⁵² 39	⁵² 39
Chicago.....	⁵⁵ 0.0	⁵⁵ 0.0	⁵⁵ 0.0	⁵⁵ 0.0	⁵⁵ 0.0	⁵⁵ 0.0	⁵⁵ 64.0	⁵⁵ 64.0	48	48	45	45	45	45	45	45
Cincinnati.....	52.1	54.2	56.3	56.3	56.3	56.3	87.5	100.6	⁵⁶ 47½	48	48	48	48	48	48	48
Cleveland.....	53.8	53.8	53.8	53.8	62.5	62.5	68.8	87.5	48	48	48	48	48	48	48	48
Dallas.....	⁶¹ 12.5	⁶¹ 12.5	⁶¹ 12.5	⁶¹ 12.0	⁶¹ 12.0	⁶¹ 12.0	⁶¹ 12.0	⁶¹ 15.0	39	39	⁵⁷ 39	⁵⁷ 39	⁵⁷ 39	⁵⁷ 39	⁵⁷ 39	⁵⁷ 39
Denver.....	63.3	63.3	63.3	63.3	63.3	72.7	72.7	97.8	45	45	45	45	45	45	45	45
Detroit.....	55.0	55.0	55.0	55.0	60.5	60.5	74.5	87.0	48	48	⁵⁸ 48	⁵⁸ 48	⁵⁸ 48	⁵⁸ 48	⁵⁸ 48	⁵⁸ 48
Fall River.....	45.8	45.8	45.8	45.8	45.8	46.9	50.0	75.0	48	48	48	48	48	48	48	48
Indianapolis.....	50.0	50.0	50.0	50.0	56.3	56.3	60.4	81.3	48	48	48	48	48	48	48	48
Jacksonville.....	⁵¹ 9.0	52.1	52.1	52.1	52.1	55.2	58.3	83.3	45	48	⁵⁸ 48	⁵⁸ 48	48	48	48	48
Kansas City, Mo.	59.4	59.4	59.4	59.4	59.4	59.4	68.8	90.6	48	48	48	48	48	48	48	48
Little Rock.....	⁵¹ 9.5	⁵¹ 9.5	⁵¹ 9.5	⁵¹ 9.5	⁵¹ 9.5	⁵¹ 9.5	61.9	56.3	⁵² 45	⁵² 45	⁵² 45	⁵² 45	⁵² 45	⁵² 45	⁵² 45	⁵² 45
Los Angeles.....	62.2	64.4	64.4	64.4	66.7	66.7	75.6	86.7	45	45	45	45	45	45	45	45
Louisville.....	49.0	50.0	50.0	50.0	54.2	54.5	62.5	87.5	48	48	48	48	48	48	48	48
Manchester.....	35.4	35.4	35.4	35.4	37.5	39.6	41.7	66.7	48	48	48	48	48	48	48	48
Memphis.....	⁵¹ 9.5	⁵¹ 9.5	⁵¹ 9.5	⁵¹ 9.5	⁵¹ 9.5	⁵¹ 9.5	⁶¹ 9.5	⁶¹ 12.0	⁵² 45	⁵² 45	⁵² 45	⁵² 45	⁵² 45	⁵² 45	⁵² 45	⁵² 45
Milwaukee.....	45.8	47.9	50.0	50.0	54.2	56.3	56.3	77.1	48	48	48	48	48	48	48	48
Minneapolis.....	⁵¹ 10.0	⁵¹ 10.0	⁵¹ 10.0	⁵¹ 10.0	⁵¹ 10.0	⁵¹ 10.0	⁵¹ 10.0	⁵¹ 11.0	48	48	48	48	48	48	48	48
Newark, N. J.....	60.9	60.9	60.9	60.9	63.0	69.6	76.1	89.1	46	46	46	46	46	46	46	46
New Haven.....	46.9	46.9	47.9	47.9	50.0	50.0	50.0	72.9	48	48	48	48	48	48	48	48
New York.....	66.7	66.7	66.7	66.7	66.7	71.1	96.7	122.2	45	45	45	45	45	45	45	45
Omaha.....	50.0	50.0	53.1	53.1	53.1	53.1	68.8	87.5	48	48	48	48	48	48	48	48
Philadelphia.....	45.8	45.8	45.8	45.8	45.8	52.1	66.7	81.3	48	48	48	48	48	48	48	48
Pittsburgh.....	55.0	60.0	60.0	60.0	61.0	65.0	77.0	87.5	48	⁵² 45	⁵² 45	⁵² 45	⁵² 45	⁵² 45	⁵² 45	⁵² 45
Portland, Oreg.....	68.3	68.3	68.3	68.3	68.3	72.7	100.0	100.0	45	45	45	45	45	45	45	45
Providence.....	47.9	47.9	50.0	50.0	50.0	52.1	66.7	87.5	48	48	48	48	48	48	48	48
St. Louis.....	⁵¹ 11.0	⁵¹ 11.0	⁵¹ 11.0	⁵¹ 11.0	⁵¹ 11.5	⁵¹ 11.5	⁵¹ 11.5	⁵¹ 15.0	⁵⁹ 39	⁵⁹ 39	⁵⁹ 39	⁵⁹ 39	⁵⁹ 42	⁵⁹ 42	⁵⁹ 42	⁵⁹ 42
St. Paul.....	54.5	54.5	54.5	54.5	54.5	63.0	63.0	94.0	48	48	48	48	48	48	48	48
Salt Lake City.....	⁵¹ 10.0	⁵¹ 10.0	⁵¹ 10.0	⁵¹ 10.0	⁵¹ 10.0	⁵¹ 10.0	⁵¹ 11.0	⁶² 11.0	48	⁶⁰ 48	⁶⁰ 48	⁶⁰ 48	⁶⁰ 48	⁶⁰ 48	⁶⁰ 48	⁶⁰ 48
San Francisco.....	64.4	64.4	69.0	69.0	69.0	68.9	75.6	93.3	45	45	42	42	42	45	45	45
Seranton.....	47.9	47.9	47.9	47.9	52.1	52.1	60.4	81.3	48	48	48	48	48	48	48	48
Seattle.....	75.0	75.0	75.0	75.0	78.6	80.1	100.0	114.3	42	42	42	42	42	42	42	42
Washington.....	60.7	60.7	60.7	60.7	60.7	69.8	92.9	104.0	42	42	42	42	42	42	42	42

Machinists, manufacturing shops.

Atlanta.....	35.0	35.0	35.0	35.0	40.0	55.0	70.0	80.0	60	{ 54 60	60	60	54	54	54	54
Baltimore.....	33.3	37.5	37.5	37.5	{ 47.0 65.0	{ 62.0 68.8	75.0	75.0	54	48	48	48	48	48	48	48
Birmingham.....	35.0	{ 35.0 40.0	40.0	45.0	47.5	60.0	68.0	78.5	60	{ 54 60	60	54	54	54	48	48
Boston.....	{ 38.9 43.8	{ 38.9 43.8	{ 28.0 42.0	{ 35.0 42.0	{ 50.0 55.0	65.0	65.0	{ 80.0 90.0	48	48	50	50	48	48	48	48
Buffalo.....	37.5	37.5	37.5	40.0	40.0	55.0	73.0	73.0	54	54	54	54	{ 48 54	54	54	54

⁵¹ Per 1,000 ems nonpareil.

⁵² Minimum; maximum, 8 hours per day, 48 per week.

⁵³ For 3,500 ems per hour; 55 cents for 4,500 ems, and 1 cent for each 100 ems over 4,500 per hour.

⁵⁴ For 3,500 ems per hour; 58 cents for 4,500 ems, and 1 cent for each 100 ems over 4,500 per hour.

⁵⁵ For 3,500 ems per hour; 70 cents for 4,500 ems, and 1 cent for each 100 ems over 4,500 per hour.

⁵⁶ Work 47½ hours, paid for 48.

⁵⁷ Maximum; minimum, 5½ hours per day, 33 per week.

⁵⁸ Maximum; minimum, 7 hours per day, 42 per week.

⁵⁹ Minimum; maximum, 7½ hours per day, 46 per week.

⁶⁰ Maximum; minimum, 6½ hours per day, 39 per week.

⁶¹ Per 1,000 ems nonpareil, plus 45 cents per day bonus.

⁶² Per 1,000 ems nonpareil, and \$1 per day bonus.

UNION SCALE OF WAGES AND HOURS OF LABOR, 1913 TO 1920, BY OCCUPATIONS—
Continued.*Machinists, manufacturing shops—Concluded.*

City.	Rate per hour (cents).								Hours per week.							
	1913	1914	1915	1916	1917	1918	1919	1920	1913	1914	1915	1916	1917	1918	1919	1920
Charleston, S. C.			36.1	38.9	42.8	59.0	73.0	90.0			54	54	54	54	48	48
Chicago	39.0	41.7 43.5	41.7 43.5	46.9	55.0	65.0	80.0	100.0	54	48 54	48 54	48	48	60 48	44	44
Cincinnati	25.0 35.0	25.0 35.0	32.5	35.0	42.0	42.0	50.0	75.0	55	52½	52½	48	48	48	48	48
Cleveland	33.3	33.3	35.0	45.0	45.0	60.0	60.0	75.0	54	54	54	50	50	50	50	50
Dallas	40.0	40.0	42.0	42.0				70.0	80.0	54	54	48	48		48	48
Denver	40.0	40.0	40.0	40.0	42.5	52.0	68.0	72.0	54	54	54	54	51	48	48	48
Detroit	39.0	39.0	39.0	40.0	42.0 47.0	72.5 75.0	85.0	90.0 110.0	50	50	50	50	55	55	50	50
Indianapolis					47.5	62.5	70.0	80.0						50	48	48
Jacksonville	36.5	36.5	36.6	38.0	40.0	65.0	80.0	80.0	54	54	54	54	54	54	48	48
Kansas City, Mo.	37.0	40.0	40.0	50.0	50.0	75.0	75.0	100.0	54	54	54	48	48	48	48	44
Little Rock	42.5	42.5	42.5	42.5	45.0	60.0	60.0	68.0	54	54	54	54	54	54	48	48
Los Angeles							70.0	70.0							48	48
Memphis	40.0	42.0	42.0	42.0	50.0	55.0	70.0	100.0	54	54	54	54	48	48	48	48
Manchester							40.0	50.0							48	48
Milwaukee							65.0	75.0							52½	48
Minneapolis	33.5	33.5	33.5		40.0	40.0	72.5	90.0	59	59	59			54	54	48
Newark, N. J.	36.1	36.1	36.1	45.0	45.0	55.0	75.0	75.0	54	54	54	48	48	48	48	48
New Haven	33.3 35.0	33.3 35.0		42.5	50.0	60.0	60.0	80.0	54 59	54 59		48	48	48	48	48
New Orleans	38.9	38.9	38.9	43.8	50.0	68.8	80.0	80.0	54	54	54	48	48	48	48	48
New York	38.2 40.6	38.2 40.6	38.2 40.6	46.9	56.3	73.0 82.0	73.0	80.0	48 51	48 51	48	48	48	48	48	48
Omaha	40.0	40.0	40.0	40.0	45.0 50.0	60.0	70.0	85.0	54	54	54	54	54	48	48	48
Philadelphia	33.3	33.3	35.0	45.0	48.0	65.0 72.5	72.0 80.0	80.0	54	54	54	54	48	48	48	48
Portland, Oreg.	45.0	45.0	45.0	45.0	50.0	75.0	80.0	88.0	48	48	48	48	48	48	44	44
Richmond, Va.	35.5	35.5	35.5	35.5	37.5 51.0	57.0	75.0	75.0	55	55	55	55	55	50	48	48
St. Louis	33.0	37.0	37.0	37.0	44.0	60.0	70.0	85.0	54	54	54	54	54	48	48	48
St. Paul	33.5 35.0	33.5 35.0	35.0	40.0	40.0	40.0	72.5	90.0	54 59	54 59	54	54	54	54	48	44
Salt Lake City	44.0	44.0	43.0	43.0	56.3	62.5	75.0	87.5	48	48	54	54	48	48	44	64 48
San Francisco	43.8	43.8	43.8	50.0	50.0	62.5	80.0	90.0	48	48	48	48	48	64 48	44	44
Seattle	45.0	45.0	45.0	45.0	50.0	75.0	80.0	88.0	48	48	48	48	48	48	44	44
Washington	40.6	40.6	40.6 50.0	40.6 50.0	50.0 55.0	57.5 68.0	81.3 86.0	88.0	48	48	48	48	48	48	64 48	64 48

Molders, iron.

Atlanta	35.0	35.0	35.0	35.0	41.7	50.0	70.0	80.0	60	60	60	60	54	54	54	50
Baltimore	36.1	36.1	36.1	36.1	46.9	68.8	68.8	93.8	54	54	54	54	48	48	48	48
Birmingham	36.1	36.1	36.1	36.1	36.1 37.5	44.4 72.0	70.0 72.0	80.0	54	54	54	54	54	60	60	48
Boston	38.9	38.9	38.9	44.4	50.0	58.3	58.3	90.0	54	54	54	54	54	54	54	48
Buffalo	36.1	36.1	36.1	41.7	47.2	58.3	58.3	88.0	54	54	54	54	54	54	54	48
Chicago	44.4	44.4	44.4	50.0	56.3	68.8	80.0	105.0	54	54	54	48	48	48	48	48
Cincinnati	36.1	38.9	38.9	44.4	44.4	55.5	58.3	81.3	54	54	54	54	54	54	54	48
Cleveland	38.9	38.9	38.9	38.9	44.4	61.1	61.1	90.0	54	54	54	54	54	60 50	50	48
Denver	44.4	44.4	44.4	44.4	50.0	59.4	75.0	80.0	54	54	54	54	54	54	48	48
Detroit	38.9	38.9	38.9	44.4	50.0	61.1	80.0	100.0	54	54	54	54	54	54	48	48
Fall River	33.3	33.3	33.3	36.1	41.7	50.0	65.6	72.5	54	54	54	54	54	54	48	48
Indianapolis	36.1	36.1	36.1	38.9	44.4	55.6	55.6	90.0	54	54	54	54	54	54	54	48
Kansas City, Mo.	40.0	40.0	40.0	45.0	50.0	60.0	67.5	90.0	54	54	54	54	54	54	48	48
Little Rock	38.9	38.9	38.9	38.9	41.7	44.4	68.0	80.0	54	54	54	54	54	54	54	48
Los Angeles							80.0	87.5							48	48
Louisville					30.0	45.0	45.0	83.0					60	54	54	48
Manchester							72.5	72.5							48	48
Memphis	38.9	40.0	40.0	40.0	40.0	56.0	68.0	82.0	54	54	54	54	54	54	54	48
Minneapolis	36.7	38.9	38.9	38.9	44.4	55.6	72.5	87.5	54	54	54	54	54	54	54	48
Newark, N. J.	38.9	38.9	38.9	41.7	47.2	55.6	75.0	88.0	54	54	54	54	54	54	48	48

³³ 44 hours per week, June to September, inclusive.⁴⁴ 44 hours per week, June to August, inclusive.^{49½} 49½ hours per week, June to August, inclusive.⁵⁴ 54 hours per week, November to April, inclusive.

WAGES AND HOURS OF LABOR.

UNION SCALE OF WAGES AND HOURS OF LABOR, 1913 TO 1920, BY OCCUPATIONS—Continued.

Molders, iron—Concluded.

City.	Rate per hour (cents).								Hours per week.							
	1913	1914	1915	1916	1917	1918	1919	1920	1913	1914	1915	1916	1917	1918	1919	1920
New Orleans...	36.1	36.1	36.1	38.9	50.0	62.5	80.0	80.0	54	54	54	54	48	48	48	48
New York.....	38.9	41.7	41.7	41.7	47.2	52.8	75.0	88.0	54	54	54	54	54	54	54	48
Omaha.....	36.7	40.0	40.0	40.0	45.0	55.6	68.0	85.0	54	54	54	54	54	54	54	48
Philadelphia...	36.1	38.9	38.9	44.4	50.0	68.8	68.8	100.0	54	54	54	54	54	54	48	48
Pittsburgh....	44.4	44.4	44.4	44.4	50.0	65.6	75.0	93.8	54	54	54	54	48	48	48	48
Portland, Oreg.	41.7	37.5 (41.7)	41.7	41.7	56.3	72.5	87.5	93.8	54	54	54	54	48	48	44	44
Richmond, Va.	33.3	33.3	33.3	33.3	47.2	58.3	70.0	80.0	54	54	54	54	54	54	54	48
St. Louis.....	38.9	38.9	38.9	41.7	50.0	61.1	75.0	90.0	54	54	54	54	54	54	48	48
St. Paul.....	38.9	38.9	38.9	42.8	47.2	55.6	72.5	90.0	54	54	54	54	54	54	48	48
Salt Lake City.	41.7	41.7	41.7	44.4	56.3	62.5	75.0	87.5	54	54	54	54	48	48	63 48	68 48
San Francisco..	50.0	50.0	50.0	50.0	53.1	72.5	80.0	88.0	48	48	48	48	48	69 48	44	44
Scranton.....	25.0	27.5	27.5	27.5	38.9	55.6 (58.3)	65.0 (71.9)	79.0 (87.5)	60	60	60	60	54	54	48	48
Seattle.....	44.4	44.4	44.4	44.4	56.3	82.5	87.5	88.0	54	54	54	54	48	48	44	44
Washington....	.....	30.6	30.6	34.4	43.8	68.8	68.8	80.0	.....	54	54	48	48	48	48	48

Painters.

Atlanta.....	33.3	33.3	33.3	33.3	36.1	50.0	60.0	100.0	⁶⁹ 53	⁶⁹ 53	⁶⁹ 53	⁶⁹ 53	⁶⁹ 53	48	44	44
Baltimore.....	37.5	37.5	37.5	37.5	43.8	56.3	68.8	90.0	48	48	48	48	48	44	44	44
Birmingham...	45.0	45.0	45.0	45.0	50.0	62.5	75.0	87.5	48	48	48	48	44	44	44	44
Boston.....	50.0	50.0 (55.0)	55.0	60.5	62.5	75.0	82.5	100.0	44	44	44	40	40	40	40	40
Buffalo.....	43.8	46.9	46.9	46.9	50.0	56.3	62.5	87.5	48	48	⁶⁸ 48	⁶⁸ 48	⁶⁸ 48	70 48	⁷⁰ 48	70 48
Charleston, S.C.	25.0	25.0	25.0	25.0	25.0	31.3 (50.0)	50.0 (65.0)	65.0 (80.0)	48	48	48	48	48	48	48	48
Chicago.....	65.0	70.0	70.0	70.0	72.5	75.0	87.5	125.0	44	44	44	44	44	44	44	44
Cincinnati.....	50.0	50.0	50.0	55.0	55.0	60.0	62.5	87.5	44	44	44	44	44	44	44	44
Cleveland.....	50.0	50.0	50.0	55.0	55.0	67.5	75.0	112.5	44	44	44	44	44	44	44	44
Dallas.....	50.0	50.0	50.0	50.0	60.0	70.0	87.5	100.0	44	44	44	44	44	44	44	44
Denver.....	50.0	50.0	50.0	55.0	62.5	68.8	85.0	100.0	44	44	44	44	44	44	44	44
Detroit.....	45.0	45.0	45.0	50.0	60.0	70.0	80.0	100.0	48	48	48	48	44	44	44	44
Fall River.....	37.5	37.5	37.5	41.0	41.0	55.0	62.5	100.0	44	44	44	44	44	44	44	44
Indianapolis...	47.5	50.0	50.0	50.0	55.0	55.0	70.0	100.0	44	44	44	44	44	44	44	44
Jacksonville...	37.5	37.5	37.5	37.5	45.0	50.0	75.0	87.5	48	48	48	48	48	48	44	44
Kansas City, Mo.	60.0	60.0	60.0	60.0	60.0	70.0	82.5	100.0	44	44	44	44	44	44	44	44
Little Rock....	50.0	50.0	50.0	55.0	55.0	60.0	80.0	100.0	48	48	48	48	44	44	44	44
Los Angeles....	43.8	43.8	43.8	43.8	50.0	56.3	75.0	87.5	48	48	48	48	48	48	44	44
Louisville....	45.0	50.0	50.0	50.0	50.0	50.0	62.5	75.0	48	48	48	48	48	48	44	44
Manchester....	.....	31.3	31.3	37.5	37.5	50.0	62.5	80.0	.....	48	48	48	48	48	44	44
Memphis.....	50.0	52.5	52.5	52.5	60.0	62.5	75.0	100.0	44	44	44	44	44	44	44	44
Milwaukee....	50.0	50.0	50.0	50.0	55.0	60.0	70.0	85.0	44	44	44	44	44	44	44	44
Minneapolis...	50.0	50.0	50.0	50.0	55.0	62.5	70.0	100.0	44	44	44	44	44	44	44	44
Newark, N. J.	44.4	44.4	44.4	46.9	50.0	62.5	75.0	100.0	44	44	44	44	44	44	44	44
New Haven....	40.9	40.9	40.9	40.9	45.5	53.1	62.5	87.5	44	44	44	44	44	44	44	44
New Orleans...	40.0	40.0	40.0	40.0	40.0	50.0	65.0	75.0	48	48	48	48	48	48	44	44
New York.....	50.0	50.0	50.0	62.5	62.5	62.5	75.0	112.5	44	44	44	44	44	44	44	40
Omaha.....	50.0	50.0	50.0	55.0	62.5	62.5	75.0	100.0	44	44	44	44	44	44	44	44
Philadelphia...	42.5	42.5	42.5	42.5	45.0	60.0	75.0	100.0	44	44	44	44	44	44	44	44
Pittsburgh....	55.0	56.3	58.1	58.1	65.0	67.5	87.5	112.5	44	44	44	44	44	44	44	44
Portland, Oreg.	50.0	50.0	50.0	50.0	50.0	70.0	90.0	100.0	48	44	44	44	44	44	44	44
Providence....	45.5	45.5	45.5	45.5	50.0	62.5	62.5	90.0	44	44	44	44	44	44	44	44
Richmond, Va.	37.5	30.6	30.6	30.6	37.5	50.0	60.0	65.0	48	54	54	54	48	48	48	48
St. Louis.....	57.5	60.0	62.5	62.5	62.5	75.0	75.0	100.0	44	44	44	44	44	44	44	44
St. Paul.....	50.0	50.0	50.0	55.0	55.0	62.5	70.0	100.0	44	44	44	44	44	44	44	44

⁶⁷ 49½ hours per week, May 19 to September 15.

⁶⁸ 44 hours per week, June to August, inclusive.

⁶⁹ Work 53 hours, paid for 54.

⁷⁰ 44 hours per week, July to March, inclusive.

UNION SCALE OF WAGES AND HOURS OF LABOR, 1913 TO 1920, BY OCCUPATIONS—
Continued.*Painters—Concluded.*

City.	Rate per hour (cents).								Hours per week.							
	1913	1914	1915	1916	1917	1918	1919	1920	1913	1914	1915	1916	1917	1918	1919	1920
Salt Lake City.	56.3	56.3	56.3	62.5	75.0	75.0	90.0	100.0	44	44	44	44	44	44	44	44
San Francisco.	56.3	59.4	62.5	62.5	62.5	75.0	87.5	106.3	44	44	44	44	44	44	44	44
Scranton.	40.0	40.0	42.5	45.0	50.0	50.0	65.0	87.5	48	48	44	44	44	44	44	44
Seattle.	56.3	56.3	56.3	56.3	65.0	75.0	90.0	100.0	44	44	44	44	44	44	40	40
Washington.	50.0	50.0	50.0	50.0	56.3	75.0	75.0	90.0	44	44	44	44	44	44	44	44

Plasterers.

Atlanta.	45.0	45.0	45.0	45.0	45.0	50.0	60.0	100.0	53	53	53	53	53	49½	49½	44
Baltimore.	62.5	62.5	62.5	62.5	68.8	72.0	87.5	112.5	44	44	44	44	44	44	44	44
Birmingham.	62.5	62.5	62.5	62.5	62.5	62.5	75.0	75.0	44	44	44	44	44	44	44	44
Boston.	65.0	65.0	65.0	70.0	70.0	70.0	80.0	100.0	44	44	44	40	40	40	40	40
Buffalo.	60.0	60.0	60.0	60.0	65.0	70.0	85.0	100.0	48	71 44	71 44	71 44	44	44	44	72 40
Charleston, S.C.	40.0	40.0	40.0	40.0	40.0	50.6	75.0	100.0	73 53	73 53	73 53	73 53	73 53	48	48	48
Chicago.	75.0	75.0	75.0	75.0	75.0	81.3	87.5	125.0	44	44	44	44	44	44	44	44
Cincinnati.	68.8	75.0	75.0	75.0	75.0	75.0	87.5	100.0	44½	44½	44½	44½	44½	44½	44½	44½
Cleveland.	62.5	62.5	68.8	68.8	75.0	85.0	90.0	125.0	44	44	44	44	44	44	44	44
Dallas.	75.0	87.5	87.5	87.5	87.5	100.0	112.5	112.5	44	44	44	44	44	44	44	44
Denver.	75.0	75.0	75.0	75.0	87.5	87.5	87.5	125.0	44	44	44	44	44	44	44	44
Detroit.	68.8	68.8	68.8	68.8	75.0	75.0	87.5	125.0	44	44	44	44	44	44	44	44
Fall River.	55.0	60.0	60.0	60.0	65.0	75.0	85.0	115.0	48	48	48	44	44	44	44	44
Indianapolis.	62.5	65.0	68.8	68.8	72.0	75.0	87.5	100.0	44½	44½	44½	44½	44½	44½	44½	44
Jacksonville.	56.3	62.5	62.5	56.3	56.3	68.8	75.0	87.5	48	48	48	48	48	44	44	44
Kansas City, Mo.	75.0	75.0	75.0	75.0	75.0	87.5	100.0	120.0	44	44	44	44	44	44	44	44
Little Rock.	62.5	62.5	62.5	62.5	75.0	75.0	87.5	112.5	48	48	48	74 44	74 44	74 44	74 44	44
Los Angeles.	75.0	75.0	75.0	75.0	75.0	75.0	87.5	112.5	44	44	44	44	44	44	44	44
Louisville.	65.0	65.0	65.0	65.0	65.0	70.0	75.0	100.0	44	44	44	44	44	44	44	44
Manchester.	50.0	50.0	50.0	60.0	60.0	70.0	75.0	90.0	48	44	44	44	44	44	44	44
Memphis.	75.0	75.0	75.0	75.0	75.0	87.5	87.5	100.0	44	44	44	44	44	44	44	44
Milwaukee.	65.0	65.0	65.0	65.0	65.0	70.0	87.5	87.5	44	44	44	44	44	44	44	44
Minneapolis.	70.0	70.0	70.0	70.0	70.0	75.0	90.0	112.5	44	44	44	44	44	44	44	44
Newark, N. J.	65.0	65.0	65.0	70.0	75.0	75.0	87.5	125.0	44	44	44	44	44	44	44	44
New Haven.	60.0	60.0	60.0	60.0	65.0	70.0	82.5	100.0	44	44	44	44	44	44	44	44
New Orleans.	62.5	62.5	50.0	50.0	62.5	62.5	75.0	100.0	48	48	48	48	45	45	45	45
New York.	68.8	68.8	68.8	75.0	75.0	75.0	93.8	118.8	44	44	44	44	44	44	44	44
Omaha.	75.0	75.0	75.0	75.0	75.0	80.0	87.5	112.5	44	44	44	44	44	44	44	44
Philadelphia.	62.5	62.5	62.5	65.0	70.0	75.0	80.0	125.0	44	44	40	40	40	40	40	40
Pittsburgh.	62.5	68.8	71.9	75.0	75.0	75.0	85.0	115.0	44	44	44	44	44	44	44	44
Portland, Oreg.	75.0	75.0	75.0	75.0	75.0	87.5	100.0	112.5	44	44	44	44	44	44	44	44
Providence.	62.5	62.5	62.5	62.5	68.8	68.8	80.0	100.0	44	44	44	44	40	40	40	40
Richmond, Va.	37.5	50.0	50.0	50.0	50.0	50.0	62.5	75.0	48	44	44	44	44	44	44	44
St. Louis.	75.0	75.0	75.0	75.0	75.0	87.5	100.0	125.0	44	44	44	44	44	44	44	44
St. Paul.	62.5	62.5	62.5	70.0	70.0	75.0	90.0	112.5	44	44	44	44	44	44	44	44
Salt Lake City.	75.0	75.0	75.0	75.0	87.5	87.5	100.0	125.0	44	44	44	44	44	44	44	44
San Francisco.	87.5	87.5	87.5	87.5	87.5	100.0	112.5	125.0	44	44	44	40	40	40	40	40
Scranton.	55.0	55.0	60.0	65.0	65.0	70.0	80.0	100.0	44	44	44	44	44	44	44	44
Seattle.	75.0	75.0	75.0	75.0	87.5	100.0	112.5	125.0	44	44	44	40	40	40	40	40
Washington.	62.5	62.5	62.5	62.5	70.0	70.0	87.5	100.0	44	44	44	44	44	44	44	44

Plasterers' laborers.

Boston.	{40.0 41.5}	40.0	{41.5 45.0}	45.0	45.0	50.0	60.0	80.0	44	44	44	40	40	40	40	40
Chicago.	48.0	50.0	50.0	50.0	50.0	56.3	62.5	106.3	44	44	44	44	44	44	44	44
Cincinnati.	45.0	45.0	45.0	45.0	50.0	50.0	65.0	85.0	45	45	45	45	45	45	45	45
Cleveland.	35.0	35.0	35.0	35.0	45.0	55.0	57.5	87.5	48	48	44	44	44	44	44	44
Dallas.	30.0	35.0	.....	.....	.....	35.0	35.0	50.0	44	44	.....	.....	.....	48	48	44

⁷¹ 48 hours per week, Nov. 16 to Mar. 15.⁷² 44 hours per week, Nov. 14 to May 14.⁷³ Work 53 hours, paid for 54.⁷⁴ 48 hours per week, October to March, inclusive.

WAGES AND HOURS OF LABOR.

UNION SCALE OF WAGES AND HOURS OF LABOR, 1913 TO 1920, BY OCCUPATIONS—
Continued.

Plasterers' laborers—Concluded.

City.	Rate per hour (cents).								Hours per week.							
	1913	1914	1915	1916	1917	1918	1919	1920	1913	1914	1915	1916	1917	1918	1919	1920
Denver.....	43.8	43.8	43.8	43.8	50.0	59.4	68.8	81.3	44	44	44	44	44	44	44	44
Detroit.....	37.5	43.0	43.8	43.8	50.0	50.0	75.0	100.0	44	44	44	44	44	44	44	44
Indianapolis.....	.....	.....	.....	42.5	45.0	50.0	55.0	75.0	.....	.....	44	44	44	44	44	44
Jacksonville.....	.....	.....	.....	.....	.....	.....	38.0	45.0	.....	.....	.....	.....	.....	.....	44	44
Kansas City, Mo.....	37.5	45.0	45.0	45.0	50.0	55.0	68.8	90.0	44	44	44	44	44	44	44	44
Los Angeles.....	61.4	56.3	56.3	56.3	50.0	62.5	75.0	100.0	44	44	44	44	44	44	44	44
Louisville.....	38.0	38.0	38.0	38.0	45.0	45.0	55.0	55.0	44	44	44	44	44	44	44	47
Memphis.....	32.5	37.5	.....	.....	50.0	50.0	50.0	75.0	44	44	.....	.....	.....	44	44	44
Milwaukee.....	32.5	35.0	37.5	37.5	42.9	50.0	55.0	70.0	48	48	48	48	48	48	76 44	44
Minneapolis.....	40.6	40.6	⁷⁶ 45.0	⁷⁶ 45.0	50.0	55.0	60.0	85.0	48	44	44	44	44	44	44	44
New Haven.....	.....	.....	.....	.....	.....	.....	.....	87.5	.....	.....	.....	.....	.....	.....	.....	44
Newark, N. J.....	.....	.....	35.0	37.5	45.0	45.0	50.0	87.5	.....	.....	44	44	44	44	44	44
New Orleans.....	22.5	22.5	22.5	22.5	28.3	28.3	35.0	50.0	48	48	48	48	48	45	45	45
Philadelphia.....	40.6	40.6	40.6	43.8	46.9	56.3	62.5	87.5	44	44	44	44	44	44	44	44
Portland, Ore.....	⁷⁶ 50.0	⁷⁶ 50.0	⁷⁶ 50.0	⁷⁶ 50.0	50.0	62.5	75.0	93.8	48	48	48	48	48	48	48	44
Providence.....	.....	.....	.....	45.0	50.0	55.0	55.0	75.0	.....	.....	.....	.....	44	44	44	44
Richmond, Va.....	.....	.....	.....	.....	.....	.....	50.0	50.0	.....	.....	.....	.....	.....	.....	45	45
St. Louis.....	⁷⁷ 56.3	⁷⁷ 56.3	56.3	56.3	56.3	62.5	75.0	87.5	44	44	44	44	44	44	44	44
Salt Lake City.....	56.3	56.3	56.3	56.3	62.5	68.8	75.0	100.0	44	44	44	44	44	44	44	44
San Francisco.....	62.5	62.5	62.5	62.5	62.5	68.8	87.5	106.3	44	44	44	44	44	44	44	44
Seranton.....	.....	.....	.....	35.0	35.0	35.0	50.0	58.5	.....	.....	.....	.....	44	44	44	44
Seattle.....	50.0	50.0	50.0	50.0	62.5	75.0	87.5	87.5	44	44	44	44	44	44	40	40
Washington.....	31.3	31.3	31.3	31.3	37.5	50.0	50.0	75.0	44	44	44	44	44	44	44	44

Plumbers.

Atlanta.....	44.4	44.4	44.4	44.4	44.4	68.8	75.0	112.5	⁷⁸ 53	⁷⁸ 53	⁷⁸ 53	⁷⁸ 53	⁷⁸ 53	44	44	44
Baltimore.....	50.0	50.0	50.0	50.0	56.3	68.8	75.0	87.5	48	48	48	48	48	44	44	44
Birmingham.....	68.8	75.0	75.0	75.0	75.0	87.5	112.5	150.0	44	44	44	44	44	44	44	44
Boston.....	60.0	65.0	65.0	65.0	68.8	75.0	80.0	100.0	44	44	44	44	44	44	44	44
Buffalo.....	56.3	56.3	56.3	56.3	62.5	68.8	75.0	100.0	48	⁷⁹ 48	⁷⁹ 48	⁷⁹ 48	⁷⁹ 48	44	44	44
Charleston, S. C.....	.....	43.8	43.8	43.8	50.0	59.0	75.0	100.0	.....	48	48	48	48	48	48	44
Chicago.....	75.0	75.0	75.0	75.0	75.0	75.0	84.4	125.0	44	44	44	44	44	44	44	44
Cincinnati.....	61.8	61.8	61.8	61.8	65.6	65.6	75.0	100.0	44 ¹	44 ¹	44 ¹	44	44	44	44	44
Cleveland.....	62.5	62.5	62.5	68.8	75.0	81.3	90.0	100.0	44	44	44	44	44	44	44	44
Dallas.....	68.8	75.0	75.0	75.0	81.3	87.5	100.0	125.0	44	44	44	44	44	44	44	44
Denver.....	62.5	62.5	62.5	62.5	75.0	87.5	87.5	100.0	44	44	44	44	44	44	44	44
Detroit.....	56.3	56.3	60.0	62.5	68.8	75.0	90.0	125.0	48	48	48	48	44	44	44	44
Fall River.....	43.8	43.8	43.8	50.0	50.0	56.3	67.5	100.0	48	48	48	44	44	44	44	44
Indianapolis.....	62.5	62.5	62.5	62.5	67.5	75.0	87.5	100.0	44	44	44	44	44	44	44	44
Jacksonville.....	62.5	62.5	62.5	62.5	62.5	75.0	80.0	93.8	48	48	48	48	48	44	44	44
Kansas City, Mo.....	62.5	68.8	68.8	75.0	75.0	87.5	100.0	100.0	48	44	44	44	44	44	44	44
Little Rock.....	56.3	62.5	62.5	62.5	68.8	75.0	87.5	125.0	⁸⁰ 48	⁸¹ 44	⁸¹ 44	⁸¹ 44	44	44	44	44
Los Angeles.....	56.3	56.3	56.3	56.3	62.5	68.8	81.3	112.5	48	48	48	48	48	48	44	44
Louisville.....	60.0	60.0	60.0	60.0	60.0	70.0	70.0	80.0	44	44	44	44	44	44	44	44
Manchester.....	31.3	31.3	31.3	47.7	47.7	50.0	70.0	100.0	48	48	48	44	44	44	44	44
Memphis.....	62.5	62.5	62.5	62.5	62.5	81.3	93.8	125.0	48	48	48	48	48	48	44	44
Milwaukee.....	62.5	62.5	62.5	62.5	62.5	68.8	75.0	87.5	44	44	44	44	44	44	44	44
Minneapolis.....	56.3	62.5	62.5	62.5	62.5	68.8	75.0	100.0	48	44	44	44	44	44	44	44
Newark, N. J.....	62.5	62.5	62.5	62.5	62.5	75.0	87.5	112.5	44	44	44	44	44	44	44	44
New Haven.....	50.0	50.0	54.5	54.5	54.5	62.5	75.0	87.5	44	44	44	44	44	44	44	44

⁷⁶ 48 hours per week, November to April, inclusive.

⁷⁶ For tenders.

⁷⁷ For helpers.

⁷⁸ Work 53 hours, paid for 54.

⁷⁹ 44 hours per week, June to August, inclusive.

⁸⁰ 44 hours per week, June to September, inclusive.

⁸¹ 48 hours per week, November to April, inclusive.

UNION SCALE OF WAGES AND HOURS OF LABOR, 1913 TO 1920, BY OCCUPATIONS—
Continued.

Plumbers—Concluded.

City.	Rate per hour (cents).								Hours per week.							
	1913	1914	1915	1916	1917	1918	1919	1920	1913	1914	1915	1916	1917	1918	1919	1920
New Orleans.....	56.3	56.3	56.3	56.3	56.3	68.8	80.0	90.0	48	48	48	48	48	48	48	48
New York.....	68.8	68.8	68.8	68.8	68.8	75.0	75.0	112.5	44	44	44	44	44	44	44	44
Omaha.....	68.3	68.3	68.3	68.3	75.0	75.0	87.5	125.0	44	44	44	44	44	44	44	44
Philadelphia.....	43.8	43.8	43.8	43.8	43.8	56.3	62.5	80.0	44	44	44	44	44	44	44	44
Pittsburgh.....	50.0	50.0	50.0	50.0	50.0	62.5	75.0	93.8	44	44	44	44	44	44	44	44
Pittsburgh.....	62.5	62.5	62.5	62.5	62.5	75.0	75.0	106.3	44	44	44	44	44	44	44	44
Portland, Oreg.....	75.0	75.0	75.0	75.0	75.0	81.3	100.0	112.5	44	44	44	44	44	44	44	44
Providence.....	56.3	56.3	56.3	56.3	62.5	75.0	75.0	100.0	44	44	44	44	44	44	44	44
Richmond, Va.....	50.0	50.0	50.0	50.0	50.0	62.5	75.0	75.0	48	48	48	48	48	48	48	48
St. Louis.....	66.3	75.0	75.0	75.0	75.0	81.3	100.0	125.0	44	44	44	44	44	44	44	44
St. Paul.....	62.5	62.5	62.5	62.5	62.5	68.8	75.0	87.5	44	44	44	44	44	44	44	44
Salt Lake City.....	75.0	75.0	75.0	75.0	75.0	87.5	100.0	112.5	44	44	44	44	44	44	44	44
San Francisco.....	75.0	75.0	75.0	75.0	81.3	87.5	100.0	125.0	44	44	44	44	44	44	44	44
Scranton.....	50.0	53.1	53.1	53.8	53.8	62.5	75.0	87.5	48	48	⁸² 44	44	44	44	44	44
Seattle.....	81.3	75.0	75.0	75.0	81.3	90.0	100.0	112.5	44	44	44	44	44	44	44	40
Washington.....	50.0	56.3	56.3	56.3	56.3	75.0	75.0	100.0	48	48	48	44	44	44	44	44

Sheet-metal workers.

Atlanta.....	33.3	33.3	33.3	33.3	33.3	60.0	60.0	60.0	53	53	50	50	50	50	50	48
Baltimore.....	40.0	40.0	40.0	40.0	45.8	62.5	80.0	80.0	48	48	48	48	48	48	44	44
Birmingham.....	55.0	55.0	55.0	50.0	50.0	65.0	75.0	100.0	44	44	44	44	44	44	44	44
Boston.....	55.0	55.0	55.0	60.0	60.0	70.0	80.0	100.0	44	44	44	44	44	44	44	44
Buffalo.....	45.0	50.0	50.0	50.0	50.0	56.3	62.5	87.5	48	48	⁷⁹ 48	⁷⁹ 48	⁷⁹ 48	⁷⁹ 48	44	44
Chicago.....	65.0	68.8	68.8	70.0	70.0	70.0	75.0	125.0	44	44	44	44	44	44	44	44
Cincinnati.....	45.0	45.0	50.0	50.0	50.0	52.5	56.0	70.0	44	44	44	44	44	48	48	48
Cleveland.....	45.0	45.0	50.0	50.0	60.0	80.0	85.0	125.0	48	48	48	44	44	44	44	44
Dallas.....	50.0	56.3	62.5	62.5	68.8	75.0	87.5	100.0	48	44	44	44	44	44	44	44
Denver.....	56.3	56.3	56.3	56.3	62.5	75.0	87.5	100.0	44	44	44	44	44	44	44	44
Detroit.....	40.0	50.0	50.0	50.0	60.0	70.0	80.0	125.0	48	48	48	48	44	44	44	44
Fall River.....	.....	.....	.....	37.5	43.8	50.0	62.5	100.0	.....	.....	.....	.....	44	44	44	44
Indianapolis.....	47.5	50.0	55.0	55.0	57.5	60.0	60.0	100.0	48	44	44	44	44	44	44	44
Jacksonville.....	.....	.....	.....	.....	.....	80.0	80.0	.....	.....	.....	.....	.....	.....	.....	48	48
Kansas City, Mo.....	57.5	60.0	62.5	62.5	62.5	67.5	70.0	100.0	44	44	44	44	44	44	44	44
Little Rock, Ark.....	50.0	52.5	52.5	52.5	60.0	65.0	80.0	100.0	48	48	48	48	48	48	48	48
Los Angeles.....	56.3	56.3	56.3	56.3	56.3	68.5	68.5	100.0	44	44	44	44	44	44	44	44
Louisville.....	40.0	42.5	45.0	45.0	47.5	50.0	65.0	80.0	48	48	44	44	44	44	44	44
Manchester.....	34.4	34.4	34.4	34.4	34.4	37.5	44.3	47.7	48	48	48	48	48	48	44	44
Memphis.....	45.0	50.0	50.0	50.0	53.1	62.5	75.0	100.0	48	48	48	48	48	48	44	44
Milwaukee.....	42.5	45.0	47.5	50.0	52.5	60.0	60.0	67.5	48	⁸⁵ 48	⁸⁵ 48	⁸⁵ 48	⁸⁶ 48	⁸⁶ 48	⁸⁶ 48	⁸⁶ 48
Minneapolis.....	50.0	50.0	50.0	50.0	50.0	56.3	70.0	100.0	48	48	48	48	48	44	44	44
Newark, N. J.....	60.0	60.0	60.0	60.0	62.5	75.0	87.5	100.0	44	44	44	44	44	44	44	44
New Haven.....	47.7	47.7	47.7	50.0	54.5	59.1	75.0	87.5	44	44	44	44	44	44	44	44
New Orleans.....	.....	40.0	40.0	40.0	45.0	68.8	80.0	100.0	.....	48	48	48	44	44	44	44
New York.....	59.4	62.5	62.5	62.5	62.5	70.0	75.0	112.5	44	44	44	44	44	44	44	44
Omaha.....	42.5	42.5	42.5	42.5	50.0	68.0	75.0	100.0	44	44	44	44	44	44	44	44
Philadelphia.....	50.0	50.0	50.0	50.0	56.3	70.0	75.0	110.0	44	44	44	44	44	44	44	44
Pittsburgh.....	55.0	55.0	57.5	60.0	60.0	70.0	80.0	90.0	44	44	44	44	44	44	44	44
Portland, Oreg.....	56.3	56.3	56.3	56.3	65.6	82.5	86.0	100.0	44	44	44	44	44	44	44	44
Providence.....	46.0	45.0	48.0	50.0	52.0	57.0	65.0	100.0	44	44	44	44	44	44	44	44
Richmond, Va.....	.....	.....	.....	41.9	50.0	70.0	80.0	.....	.....	.....	44	44	48	48	48	48
St. Louis.....	60.0	60.0	60.0	60.0	62.5	65.0	75.0	85.0	44	44	44	44	44	44	44	44
St. Paul.....	50.0	50.0	50.0	50.0	50.0	56.3	70.0	100.0	48	48	48	48	44	44	44	44
Salt Lake City.....	57.5	57.5	62.5	62.5	62.5	62.5	87.5	100.0	44	44	44	44	44	44	44	44

⁷⁹ 44 hours per week, June to August, inclusive.⁸² 48 hours per week, October to April, inclusive.⁸³ 54 hours per week, July to August, inclusive.⁸⁴ 44 hours per week, July to September, inclusive.⁸⁵ 44 hours per week, June 15 to Sept. 15.⁸⁶ 44 hours per week, June to August, inclusive.

WAGES AND HOURS OF LABOR.

UNION SCALE OF WAGES AND HOURS OF LABOR, 1913 TO 1920, BY OCCUPATIONS—
Continued.

Sheet-metal workers—Concluded.

City.	Rate per hour (cents).								Hours per week.							
	1913	1914	1915	1916	1917	1918	1919	1920	1913	1914	1915	1916	1917	1918	1919	1920
San Francisco..	68.8	68.8	68.8	68.8	75.0	82.5	100.0	112.5	44	44	44	44	44	44	44	44
Scranton.....	43.8	46.9	46.9	46.9	50.0	56.3	75.0	87.5	48	48	44	44	44	44	44	44
Seattle.....	56.3	62.5	62.5	62.5	68.8	82.5	90.0	100.0	44	44	44	44	44	44	44	44
Washington....	50.0	50.0	50.0	50.0	56.3	70.0	75.0	92.5	44	44	44½	44½	44½	44	44	44

Stonecutters.

Atlanta.....	50.0	50.0	50.0	50.0	50.0	62.5	75.0	100.0	48	48	48	48	44	44	44	44
Baltimore.....	50.0	50.0	50.0	56.3	56.3	56.3	75.0	100.0	44½	44½	44½	44	44	44	44	44
Birmingham...	50.0	50.0	50.0	50.0	50.0	62.5	62.5	90.0	44	44	44	44	44	44	44	44
Boston.....	56.3	56.3	56.3	56.3	62.5	70.0	70.0	100.0	44	44	44	44	44	44	44	44
Buffalo.....	56.3	56.3	56.3	56.3	62.5	62.5	75.0	100.0	48	48	48	44	44	44	44	44
Chicago.....	62.5	62.5	62.5	62.5	70.0	70.0	81.3	125.0	44	44	44	44	44	44	44	44
Cincinnati....	56.3	56.3	60.0	62.5	65.0	70.0	77.5	115.0	44½	44½	44½	44½	44	44	44	44
Cleveland.....	60.0	62.5	62.5	62.5	70.0	77.5	80.0	112.5	44	44	44	44	44	44	44	44
Dallas.....	62.5	62.5	62.5	62.5	75.0	75.0	87.5	100.0	44	44	44	44	44	44	44	44
Denver.....	62.5	62.5	62.5	62.5	62.5	75.0	87.5	100.0	44	44	44	44	44	44	44	44
Detroit.....	62.5	62.5	62.5	65.0	70.0	70.0	80.0	125.0	44	44	44	44	44	44	44	44
Indianapolis...	56.3	56.3	56.3	56.3	62.5	62.5	75.0	100.0	44	44	44	44	44	44	44	44
Jacksonville...	50.0	50.0	50.0	50.0	50.0	50.0	75.0	75.0	45	45	45	45	45	45	45	45
Kansas City, Mo.	56.3	62.5	62.5	62.5	62.5	62.5	75.0	100.0	44	44	44	44	44	44	44	44
Little Rock....	55.0	55.0	55.0	55.0	55.0	60.0	65.0	100.0	44	44	44	44	44	44	44	44
Louisville....	56.3	56.3	56.3	56.3	60.0	60.0	75.0	100.0	48	48	48	44	44	44	44	44
Memphis.....	65.0	65.0	65.0	65.0	65.0	75.0	75.0	100.0	44	44	44	44	44	44	44	44
Minneapolis...	56.3	62.5	62.5	62.5	62.5	62.5	75.0	87.5	44	44	44	44	44	44	44	44
Newark, N. J..	68.8	68.8	68.8	68.8	68.8	68.8	84.4	112.5	44	44	44	44	44	44	44	44
New Haven....	56.3	56.3	56.3	56.3	56.3	60.0	60.0	82.5	44	44	44	44	44	44	44	44
New York.....	68.8	68.8	68.8	68.8	68.8	68.8	84.4	112.5	44	44	44	44	44	44	44	44
Omaha.....	58.8	58.8	58.8	58.8	62.5	67.5	75.0	100.0	44	44	44	44	44	44	44	44
Philadelphia...	50.0	53.0	53.0	53.0	65.0	65.0	82.5	135.0	44	44	44	44	44	44	44	44
Pittsburgh....	50.0	55.0	56.3	62.5	62.5	66.0	75.0	85.0	44	44	44	44	44	44	44	44
Richmond....	54.5	54.5	54.5	54.5	54.5	62.5	75.0	87.5	44	44	44	44	44	44	44	44
St. Louis.....	56.3	62.5	62.5	62.5	62.5	70.0	85.0	100.0	44	44	44	44	44	44	44	44
St. Paul.....	56.3	60.0	60.0	60.0	62.5	62.5	75.0	87.5	44	44	44	44	44	44	44	44
San Francisco..	70.0	70.0	70.0	70.0	70.0	70.0	100.0	100.0	44	44	44	44	44	44	44	44
Scranton.....	50.0	50.0	50.0	50.0	50.0	56.3	60.0	90.0	48	48	48	44	44	44	44	44
Washington....	54.0	54.0	54.0	56.3	56.3	65.0	87.5	100.0	44	44	44	44	44	44	44	44

Structural-iron workers.

Atlanta.....	62.5	62.5	62.5	62.5	62.5	75.0	80.0	95.0	44	44	44	44	44	44	44	44
Baltimore.....	56.3	56.3	56.3	62.5	62.5	75.0	100.0	125.0	44	44	44	44	44	44	44	44
Birmingham...	62.5	62.5	62.5	62.5	62.5	75.0	80.0	100.0	44	44	44	44	44	44	44	44
Boston.....	62.5	62.5	62.5	62.5	68.8	80.0	80.0	100.0	44	44	44	44	44	44	44	44
Buffalo.....	60.0	62.5	62.5	62.5	62.5	70.0	85.0	100.0	48	48	48	48	48	44	44	44
Chicago.....	68.0	68.0	68.0	68.0	69.0	70.0	87.5	125.0	44	44	44	44	44	44	44	44
Cincinnati....	62.5	62.5	62.5	62.5	65.0	75.0	75.0	100.0	44½	44½	44½	44½	44	44	44	44
Cleveland.....	65.0	70.0	70.0	70.0	80.0	90.0	100.0	125.0	44	44	44	44	44	44	44	44
Dallas.....	62.5	62.5	67.5	67.5	67.5	75.0	75.0	100.0	44	44	44	44	44	44	44	44
Denver.....	56.3	56.3	62.5	62.5	70.0	75.0	87.5	100.0	44	44	44	44	44	44	44	44
Detroit.....	60.0	65.0	65.0	65.0	65.0	80.0	90.0	125.0	48	48	48	44	44	44	44	44
Indianapolis...	65.0	68.0	70.0	70.0	75.0	75.0	85.0	125.0	44	44	44	44	44	44	44	44
Kansas City, Mo.	62.5	65.0	68.8	68.8	68.8	75.0	90.0	110.0	44	44	44	44	44	44	44	44
Little Rock....							87.5	100.0								44
Los Angeles...	50.0	50.0	50.0	50.0	50.0	62.5	75.0	87.5	48	48	48	48	48	48	44	44

⁸⁷ 44 hours per week, June to September, inclusive.

⁸⁸ 44 hours per week, June to September, inclusive.

⁸⁹ 48 hours per week, December to March, inclusive.

⁹¹ 48 hours per week, October to April, inclusive.

⁹² 48 hours per week, October to March, inclusive.

UNION SCALE OF WAGES AND HOURS OF LABOR, 1913 TO 1920, BY OCCUPATIONS—
Concluded.*Structural-iron workers—Concluded.*

City.	Rate per hour (cents).								Hours per week.							
	1913	1914	1915	1916	1917	1918	1919	1920	1913	1914	1915	1916	1917	1918	1919	1920
Louisville.....	50.0	50.0	50.0	50.0	60.0	70.0	80.0	100.0	48	44	44	44	44	44	44	44
Manchester.....								100.0								44
Memphis.....	62.5	62.5	65.0	65.0	65.0	75.0	87.5	100.0	44	44	44	44	44	44	44	44
Milwaukee.....	56.3	62.5	62.5	62.5	62.5	70.0	80.0	100.0	⁸⁹ 44	⁹³ 44	⁹³ 44	⁹³ 44	⁹³ 44	⁹⁰ 44	44	44
Minneapolis.....	56.3	62.5	62.5	62.5	62.5	68.8	87.5	87.5	48	⁹⁴ 44	⁹⁴ 44	⁹⁴ 44	44	44	44	44
Newark, N. J.....	62.5	62.5	62.5	68.8	72.5	75.0	87.5	112.5	44	44	44	44	44	44	44	44
New Haven.....	62.5	62.5	62.5	62.5	62.5	80.0	92.5	106.3	44	44	44	44	44	44	44	44
New Orleans.....	62.5	62.5	62.5	62.5	62.5	75.0	75.0	100.0	44	44	44	44	44	44	44	44
New York.....	62.5	62.5	62.5	66.3	68.8	80.0	87.5	112.5	44	44	44	44	44	44	44	44
Omaha.....	58.8	60.0	62.5	65.0	68.8	75.0	90.0	115.0	48	48	⁹³ 44	⁹³ 44	⁹² 44	44	44	44
Philadelphia.....	60.0	60.0	60.0	60.0	70.0	92.5	92.5	112.5	44	44	44	44	44	44	44	44
Pittsburgh.....	62.5	62.5	62.5	62.5	70.0	87.5	100.0	100.0	44	44	44	44	44	44	44	44
Portland, Oreg.....	62.5	62.5	62.5	62.5	70.0	87.5	100.0	112.5	44	44	44	44	44	44	44	44
Providence.....	56.3	62.5	62.5	62.5	68.8	80.0	92.5	100.0	44	44	44	44	44	44	44	44
Richmond, Va.....	56.3	56.3	62.5	62.5	62.5	80.0	92.5	100.0	44	44	44	44	44	44	44	44
St. Louis.....	65.0	65.0	65.0	67.5	70.0	80.0	92.5	125.0	44	44	44	44	44	44	44	44
St. Paul.....	56.3	62.5	62.5	62.5	62.5	68.8	80.0	100.0	48	⁸⁹ 48	⁸⁹ 48	⁸⁹ 48	⁸⁹ 48	⁸⁹ 48	44	44
Salt Lake City.....	62.5	62.5	62.5	62.5	68.8	81.3	100.0	112.5	44	44	44	44	44	44	44	44
San Francisco.....	75.0	75.0	75.0	75.0	75.0	87.5	100.0	112.5	44	44	44	44	44	44	44	44
Scranton.....	56.3	56.3	56.3	62.5	62.5	68.8	87.5	100.0	48	48	48	⁸⁹ 48	⁸⁹ 48	⁸⁹ 48	44	44
Seattle.....	62.5	62.5	62.5	62.5	62.5	87.5	100.0	112.5	44	44	44	44	44	44	44	40
Washington.....	56.3	62.5	62.5	62.5	70.0	80.0	92.5	98.0	44	44	44	44	44	44	44	44

⁸⁹ 44 hours per week, June to September, inclusive.⁹⁰ 48 hours per week, December to March, inclusive.⁹³ 48 hours per week, November to April, inclusive.⁹⁴ 48 hours per week, September to April, inclusive.

Award of the Anthracite Coal Commission and Resultant Wage Rates.

ON August 30 the President made public the report, findings, and award of the Anthracite Coal Commission appointed by him on June 3 last. The decisions of the commission affect approximately 175,000 mine workers employed in the anthracite mining industry.

Since the award of the earlier anthracite commission known as the Anthracite Coal Strike Commission, promulgated in 1903, wages and conditions of labor in the anthracite industry have been fixed by joint agreements between the operators and the miners. The original award continued in force for a period of three years from April 1, 1903, to March 31, 1906. This award fixed wages for the period covered and provided for a board of conciliation and a method of selecting umpires for the arbitration of disputes arising during the life of the agreement. In 1906 this agreement was extended for a second period of three years, or until April 1, 1909. At the expiration of this term another agreement extended the award for a third period, terminating March 31, 1912. After a brief suspension of operations a new agreement was signed on May 20, 1912, providing for an extension of the 1903 award and subsequent modifications for four years, or until March 31, 1916. This agreement provided local conciliation machinery in addition to that already set up, granted a general increase of 10 per cent in wages, and made certain changes in working conditions. The next agreement, signed May 5, 1916, continued with some modifications

the terms and provisions of the award of the Anthracite Coal Strike Commission and subsequent agreements modifying or supplementing it, until March 31, 1920. This agreement changed the working day established by the commission from 9 to 8 hours and specified increases in wages of 3 per cent to day men whose hours were reduced from 9 to 8, and of 7 per cent to contract miners and laborers, to firemen, and to day men who continued working 9 hours or more per day.

By reason of conditions which arose as a result of the war it was deemed advisable by operators and miners, acting in conjunction with the United States Fuel Administration, to modify this agreement, and three supplementary contracts increasing the wages of miners but maintaining other conditions of the 1916 agreement were made during the four years of its existence. These supplementary agreements were executed on April 25, 1917, November 17, 1917, and November 15, 1918, and provided for a total increase of 40 per cent for contract miners, 25 per cent plus \$1 per day for consideration miners, and an increase of \$1.80 to \$2.20 per day for day men and monthly employees.

The demands upon which the recent award was based were formulated at the convention of the anthracite miners held in August, 1919. About two-thirds of the anthracite miners, organized as districts 1, 7, and 9 of the United Mine Workers of America, were represented. The demands formulated at this time setting forth the changes which the miners desired in the 1920 agreement, were presented at a joint conference of representatives of anthracite operators and mine workers held in New York City on March 9, 1920. The demands of the mine workers were referred by the joint conference to a subscale committee of four operators and four mine workers to consider and report back to the joint conference a definite recommendation on all the demands that were presented. This subscale committee which first met on March 11, 1920, was unable to reach an agreement, and on April 29 Secretary of Labor Wilson invited the committee to meet him in Washington. The Washington conference was likewise unable to come to an understanding, and on May 21, 1920, the President suggested the appointment of a commission to hear and decide the matters in dispute. Both operators and miners accepted the President's offer, agreed that there should be no strikes or lock-outs pending the decision, and promised to abide by the decision of the commission. On June 3 the Anthracite Coal Commission was appointed by the President.¹ The commission met in Scranton, Pa., on June 24. Public hearings were held at which both parties submitted testimony. The commission's decisions, announced on August 30, were not unanimous, the labor member dissenting and presenting a minority report setting forth reasons for his dissension.

The Majority Report.

THE following is the full text of the majority report as signed by W. O. Thompson, president of Ohio State University, chairman of the commission, representing the public, and by W. L. Connell, Scranton, Pa., representing the operators:

The public interest in the award centers chiefly around the wages determined upon and the effect of these wages upon prices. The commission has sought to be conservative in the award while making provision for a substantial improvement in the situa-

¹ For account of the appointment and personnel of this commission see MONTHLY LABOR REVIEW, July, 1920, p. 53.

tion of the miner. The award is made with the primary purpose of making the position of the men performing common ordinary labor more tolerable and of preserving the differentials between the several classes of labor. The commission declines to commit itself to an award which could justly be considered as an encouragement to the so-called "vicious spiral" in prices. This award while providing improved conditions for the employees offers no justification for any advance in the retail prices of coal, but on the other hand is consistent with a decline in prices. The award has not passed a great burden along to the consumer of coal. Any sharp advance in the retail price of coal could not be charged to the operators, the miners, or the award.

In order that the possibilities of this award may be realized it is important that there be the heartiest spirit of cooperation by all parties. It assumes that the operators will use every effort to keep the mines in active operation and thus afford the miner opportunity for regularity of employment. Much emphasis in the hearings was given to the statement that the anthracite industry had become substantially a continuous industry. It is important that this statement be realized in experience, as it affects both the annual earnings and the annual production. In one of these the miner is vitally concerned and in the other the public is profoundly interested.

Coal mining in the past has suffered from intermittency more than most other industries. Irregularity in service would in most industries be the cause of dismissal. It is not so in mining. This award is made upon the assumption of increasing regularity of the mines and of the miner. If, for any reason, or for a number of reasons combined, this regularity should fail the award will be disappointing. The commission indulges the hope that the improved opportunity will result in developing regularity of employment, greater earnings for the miners and a lower cost of production for the operators. This points the way to a reduced cost of coal to the consumer while maintaining the earnings of the miner and the reasonable profits of the operator.

The terms of the award are given in detail as follows:

I. The commission adjudges and awards: That the terms and provisions of the award of the Anthracite Coal Strike Commission and subsequent agreements made in modification thereof, or supplemental thereto, as well as the rulings and decisions of the board of conciliation, shall be ratified and continued, excepting in so far as they are changed by the terms of the awards of this commission.

II. The commission adjudges and awards: That the increases provided in the awards of the commission hereinafter set forth shall be paid to the legal representatives of such employees as may have died since April 1, 1920.

Demand No. 1.

(1) We demand that the next contract be for a period not exceeding two (2) years and that the making of individual agreements and contracts in the mining of coal shall be prohibited.

The commission adjudges and awards:

(a) That item one of this demand being agreed to by both operators and miners be answered in the affirmative and made a part of the report.

(b) That concerning item two, the commission holds that the right of contract can not be denied and therefore returns a negative reply on the principle. The commission places on record its judgment as unfavorable to the general extension of the subcontract system, while recognizing the necessity of such subcontracts under certain conditions. The commission recognizes, however, that abuses of the contract system of mining are possible and has listened with sympathy to a recital of some of these alleged abuses. In order to remove so far as possible all such abuses the commission hereby directs that upon the complaint of any employee affected, the board of conciliation shall review the practices in existing or proposed individual agreements and contracts as included in demand number one. The board of conciliation, by way of appeal, shall promptly give consideration to the complaint and render decision in the case. The board of conciliation, in case of appeal, shall consider and decide the question of the terms of the contract involving rates of pay and other conditions in such way as to protect and conserve the rights of all the employees in the colliery affected.

Demand No. 2.

(2) We demand that the present wages of the anthracite mine workers be increased to correspond to the increases granted the bituminous mine workers by the presidential coal commission.

The commission adjudges and awards:

(a) The contract rates at each colliery shall be increased 65 per cent over and above the contract rates at each colliery effective April, 1916, as established under the agreement of May 5, 1916.

(b) The hourly rates of outside and inside company men, receiving \$1.545 or more per day under the agreement of May 5, 1916, shall be increased 17 per cent, said increase to be applied to the total rate now in effect, namely, the base rate established under the agreement of May 5, 1916, plus the war allowance granted under the supplemental agreement of November 15, 1918; it being understood that the new rate so established shall be not less than 52½ cents per hour for those employed on the basic 8-hour day. In the case of company men employed on the shift basis, the shift rate shall be increased 17 per cent, said increase to be applied to the rate now in effect, it being understood that the new rate so established shall be not less than \$4.20 per shift.

(c) The hourly rates of outside and inside employees, receiving less than \$1.545 per day under the agreement of May 5, 1916, shall be increased 4 cents per hour over the rates now in effect, namely, the base rate established under the agreement of May 5, 1916, plus the war allowance granted under the supplemental agreement of November 15, 1918.

(d) The rates paid consideration miners shall be increased 17 per cent, said increase to be applied to the total rate now in effect, namely, the base rate established under the agreement of May 5, 1916, plus the war allowance granted under the supplemental agreement of November 15, 1918.

(e) The rates paid contract miners' laborers and consideration miners' laborers shall be increased above the rates established under the agreement of May 5, 1916, to the same amount per day as the increase to company laborers, at the respective collieries, under the provisions of clause (b) hereof, it being understood that in the case of contract miners' laborers the miner is to assume and pay so much of said increase as shall be represented by the application of 65 per cent to the rate per basic shift, as established under the agreement of May 5, 1916, and the difference between said amount and the total increase to the contract miners' laborer shall be assumed and paid by the operator.

(f) Monthly men coming under the agreement of May 5, 1916, shall be paid an increase of 17 per cent, said increase to be applied to the total rate now in effect, namely, the base rate established under the agreement of May 5, 1916, plus \$54 per calendar month in the case of outside employees, and the base rate under said agreement plus \$60 per calendar month in the case of inside employees.

(g) The increases herein provided shall become effective April 1, 1920, and the amount due for the period April 1 to August 31, shall be paid as follows:

The amount due for April, with the pay for the first half of September, and the amount due for each of the succeeding four months with the pay for each semimonthly pay period thereafter.²

Demand No. 3.

(3) *We demand that a uniform wage scale be established so that the various occupations of like character at the several collieries shall command the same wage.*

The commission adjudges and awards:

The board of conciliation shall act as a commission to make a study of, and report to, the joint conference at the expiration of this contract, or sooner if practicable, the matter of uniformity in day rates for the several occupations of day men of the respective collieries in the anthracite field.

Demand No. 4.

(4) *We demand that shovel crews operating for coal companies shall be paid not less than the rates paid by contractors to shovel men.*

The commission adjudges and awards:

This demand is based upon the fact that in many instances the rates paid to shovel crews working for stripping contractors are higher than the rates paid to shovel crews working for a company. The rates paid to company employees have been established for many years. In the establishment of these rates it can be assumed that due regard was had for the classification of labor and the differentials. The rates paid the employees of stripping contractors are fixed upon a different and independent basis. This demand seeks to determine the rates for one class of employees without regard to the effect upon other classes of company employees and upon the differentials. The commission therefore can not grant this demand.

² Section (g) was abrogated by the President in his letter of August 30, 1920, accepting the award, on the ground that one of the bases of submission was that the award of the commission should be retroactive to April 1, and the question of back pay and its manner of payment was therefore excluded from the jurisdiction of the commission.

Demand No. 5.

(5) *We demand that the 8-hour day be extended to all classes of inside and outside day labor and monthly men with time and half time for overtime and double time for Sundays and holidays.*

The commission adjudges and awards:

(1) That the case of inside pumpmen and inside and outside hoisting engineers, working a 12-hour cross shift, shall be referred to the board of conciliation. The board shall work out a basis of 8-hour shifts and the rates to be paid for an 8-hour day. Pending the decision of the board, inside pumpmen and inside and outside hoisting engineers, working a 12-hour cross shift shall continue on that basis and shall be paid the same increase as provided for day men under clause (b) in our answer to the wage demand. When the rates to be paid for an 8-hour day have been established by the board of conciliation, time in excess of 8 hours per day shall be paid for at the rate per hour established for the 8-hour day.

(2) The demand for time and half time for overtime and double time for Sundays and holidays.

It is well known that the principle underlying this demand has been defended by its friends and advocates everywhere for the reason that such excess pay for overtime would act as a deterrent and thus serve to strengthen the 8-hour day as the normal working-day. The anthracite industry is now organized on the basic 8-hour day. The commission does not understand that either the operators or the miners desire to abolish the existing basic 8-hour day. It is freely recognized that while the 8-hour day is generally applicable there are necessary services requiring more than an 8-hour day. By mutual consent and agreements entered into a certain number of employees work a longer day and are paid the usual rates for this overtime. If this demand is to be interpreted as preventing overtime, except in cases of great emergency when special rates might well be paid, then these agreements must be set aside and important consequences follow the reorganization necessary.

Certain cases where a 12-hour shift is now in operation are by this commission referred to the board of conciliation. It is the opinion of the commission that this reference will bring about any desired and desirable changes. The commission does not desire in the least to encourage any departure from the 8-hour day or to encourage any permanence of long-hour days except where the necessities of the organization require it. Under these conditions it does not approve the demand for extra pay for overtime.

Upon the question of Sundays and holidays it may be said that where continuous operation is necessary, as in many of the activities of modern industry, that fact is taken into consideration and forms part of the contract. The commission does not concur in the theory that any workman should be permitted or required to work the 52 Sundays in a year or be denied the privilege of holidays. It is obvious that some one must be in service at all hours. The schedule should be so adjusted that workers could have relief. The commission of 1902, in recognition of this situation, definitely provided that men should be relieved from duty on Sundays without loss of pay by a man provided by the employer to relieve them during the hours of the day shift.

The commission sees no sufficient reason for disturbing the present adjustment and therefore takes no further action than that contemplated in referring this demand to the board of conciliation as above. The demand for time and half time for overtime and double time for Sundays and holidays is denied.

Demand No. 6.

(6) *We demand a closed shop contract which means full recognition of the United Mine Workers of America as a party to the agreement.*

The commission adjudges and awards:

That the commission approves the request for recognition of the United Mine Workers of America as party to the agreement in adjusting the differences between the operators and the miners in all the contractual relations between the parties and directs that the form of contract entered into as provided in this award shall be between Districts 1, 7, and 9 of the United Mine Workers of America, as represented by the presidents of the three Districts, and the anthracite operators.

Provided, however, that this official recognition of the United Mine Workers of America for the purpose of adjusting differences and strengthening collective bargaining does not carry with it the theory or the fact of the "closed shop," or the "check off"; and provided further, that it does not in any degree interfere with or annul the provisions of the award of 1902 in which the rights and privileges of nonunion men

were stated and protected; and provided further, that in cases where nonunion employees have grievances or where for any reason the grievance committee or mine committee fails to give such grievance consideration satisfactory to the employee, his right to appeal from the decision of the foreman or grievance committee and to the board of conciliation shall be inviolate.

Demand No. 7.

(7) We demand that all deadwork shall be paid for on the consideration basis, existing at the colliery, and that where more than one miner is employed they shall receive the same rate.

The commission adjudges and awards:

This demand is based upon the principle that the rates paid for an employee's principal occupation should obtain when for any reason he is occupied temporarily in another kind of employment. The exigencies of any ordinary business may make such temporary transfers desirable from the standpoint of the employer. The employee, however, is under no obligation to accept such transfer. In many instances he has a choice between idleness enforced by circumstances beyond control and the use of his time at such compensation as the company can offer. The arrangement must always, therefore, be one of mutual agreement. No adequate reason has been presented to the commission why the rate prevailing for any type of work should not govern in the case of all persons engaged in that work.

The demand is, therefore, denied.

Demand No. 8.

(8) We demand payment for all sheet iron, props, timber, forepolling, and cribbing.

The commission adjudges and awards:

This demand seeks to secure payment for the items named as a separate contract. The testimony presented did not establish the assumption that payment was not made for the work. On the other hand, the claim was distinctly made that these items were within the terms of the contract. The claim was made that the base rates established in 1902 are unfair. It should be borne in mind that in all wage adjustments subsequent to that date the alleged unfairness of an earlier date tends to disappear with each new adjustment. The demand, therefore, if granted, would tend to disturb the wage structure. The commission is of the opinion that the maintenance of the wage structure subject to adjustment in rates from time to time is the surest method of preserving desirable features and of removing causes of grievance.

The demand is, therefore, denied.

Demand No. 9.

(9) We demand where miners are prevented from working on account of lack of supplies that they shall be accorded the opportunity of making a shift at some other work.

This demand, after discussion, was, upon motion of Commissioner Ferry, withdrawn.

Demand No. 10.

(10) We demand in the settlement of grievances that the aggrieved parties shall have the right to demand settlement upon a basis of equity, and if such equity settlement is requested the conditions of 1902 shall not enter into or prejudice the case.

The commission adjudges and awards:

The commission interprets this demand in the light of the evidence presented to be that in case of any grievances arising the case shall be considered in the light of the facts as they exist at the time and that precedents and rules established through experience shall not apply. This in effect would set aside or nullify many of the precedents developed since the award of 1902.

The plea was made that these precedents worked hardship on miners not acquainted with the conditions established nearly two decades ago. The evidence presented failed, however, to impress the commission of anything more than the theoretical possibility of an abuse. It also failed to show in what particulars the established custom had developed any abuses that would be corrected or abolished under the proposals in the demand.

The commission, therefore, denies the request contained in the demand.

Demand No. 11.

(11) We demand that a uniform rate of 17 cents per inch be paid for all refuse in all kinds of mining up to ten feet wide, and a proportional rate be applied for all over ten feet.

The commission adjudges and awards:

This demand is essentially the same in principle with demand number eight in that it is a desire to appeal from the condition established by the award of the Anthracite Coal Strike Commission of 1902 and the subsequent agreements, and to provide by separate contract for the payment for refuse on the assumption that it is not now paid for. The evidence supports the statement that in many if not in all cases payment is made. The contention, therefore, is for a new rate based upon certain alleged unsatisfactory rates at present in force. It was developed during the hearings that from time to time adjustments had been made through collective bargaining.

The commission, therefore, denies this demand.

Demand No. 12.

(12) We demand that wherever miners are now paid on the car basis that hereafter they shall be paid on the legal ton basis, and that dockage shall be eliminated.

The commission adjudges and awards:

This demand, for two things—the substitution of measure by weight for the present method of payment by the car and the elimination of the system of dockage—presented by the miners, involves a reconstruction of the basis of pay in force from the beginning. The subject was before the Anthracite Coal Strike Commission in 1902 and was made the subject of formal discussion from the legal and other points of view.

The present commission is asked to treat the same problem essentially that was presented to the former commission except that a price per ton is not now included and the elimination of the practice of dockage is included.

In support of the demand the system in use was challenged as unfair; that payment resulting from an unfair system was also unsatisfactory; that the changes in the marketing of coal since 1902, by which smaller sizes were utilized, made it reasonable that the system of weighing should be applied to the miner as to the purchaser of the commodity. There can be no question that a just weight, in the last analysis, is the best test for compensation. In the development of the subject, however, the evidence to sustain the inference of injustice to the miner was not presented. It may be impossible to secure and present such evidence in a conclusive manner. On the other hand it was affirmed that in certain collieries where payment by weight had been installed the practical results were no more satisfactory than where payment by the car was the practice. It is apparent that so long as there are impurities in the seams or veins a source of dissatisfaction and complaint exists. The operators will complain about the amount of impurities in the car and the miner about the payment. Recognizing the justice of both these complaints, there would appear to be an economic pressure on both parties to adjust the conditions so as to remove abuses. The operators contend that payment by the car as practiced has been brought to a substantially accurate basis, and that payment has been adjusted to experience under the existing practice until no financial hardship is put upon the miner. They further contend that under these conditions there is no need of a change, and that to substitute the change as proposed would involve a readjustment of the whole question of miners' wages.

In the absence of conclusive evidence that the present system is working serious injustice to the miner, the commission denies the demand and reaffirms the award of 1902, viz, that during the life of this award the present methods of payment for coal mined shall be adhered to, unless changed by mutual agreement.

Demand No. 13.

(13) We demand that on all reel motors one motorman and two brakemen be employed and that on all other motors and engines assistants or patchers be employed, and that when motormen or engineers are repairing their motors or engines that their assistants shall be employed to help in the work.

The commission adjudges and awards:

This demand looks to two things—first, the determination of how the reel motors shall be operated by naming the number and the grade of the men to be employed, and second, the determination and control of the repairs of the motors or engines by naming the definite employment of certain employees.

The evidence presented is not convincing as to the need of the men suggested. In case of trouble arising it would naturally be dealt with through the usual channels. Moreover, the responsibility for the property, which is in some cases quite expensive,

vests in the owners and operators. The responsibility for repairs also vests in the same persons. The assignment, therefore, of men to the repair work must always rest with the responsible parties.

The commission, therefore, denies the demand.

Demand No. 14.

(14) We demand that for all tools lost, through no fault of employees, as a result of squeezes, water, or fire, the men to be compensated for such losses.

The commission adjudges and awards:

Contract miners whose tools are lost through no fault of their own as the result of squeezes, cave-ins, and similar accidents, shall be furnished with new tools by the company, corresponding to the tools lost, without expense to the miner.

Demand No. 15.

(15) Where contract miners are employed doing company work the company shall supply them with the necessary tools, and failing to do so shall compensate the miners by paying each miner not less than one extra hour per day for the use of such tools.

Demand No. 16.

(16) We demand that the company shall supply to all company men the necessary tools free of charge.

The commission adjudges and awards:

These two demands have been thrown together in the hearings and in the discussions owing to the fact that they both deal with the fact of ownership and one deals with the proposal of pay for the use of privately owned tools.

It may be assumed that any long-established custom that has grown up in a community, or in an industry, has some good reason for its permanence. It is true that abuses may arise from time to time and persist. It is also to be presumed that the rates of pay have taken into account the conditions under which the service is rendered. In the case of contract miners it is fair to presume that the rates of pay presumed private ownership of tools for all contract work and that the company work would be a small part of the contract miner's labor. In that case the factor of pay for the use of tools would be negligible. If, however, the amount of company work done by the contract miner should greatly increase and no consideration of that fact be given attention in the adjustment of rates, an abuse would clearly develop and a grievance be established. If, for example, two-thirds of a contract miner's time was occupied in company work and no consideration for the use of tools be given, the conditions would be quite the reverse of those under which the existing custom arose. The existing machinery would deal with such a grievance at any time and compensate the contract miner as the facts would seem to justify.

On the fact of company ownership of tools versus individual ownership, it should be noted that there is no rule other than custom. In a manufacturing establishment the lathes would be owned by the company. The same custom prevails on the farms. In contract labor, however, the contractor usually owns his own equipment and tools. Any departure from this would be the subject of consideration in the contract. In the mining industry the custom of private ownership of tools has developed. There are certain reasons for this custom, among which may be mentioned that of responsibility for the loss of tools. Other reasons are obvious to anyone familiar with the industry. The real issue is, therefore, whether under the existing custom abuses have developed that demand a reform of the abuses or an abolition of the custom. The most apparent motive for these demands was the financial one. Another demand is really for the relief of the miners from the burden of the investment necessary for ownership. The evidence was not convincing that the burden was excessive or that the miners themselves were urgent in the demand. No abuses of severe character were alleged. The commission therefore is of the opinion that there is not at the present time any urgency in this demand and answers it in the negative.

Demand No. 17.

(17) We demand that checkweighmen and check docking bosses be permitted to serve as members of mine committees.

The commission adjudges and awards:

The contention here is that these men are ordinarily selected from among the miners and are experienced in the details about which grievances arise. It is further con-

tended that they have been selected after the plan had been approved by the operators and might reasonably be construed as employees of the company.

On the other hand, the operators contend that this demand is not in harmony with the agreement of 1912, in which it was stipulated that the mine committee should be constituted by the selection of three employees of the company. They deny that these men are employees of the company.

It is clear that these men in question are elected by the contract miners and are paid by them. It would require, in order to meet this demand, an amendment to the agreement of 1912, which the parties themselves can make, if they so desire, or an enforcing of the amendment by the commission. The commission declines to take this action, and, therefore, denies the demand.

Demand No. 18.

(18) We demand that where contract miners encounter abnormal conditions in their working places they shall have the privilege of going on consideration work. A definition of consideration work shall be written into the agreement.

The commission adjudges and awards:

Whenever deficient or abnormal conditions are encountered in a working place by contract miners, the miner or miners affected shall make such fact known to the foreman, and if the foreman and the men affected are unable to agree upon compensation based on the method or practice for such payment at the mine affected, it shall be referred to the grievance committee and dealt with in the manner provided for other grievances. Work shall be continued pending the adjustment unless otherwise directed by the foreman, and whatever decision is made shall be retroactive to the date upon which the grievance was raised.

The Minority Report.

THE minority report of Neal J. Ferry, member of the executive committee of the United Mine Workers of America and the labor member of the commission, contends that the commission in its majority report avoids and fails to recognize the three fundamental principles underlying the demands of the miners: (1) The right to a living wage; (2) the right to collective action or to collective bargaining with employers through the leaders of their organizations or representatives of their own choosing; and (3) the right to an 8-hour workday.

The Right to a Living Wage.

Concerning the first principle, the right to a living wage, the miners urged that the lowest-paid anthracite workers were entitled to rates of pay sufficient to maintain themselves and their families "according to an American standard of living, on a basis of health, decency, and reasonable comfort." They asked that their wages be standardized, that a minimum wage be established (\$6 a day, that set by the Bituminous Commission, which would mean an increase of approximately 31 per cent for tonnage workers), and that wage differentials above this minimum as a basis should be established. The minority report maintains, however, that the commission disregarded this request and based its increases on increased living costs. If this principle were applied, the contention is, the wage increases should have been 27 per cent, that being the percentage of increase in the cost of living since the last wage adjustment. The commission, however, compared the increases in wages since 1903 with the increase in living costs since that time and found that miners' wages were only 17 per cent behind living costs. Wages were therefore increased 17 per cent. The minority report says: "We are thus actually deprived of at least 10 per cent of the rates of pay which we already had before the majority award was made."

The Right to Bargain Collectively.

Dissatisfaction is expressed in the minority report with the decision of the commission concerning union recognition. Complete and formal recognition of the union has never been given by the operators. The present award recognizes the union as party to this agreement in adjusting differences, provided such recognition does not involve the principle of the closed shop, but it refuses to do away with individual agreements or subcontracting. Dissatisfaction with this decision is explained in the minority report on the ground that stability, cooperation, and discipline among the workers is impossible where a number of contracts obtain. "Surely the principle of collective bargaining must necessarily be destroyed if, in addition to the collective bargain which we are now engaged in making, individual bargains such as subcontracts involve can be made, and which must necessarily supersede the general one."

The Eight-Hour Day.

With respect to the decision of the commission on the demand for an 8-hour day, the miners contend that the 8-hour day clause in the 1916 agreement has been abrogated by the commission.

The wage feature of the majority report threatens the complete abrogation of the 8-hour provision of the 1916 agreement. That this is accomplished by indirection renders the result no less certain and even more vicious. What it does do is to fix hourly rates which will produce a minimum of approximately \$1,400, provided the employees work *the same hours as they did in 1919*. This means, for outside employees, a 9½ and 10 hour day, as such hours were customary in the year 1919. This is equivalent to penalizing the employees for their patriotic services during the war and during the uncertain days following the armistice. The strike commission of 1902 had fixed 9 hours per day for practically all time workers. In the agreement of 1916 the working day was further reduced to 8 hours, the agreement providing that—"Section 1 (b). The working day established by the Anthracite Strike Commission shall be changed from 9 hours to 8 hours. * * *"

With respect to the clause in the decision of the commission in demand No. 5, that "the anthracite industry is now organized on the basic 8-hour day; the commission does not understand that either the operators or the miners desire to abolish the existing 8-hour day," the minority report says:

Nor is there the slightest weight to the argument which may possibly be made that the 8-hour day provided for in the 1916 agreement meant "basic" and not an "actual" 8-hour day, and that the employees themselves expected longer hours. The idea of a "basic 8-hour day" is meaningless unless extra pay is given for overtime work, and no such extra payment is made in the anthracite industry.

Contract Embodying Award of Commission Signed.

ON SEPTEMBER 2 the miners and operators signed a two-year contract embodying the terms of the award of the commission. This agreement was signed under protest by representatives of miners whose scale committee met on September 3 and telegraphed the President asking that the agreement be reopened for the purpose of giving the miners additional increases in wages. This the President refused to do, following which a large number of the anthracite mine workers, estimated at 100,000, went on strike as a protest against the award, although the officers of the union apparently tried to

influence the men to live up to their promise to abide by the decisions of the commission until further adjustments could be made. Most of the striking workers, however, returned to work during the week beginning September 19. The agreement follows in full:

This agreement, made this 2d day of September, 1920, between Districts 1, 7, and 9, United Mine Workers of America, parties of the first part, and the Anthracite Operators, parties of the second part, covering wages and conditions of employment in the anthracite fields of Pennsylvania, witnesseth:

The terms and provisions of the award of the United States Anthracite Coal Commission, as accepted by the President, are hereby accepted by the parties hereto.

The terms and provisions of the award of the Anthracite Coal Strike Commission and subsequent agreements made in modification thereof, or supplemental thereto, as well as the rulings and decisions of the Board of Conciliation, are hereby ratified, confirmed, and continued for a further period of two years, ending March 31, 1922, excepting in so far as they are changed by the terms and awards of the United States Anthracite Coal Commission, more particularly, to wit:

(a) The contract rates at each colliery shall be increased 65 per cent over and above the contract rates at each colliery effective April, 1916, as established under the agreement of May 5, 1916.

(b) The hourly rates of outside and inside company men, receiving \$1.545 or more per day under the agreement of May 5, 1916, shall be increased 17 per cent, said increase to be applied to the total rate now in effect, namely, the base rate established under the agreement of May 5, 1916, plus the war allowance granted under the supplemental agreement of November 15, 1918; it being understood that the new rate so established shall be not less than 52½ cents per hour for those employed on the basic 8-hour day. In the case of company men employed on the shift basis, the shift rate shall be increased 17 per cent, said increase to be applied to rate now in effect; it being understood that the new rate so established shall not be less than \$4.20 per shift.

(c) The hourly rate of outside and inside employees receiving less than \$1.545 per day under the agreement of May 5, 1916, shall be increased 4 cents per hour over the rates now in effect, namely, the base rate established under the agreement of May 5, 1916, plus the war allowance granted under the supplemental agreement of November 15, 1918.

(d) The rates paid consideration miners shall be increased 17 per cent, said increase to be applied to the total rate now in effect, namely, the base rate established under the agreement of May 5, 1916, plus the war allowance granted under the supplemental agreement of November 15, 1918.

(e) The rates paid contract miners' laborers and consideration miners' laborers shall be increased above the rates established under the agreement of May 5, 1916, to the same amount per day as the increase to company laborers, at the respective collieries, under the provisions of clause (b) hereof, it being understood that, in the case of contract miners' laborers, the miner is to assume and pay so much of said increase as shall be represented by the application of 65 per cent to the rate per basic shift, as established under the agreement of May 5, 1916, and the difference between the said amount and the total increase to the contract miners' laborers shall be assumed and paid by the operator.

(f) Monthly men coming under the agreement of May 5, 1916, shall be paid an increase of 17 per cent, said increase to be applied to the total rate now in effect, namely, the base rate established under the agreement of May 5, 1916, plus \$54 per calendar month in the case of outside employees, and the base rate under said agreement plus \$60 per calendar month in the case of inside employees.

(g) The increase herein provided shall become effective April 1, 1920.

(h) The amount due employees who may have died since April 1, 1920, shall be paid to the legal representatives of such employees.

(i) That the case of inside pumpmen and inside and outside hoisting engineers, working a 12-hour cross shift, shall be referred to the Board of Conciliation. The board shall work out a basis of 8-hour shifts and the rate to be paid for an 8-hour day. Pending the decision of the board, inside pumpmen and inside and outside hoisting engineers working a 12-hour cross shift shall continue on that basis and shall be paid the same increase as provided for day men under clause (b) of this agreement. When the rates to be paid for an 8-hour day have been established by the Board of Conciliation, time in excess of 8 hours per day shall be paid for at the rate per hour established for the 8-hour day.

(j) The Board of Conciliation shall act as a commission to make a study of and report to the joint conference at the expiration of this contract, or sooner, if practicable, the matter of uniformity in day rate for the several occupations of day men of the respective collieries in the anthracite field.

(k) Contract miners whose tools are lost through no fault of their own as the result of squeezes, cave-ins, and similar accidents, shall be furnished with new tools by the company corresponding to the tools lost, without expense to the miner.

(l) Whenever deficient or abnormal conditions are encountered in a working place by contract miners, the miner or miners affected shall make such fact known to the foreman, and if the foreman and the men affected are unable to agree upon compensation based on the method or practice of such payment at the mine affected, it shall be referred to the grievance committee and dealt with in the manner provided for other grievances. Work shall be continued pending the adjustment unless otherwise directed by the foreman, and whatever decision is made shall be retroactive to the date upon which the grievance was raised.

On behalf of the anthracite operators:

S. D. WARRINER.
C. F. HUBER.
W. J. RICHARDS.
W. L. CONNELL.

On behalf of the United Mine Workers of America:

JOHN COLLINS KOLODZIEJCZAK,
Vice President, District No. 1.
THOMAS KENNEDY,
President, District No. 7.
C. J. GOLDEN,
President, District No. 9.
PHILIP MURRAY, *Vice President.*

Attest:

A. MARKLE, *Chairman.*
JAMES A. GORMAN, *Secretary.*

Earnings and Rates of Wages of Anthracite Miners Resulting from the Award.

THERE was found to exist considerable difference of opinion as to the exact meaning of some of the clauses in the award. After consultation with various authorities it was decided to illustrate the working out of the agreement by presenting certain tables with explanation thereof.

Table 1 was prepared at the request of the Bureau of Labor Statistics by Mr. Charles E. Ash, auditor, Lehigh & Wilkes-Barre Coal Co., Wilkes-Barre, Pa., in charge of statistics for the operators during the recent wage negotiations, and is based upon actual average earnings per hour obtained by this Bureau from 22 collieries for the half-month pay period ended January 31, 1919. These basic figures (column 5) were published in the REVIEW for December, 1919, and reprinted in the REVIEW for June, 1920, with corresponding data for the half month, ended March 31, 1920. The figures for 1919 were used as a base because, as will be observed from Table 2, they represented a larger number of collieries and employees, the 1920 survey having been made at the time several of the mines were flooded. Though 22 collieries were covered in the first survey and 16 in the second, the two surveys compare very closely, the agreement of November, 1918, having been in effect at the time both surveys were made.

TABLE 1.—AVERAGE HOURLY RATES OR EARNINGS BY OCCUPATIONS FOR DIFFERENT AGREEMENT PERIODS BASED ON FIGURES OF UNITED STATES DEPARTMENT OF LABOR SURVEY MADE IN JANUARY, 1919.

Occupations (1)	No. of employees in mines (Bureau of Labor Statistics survey, Jan., 1919). (2)	Scale of Apr. 1912 (9-hour day). ¹ (3)	Scale of Apr. 1916 (8-hour day). ² (4)	Bureau of Labor Statistics survey, Jan. 1919, scale of Nov. 1918 (8-hour day). ² (5)	Under commission award, Apr. 1920 (8-hour day). ² (6)	Per cent increase in hourly rates or earnings.		
						1920 over 1912. (7)	1920 over 1916. (8)	1920 over 1918. (9)
<i>Inside.</i>								
Blacksmiths.....	30	\$0.295	\$0.342	\$0.592	\$0.693	134.9	102.6	17.0
Bratticemen.....	116	.268	.311	.561	.656	144.8	110.9	17.0
Cagers.....	234	.230	.267	.517	.605	163.0	126.6	17.0
Car runners.....	342	.222	.257	.507	.593	167.1	130.7	17.0
Company miners.....	656	.286	.331	.581	.680	137.8	105.4	17.0
Company miners' laborers.....	632	.238	.276	.526	.615	158.4	122.8	17.0
Consideration miners.....	498	.353	.409	.636	.744	110.8	81.9	17.0
Contract miners.....	4,887	.425	.458	.842	.992	133.4	116.6	17.8
Contract miners' laborers.....	1,855	.369	.395	.639	.739	100.3	87.0	15 to 20 Av. 15.6
Door tenders (boys).....	247	.142	.165	.315	.355	150.0	115.1	12.7
Drivers.....	479	.215	.249	.499	.584	171.6	134.5	17.0
Engineers.....	121	.252	.292	.542	.634	151.6	117.1	17.0
Laborers.....	1,200	.232	.269	.519	.607	161.6	125.6	17.0
Machinists.....	67	.274	.318	.568	.665	142.7	109.1	17.0
Masons.....	41	.282	.327	.577	.675	139.4	106.4	17.0
Motormen.....	247	.266	.308	.558	.653	145.5	112.0	17.0
Motor brakemen.....	190	.217	.252	.502	.587	170.5	132.9	17.0
Pumpmen (12 hours).....	104	.218	.233	.413	.483	121.6	107.3	17.0
Timbermen ⁴	136	.313	.363	.613	.717	129.1	97.5	17.0
Trackmen.....	163	.276	.320	.570	.667	141.7	108.4	17.0
Total inside.....	12,245	.338	.373	.672	.787	132.8	111.0	17.1
<i>Outside.</i>								
Ashmen.....	72	.189	.219	.444	.525	177.8	139.7	17 to 25 Av. 18.2
Blacksmiths.....	60	.278	.322	.572	.669	140.6	107.8	17.0
Cagers.....	119	.201	.233	.458	.536	166.7	130.0	17.0
Carpenters.....	250	.268	.310	.560	.655	144.4	111.2	17.0
Car runners.....	83	.198	.229	.454	.531	168.2	131.9	17.0
Engineers.....	248	.265	.307	.532	.622	134.7	102.6	17.0
Firemen.....	314	.236	.253	.503	.589	149.6	132.8	17.0
Laborers.....	1,211	.180	.209	.434	.525	191.7	151.2	17 to 25 Av. 21.0
Loaders.....	199	.192	.223	.448	.525	173.4	135.4	17 to 25 Av. 17.2
Machinists.....	112	.230	.267	.517	.605	163.0	126.6	17.0
Oilers.....	77	.180	.209	.434	.525	191.7	151.2	17 to 25 Av. 21.0
Repairmen.....	113	.224	.260	.485	.567	153.1	118.1	17.0
Timber cutters.....	115	.196	.227	.452	.529	169.9	133.0	17.0
Trackmen.....	28	.217	.252	.477	.558	157.1	121.4	17.0
Total outside.....	3,001	.209	.240	.472	.559	167.5	132.9	18.4
<i>Breaker.</i>								
Dumpmen.....	88	.193	.224	.449	.525	172.0	134.4	17.0
Jig runners (men and boys).....	81	.190	.220	.410	.466	145.3	111.8	(⁵)
Platemen.....	180	.177	.205	.430	.525	196.6	156.1	17 to 25 Av. 22.1
Slaters (boys).....	580	.128	.148	.298	.338	164.1	128.4	13.4
Total breaker.....	929	.149	.173	.348	.403	170.5	132.9	15.8
Grand total.....	16,175	.303	.337	.616	.723	138.6	114.5	17.4

¹ Except 8 hours for contract miners and contract miners' laborers and 12 hours for pumpmen.

² Except 12 hours for pumpmen.

³ See text, p. 105.

⁴ The basic rate here presented for timbermen is the correct one, the rate as published in the MONTHLY LABOR REVIEW for December, 1919, having erroneously included contract timbermen in three collieries.

⁵ Boys 4 cents per hour, men 17 to 25 per cent; average, boys and men, 13.7 per cent.

TABLE 1.—AVERAGE HOURLY RATES OR EARNINGS BY OCCUPATIONS FOR DIFFERENT AGREEMENT PERIODS BASED ON FIGURES OF UNITED STATES DEPARTMENT OF LABOR SURVEY MADE IN JANUARY, 1919—Concluded.

Item.	Scale of Apr. 1912 (9-hour day). ¹	Scale of Apr. 1916 (8-hour day). ²	Bureau of Labor Statistics survey, Jan. 1919, scale of Nov. 1918 (8-hour day). ²	Under commission award, Apr. 1920 (8-hour day). ²
(10)	(11)	(12)	(13)	(14)
Agreement dated.....	May 20, 1912..	May 5, 1916....	Nov. 15, 1918...	Sept. 2, 1920.
Effective.....	Apr. 1, 1912...	Apr. 1, 1916....	Nov. 1, 1918....	Apr. 1, 1920.
Increase to company men.....	10 per cent....	3 per cent added to rate; hours reduced from 9 to 8.	\$2.20-\$2 inside; \$2-\$1.80 outside; \$1.20 boys.	17 per cent; \$4.20 minimum; boys, 4 cents per hour.
Increase on contract rates.....	10 per cent.... Sliding scale abolished.	7 per cent.....	40 per cent.....	65 per cent on 1916 base. ³

¹ Except 8 hours for contract miners and contract miners' laborers and 12 hours for pumpmen.

² Except 12 hours for pumpmen.

³ See text, below.

The hourly earnings shown in columns 3 and 4, with the exception of the rates for contract miners, were computed from those shown in column 5, which, as previously stated, were obtained from the pay rolls by special agents of this Bureau. These computations were made by taking into consideration provisions in the agreements of November 1, 1918, April 1, 1916, and April 1, 1912, the figures in column 4 being deduced from column 5 and those in column 3 from column 4. In the case of contract miners it was not possible to make the computation in the same way because the increases were made on gross earnings; from the miner's gross earnings deductions are made for labor and supplies. Mr. Ash stated that the 1912 rate was based on the earnings of 13,000 miners included in a tabulation prepared for the 1916 wage negotiations. The earnings were those of 1916 while the men were still working under the scale of 1912. That tabulation showed average earnings equivalent to \$3.40 for eight hours, or \$0.425 per hour. There was a record of the number of starts, but not of the hours worked per day. The collieries were in operation 9 hours and it was assumed that the miners worked 8 hours per start. The survey by the Bureau of Labor Statistics in 1920 showed an average of 7.4 hours of work per start. The 7 per cent increase on gross earnings resulted in an estimated average net earnings of \$0.458 per hour, under the 1916 agreement. The average net earnings under the 1920 agreement are estimated to be \$0.992 per hour.

Attention is called to the fact that the box headings disclose the dates of the various agreements and the customary hours per day in effect, while additional detailed information is to be found in columns 10 to 14, inclusive, some exceptions being shown in footnotes.

To the Bureau's figures, shown in column 5, were added the increases which were brought about by the recent award, resulting in the present-day earnings per hour shown in column 6.

With the exceptions noted above, the table is in the main self-explanatory. The occupations shown cover practically all employees in the 22 mines visited. It will be observed that the occupations

are here grouped somewhat differently from the arrangement in former issues of the REVIEW, the "breaker" employees now being presented in a separate group.

Application of the Award in Specific Instances.

BECAUSE of the difference of opinion on the interpretation of those clauses of the award bearing upon the wages of contract miners and contract miners' laborers, concrete examples are presented below.

The application of the award to the earnings of a contract miner² is illustrated as follows: Assume a typical contract miner as having \$90.20 gross earnings in a half month of 13 working days in 1916, a deduction of \$9 for supplies and powder, and having the same output in 1920 as in 1916, also having a laborer whom he paid \$2.60 per day in 1916, and who worked 13 days in the half month in both years, and the following results:

APPLICATION OF AWARD TO EARNINGS OF A CONTRACT MINER.

Item.	Gross earnings in a half month, 1916.	Deduct supplies and powder.	Deduct amount paid laborer.	Net earnings.
On base rate, 1916 . . .	\$90.20	\$9.00	\$33.80	\$47.40
65 per cent of 1916 base rate	58.63	.....	21.97	.....
Total	148.83	9.00	55.77	\$4.06

It will be observed that there has been no increase in the charge for supplies and powder. The earnings of the contract miner's laborer is still further increased under the new agreement by an additional amount paid by the company. In the illustration above he receives \$13.26 from the company in addition to the \$55.77 paid by the miner, making a total earnings of \$69.03.

The following illustration shows the application of the award to a typical company laborer,³ assumed as having a daily rate of \$2.20 in 1916:

Application of award to company laborer.

Base rate, 1916	\$2.20
War allowances	2.00
Earnings	4.20
increase of 17 per cent of \$4.20 . . . . .	.71
Rate after award	4.91
Base, 1916	2.20
Increase over 1916	2.71

-Applying the award to a typical contract miner's laborer,⁴ assumed as having a daily rate of \$2.60 in 1916 in the same mine as the above company man, his daily rate is as follows:

Application of award to contract miner's laborer.

Base rate, 1916	\$2.60
Increase over 1916, shown above as paid to the company man	2.71
Rate after award	5.31

² See paragraph (a) of the agreement, p. 102.

³ See paragraph (b) of the agreement, p. 102.

⁴ See paragraph (c) of the agreement, p. 102.

Of this new rate the miner pays his laborer:

Base, 1916 rate.....	\$2. 60
Also 65 per cent of 1916 rate.....	1. 69

Total paid by miner..... 4. 29

Of this new rate the company pays..... 1. 02

Total new rate..... 5. 31

Hourly Earnings, by Occupation.

IN ORDER that any desired comparison may be drawn between the data obtained in the 1919 survey, which were used as the basic figures in Table 1, and corresponding data obtained during the 1920 survey, Table 2 is herewith presented.

TABLE 2.—AVERAGE HOURLY RATES OR EARNINGS, BY OCCUPATION.

Occupations.	January, 1919 (22 collieries).		March, 1920 (16 collieries).	
	Number of employees.	Average hourly earnings.	Number of employees.	Average hourly earnings.
<i>Inside.</i>				
Blacksmiths.....	30	\$0.592	20	\$0.578
Bratticemen.....	116	.561	111	.569
Cagers.....	234	.517	197	.512
Car runners.....	342	.507	233	.505
Company miners.....	656	.581	367	.575
Company miners' laborers.....	632	.526	308	.528
Consideration miners.....	498	.636	480	.657
Consideration miners' laborers.....	(1)	.....	202	.542
Contract miners.....	4,887	.842	3,188	.934
Contract miners' laborers.....	1,855	.639	1,191	.679
Door tenders (boys).....	247	.315	156	.306
Drivers.....	479	.499	272	.498
Engineers.....	121	.542	100	.555
Laborers.....	1,200	.519	736	.519
Machinists.....	67	.568	19	.584
Masons.....	41	.577	29	.579
Motormen.....	247	.558	202	.554
Motor brakemen.....	190	.502	178	.497
Pumpmen.....	104	.417	99	.429
Timbermen.....	136	.613	97	.577
Trackmen.....	163	.570	123	.578
Total inside.....	12,245	.672	8,308	.710
<i>Outside.</i>				
Ash men.....	72	.444	53	.452
Blacksmiths.....	60	.572	39	.574
Cagers.....	119	.458	84	.449
Carpenters.....	250	.560	163	.547
Car runners.....	83	.454	46	.450
Engineers.....	248	.532	185	.538
Firemen.....	314	.503	217	.501
Laborers.....	1,211	.434	718	.438
Loaders.....	199	.448	142	.449
Machinists.....	112	.517	117	.509
Oilers.....	77	.434	42	.438
Repair men.....	113	.485	21	.480
Timber cutters.....	115	.452	92	.448
Trackmen.....	28	.477	26	.454
Total outside.....	3,001	.472	1,945	.474
<i>Breaker.</i>				
Dump men.....	88	.449	57	.446
Jig runners (men and boys).....	81	.410	54	.424
Plate men.....	180	.430	112	.423
Slaters (boys).....	580	.298	345	.303
Total breaker.....	929	.348	568	.352
Grand total.....	16,175	.616	10,821	.648

¹ Included with company miners' laborers.

Application of Award to Employees Paid by the Day.

THE practical application of the award, so far as it affects employees paid by the day, is illustrated by the following tabulation which, like Table 1, was prepared by Mr. Ash at the request of this Bureau:

TABLE 3.—TYPICAL CHANGES IN WAGE RATES PER DAY, 1912 TO 1920.

Item.	1912 rate (9-hour day).	1916 rate (8-hour day).	War allow- ance.	1918 rate (8-hour day).	New rate, 1920.	Per cent increase.		
						1920 over 1912.	1920 over 1916.	1920 over 1918.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Outside day men.....	\$1.50	\$1.55	\$1.80	\$3.35	\$4.20	180.0	171.0	25.4
	1.60	1.65	1.80	3.45	4.20	162.5	154.5	21.7
	1.70	1.75	1.80	3.55	4.20	147.1	140.0	18.3
	1.80	1.85	1.80	3.65	4.27	137.2	130.8	17.0
	1.90	1.96	1.80	3.76	4.40	131.6	124.5	17.0
	2.00	2.06	1.80	3.86	4.52	126.0	119.4	17.0
	2.10	2.16	1.80	3.96	4.63	120.5	114.4	17.0
	2.20	2.27	1.80	4.07	4.76	116.4	109.7	17.0
	2.30	2.37	1.80	4.17	4.88	112.2	105.9	17.0
	2.40	2.47	2.00	4.47	5.23	117.9	111.7	17.0
	2.50	2.58	2.00	4.58	5.36	114.4	107.8	17.0
	2.60	2.68	2.00	4.68	5.48	110.8	104.5	17.0
	2.70	2.78	2.00	4.78	5.59	107.0	101.1	17.0
	2.80	2.88	2.00	4.88	5.71	103.9	98.3	17.0
	2.90	2.99	2.00	4.99	5.84	101.4	95.3	17.0
	3.00	3.09	2.00	5.09	5.96	98.7	92.9	17.0
Inside day men.....	1.50	1.55	2.00	3.55	4.20	180.0	171.0	18.3
	1.60	1.65	2.00	3.65	4.27	166.9	158.8	17.0
	1.70	1.75	2.00	3.75	4.39	158.2	150.9	17.0
	1.80	1.85	2.00	3.85	4.50	150.0	143.2	17.0
	1.90	1.96	2.00	3.96	4.63	143.7	136.2	17.0
	2.00	2.06	2.00	4.06	4.75	137.5	130.6	17.0
	2.10	2.16	2.00	4.16	4.87	131.9	125.5	17.0
	2.20	2.27	2.00	4.27	5.00	127.3	120.3	17.0
	2.30	2.37	2.00	4.37	5.11	122.2	115.6	17.0
	2.40	2.47	2.00	4.47	5.23	117.9	111.7	17.0
	2.50	2.58	2.00	4.58	5.36	114.4	107.8	17.0
	2.60	2.68	2.00	4.68	5.48	110.8	104.5	17.0
	2.70	2.78	2.00	4.78	5.59	107.0	101.1	17.0
	2.80	2.88	2.00	4.88	5.71	103.9	98.3	17.0
	2.90	2.99	2.00	4.99	5.84	101.4	95.3	17.0
	3.00	3.09	2.00	5.09	5.96	98.7	92.9	17.0
Boys.....	.90	.93	1.20	2.13	2.45	172.2	163.4	15.0
	1.00	1.03	1.20	2.23	2.55	155.0	147.6	14.3
	1.10	1.13	1.20	2.33	2.65	140.9	134.5	13.7
	1.20	1.24	1.20	2.44	2.76	130.0	122.6	13.1
	1.30	1.34	1.20	2.54	2.86	120.0	113.4	12.6
	1.40	1.44	1.20	2.64	2.96	111.4	105.6	12.1

Table 3 presents a series of rates paid in various districts by different mining companies that illustrate the increases under the different agreements from 1912 to date. Thus the job that paid \$1.50 per day in 1912 paid \$1.55 in 1916, carried a war bonus of \$1.80 and paid a total of \$3.35 in 1918, and under the present award pays \$4.20. The rates are here shown in breaks of 10 cents but breaks of only a cent an hour are found, throughout the different districts, and there are said to be even quarter-cent breaks. Thus, while there may be many rates between \$1.50 and \$1.60, and between the other round number rates, the rates here stated in the transition from one agreement to another will hold good for the intervening rates.

Three groups of employees are covered, namely, outside day men, inside day men, and boys. These three groups include common labor

and semiskilled and skilled labor. In column 1, where are shown the rates for 1912 on a nine-hour basis, the \$1.50, \$1.60, \$1.70, \$1.80 represent the rates paid for common labor, the \$1.50 being the prevailing common-labor rate for outside day men in the Lehigh district from 1912 to April 1, 1916, while the semiskilled outside day men carried rates from \$1.90 to \$2 and \$2.10. By semiskilled labor is meant firemen, machinists' helpers, chute bosses, breaker repairmen, etc. The \$2.20 to \$3 rates went to those classed as skilled men, such as blacksmiths, carpenters, engineers, machinists, and shaft engineers.

The war allowance of November, 1918, negotiated between the men and the employer, but approved by the Fuel Administration, which is shown in column 3, changed the rates to those reported in column 4. These were the rates being paid at the time of the request for an increase, out of which the Anthracite Commission grew, and forms the basis of the commission's award, which is represented by the figures in column 5.

New Wage Schedule for Navy-Yard Employees.

THE following new wage schedule affecting approximately 75,000 employees of the navy yards and naval stations and hospitals of the country was approved by Secretary Daniels on September 4 and went into effect on September 16.

The new rates, which are in accordance with the findings of the Navy Yard Wage Board, represent an increase of 5 per cent over the previous rates of all classes of employees whose pay is less than \$8 per day. These rates do not include the \$240 per annum bonus authorized by section 6 of the legislative, executive, and judicial act approved May 29, 1920. On a per diem basis the \$240 per annum bonus amounts to \$0.76 plus per diem.

SCHEDULE OF WAGES FOR EMPLOYEES UNDER THE NAVAL ESTABLISHMENT, INCLUDING NAVAL HOSPITALS.

Occupation.	East coast.	West coast.	Occupation.	East coast.	West coast.
<i>Group I.</i>			<i>Group II—Continued.</i>		
Attendants:			Hammer runners:		
Battery.....	\$4.88	.....	Heavy.....	\$5.36	\$5.36
Powder factory.....	5.60	.....	Others.....	4.88	4.88
Charwomen.....	2.96	\$2.96	Helpers:		
Janitors.....		4.40	Blacksmiths', heavy fires.....	5.36	5.36
North Atlantic and Great Lakes.....	3.84	.....	Blacksmiths', other fires.....	4.76	4.88
Charleston, Pensacola, Key West, and New Orleans.....	3.04	.....	Boilermakers'.....	4.76	4.88
Laborers, common.....		4.40	Coppersmiths'.....	4.76	4.88
North Atlantic and Great Lakes.....	3.84	.....	Electricians'.....	4.76	4.88
Charleston, Pensacola, Key West, and New Orleans.....	3.04	.....	Electricians', radio.....	4.76	4.88
<i>Group II.</i>			Flange turners'.....	5.36	5.36
Apprentices:			Forgers', heavy.....	5.36	5.36
First class.....	4.56	4.56	General.....	4.76	4.88
Second class.....	4.00	4.00	Laboratory.....	4.76	4.88
Third class.....	3.52	3.52	Machinists'.....	4.76	4.88
Fourth class.....	3.04	3.04	Molders'.....	4.56	4.88
Apprentices, sewers:			Ordnance.....	4.56	4.88
First class.....	2.56	2.56	Painters'.....	4.56	4.88
Second class.....	2.16	2.16	Pipefitters'.....	4.56	4.88
Third class.....	1.84	1.84	Riggers'.....	4.56	4.88
Fourth class.....	1.52	1.52	Ropemakers'.....	4.56	.....
Boys or girls.....	2.40	2.40	Sheet-metal workers'.....	4.56	4.88
Carbon packers.....	4.88	.....	Ship fitters'.....	4.56	4.88
			Shipsmiths', heavy fires.....	5.36	5.36
			Shipsmiths', other fires.....	4.56	4.88
			Woodworkers'.....	4.56	4.88

SCHEDULE OF WAGES FOR EMPLOYEES UNDER THE NAVAL ESTABLISHMENT,
INCLUDING NAVAL HOSPITALS—Continued.

Occupation.	East coast.	West coast.	Occupation.	East coast.	West coast.
<i>Group II—Concluded.</i>			<i>Group III—Continued.</i>		
Hodcarriers.....		\$4.64	Galvanizers.....	\$5.28	\$5.28
North Atlantic and Great Lakes. Charleston, Pensacola, Key West, and New Orleans.....	\$4.08		Gardeners.....	4.40	4.40
Holders-on.....	3.28		Glass workers, optical, fine.....	4.88	
Lens cleaners, inspectors, bench hands.....	5.04	5.36	Grinders and polishers, optical glass.....	6.72	
Oilers.....	3.84		Handymen.....	5.20	5.20
Pitmen.....	4.88	5.20	Inspectors, optical parts.....	6.56	
Primer workers.....	4.56		Instrument assemblers.....	5.68	
Rivet heaters.....	3.84		Instrument makers.....	7.20	7.20
Sand blasters.....	4.24	4.72	Jackmen.....	6.72	
Stable keepers.....	5.20	5.20	Joiners (see par. 16).....	6.72	7.20
North Atlantic and Great Lakes. Charleston, Pensacola, Key West, and New Orleans.....	3.84		Joiners, ship (see par. 16).....	6.72	7.20
Stevedores.....	3.04		Ladlemen, foundry.....	5.36	5.68
Teamsters.....	4.56	4.88	Leather workers.....	5.76	5.76
	4.32	4.64	Lead burners.....	8.32	
			Letterers and grainers.....	6.96	6.96
			Levelers.....	4.88	4.88
			Levermen.....	6.72	
			Linemen.....	5.36	5.36
			Loftsmen (see par. 7).....	7.60	7.60
			Machine operators.....	5.20	5.20
			Machinists.....	6.72	6.72
			All-round.....	6.72	6.72
			Automatic.....	6.72	6.72
			Electrical.....	6.72	6.72
			Floor or vise hand.....	6.72	6.72
			Masons:		
			Brick.....	7.20	7.20
			Stone.....	7.20	7.20
			Mattress makers.....	5.12	5.12
			Melters.....	5.76	5.76
			Electric.....	8.96	8.96
			Open-hearth.....	8.96	8.96
			Metallic cartridge-case makers.....	6.08	
			Millmen.....	6.72	7.20
			Model makers, wood.....	6.72	6.72
			Model testers.....	5.68	5.68
			Molders.....	7.20	7.20
			Steel casting.....	7.20	7.20
			Oakum spinners.....	3.92	3.92
			Operators:		
			Charging machine.....	6.72	
			Gas torch.....	6.40	6.40
			Optical-glass test plate and gauge makers.....	7.20	
			Optical instrument finishers.....	6.72	
			Ordnance men.....	5.92	5.92
			Packers.....	5.28	5.28
			Painters (see par. 14).....	6.72	6.72
			Pattern makers.....	7.76	8.40
			Pavers.....	6.08	6.08
			Pile drivers.....	6.72	6.72
			Pipe coverers.....	6.72	6.72
			Pipe fitters.....	6.72	6.72
			Pit foremen.....	6.88	
			Pitman, leading.....	6.08	
			Plasterers.....	7.20	7.20
			Plumbers:		
			House.....	6.72	6.72
			Ship.....	6.72	6.72
			Polish and wax mixer.....	6.72	6.72
			Pressmen, armor plate.....	9.52	
			Projector, armor plate.....	9.76	
			Punchers and shearers.....	5.36	5.68
			Pyrometer men.....	6.72	
			Railroad conductors.....	5.36	5.68
			Riggers.....	6.72	6.72
			Riveters.....	6.72	6.72
			Rodmen.....	4.64	4.64
			Rollers, brass and copper.....	6.32	6.32
			Ropemakers.....	5.36	
			Sailmakers.....	6.40	6.40
			Saw filers.....	6.72	6.72
			Sewers (see par. 17).....	3.84	3.84
			Sheet-metal workers.....	6.72	7.20
			Ship fitters.....	6.72	6.72
			Shipsmiths:		
			Heavy fires.....	8.08	8.08
			Other fires.....	6.72	6.72
			Shipwrights.....	6.72	7.20

SCHEDULE OF WAGES FOR EMPLOYEES UNDER THE NAVAL ESTABLISHMENT,
INCLUDING NAVAL HOSPITALS—Concluded.

Occupation.	East coast.	West coast.	Occupation.	East coast.	West coast.
<i>Group III—Continued.</i>			<i>Group III—Concluded</i>		
Steel workers (abolished; rerate to nearest authorized rating).			Wheelwrights.....	\$5.52	\$5.52
Stone cutters.....	\$6.08	\$6.08	Wire workers.....	5.28	5.28
Switchmen.....	5.28	5.60	<i>Print-shop ratings.</i>		
Temperers.....	6.88		Compositors.....	5.44	5.44
Toolmakers.....	7.20	7.20	Job printers.....	5.92	5.92
Trackmen.....	4.96	4.96	Linotype or monotype operator.....	5.92	5.92
Upholsterers.....	5.68	5.68	Machinist operators.....	6.32	6.32
Water tenders.....	5.36	5.68	Pressmen.....	5.92	5.92
Welders:			Press feeder, folder, stitcher, etc. (II).	3.76	3.76
Electric.....	6.88	6.88	Stonemen.....	5.92	5.92
Gas.....	6.72	6.72			
Wharf builders.....	6.08	6.08			

PAY OF QUARTERMEN AND LEADINGMEN.

1. The pay of quartermen and leadingmen shall be \$3.04 and \$1.52 per diem more, respectively, than the maximum pay of his occupation or trade.

GENERAL INSTRUCTIONS.

2. The schedule indicates the maximum rate of pay. The minimum shall be \$1.04 per diem less than the maximum, and the intermediate shall be \$0.48 per diem less than the maximum rate.

3. The Labor Board shall accept applications only for such ratings hereon as may be necessary for the conduct of the work of the yard. The commandant, industrial manager, or other officer in charge, shall judge and decide as to the necessity for the use of any ratings on the schedule of wages.

4. All ratings open to both males and females.

5. All mechanics who are sufficiently competent to be considered first class shall be carried at the maximum rate of pay.

6. Employees who are furnished quarters, light, heat, or subsistence shall be charged for such in accordance with the provisions of paragraph 9 of the department's circular letter of September 4, 1920.

7. Artisans detailed for duty as loftsmen shall be allowed the rate of pay therefor, in lieu of the rate of pay for their trade, without change of rating through the Labor Board where such procedure is deemed more advantageous or desirable.

8. A statement of the duties and qualifications of all ratings may be found in the "Manual Governing the Employment of Labor under the Naval Establishment," to be issued in the near future.

ADDITIONAL ALLOWANCES.

9. No allowances in addition to the regular daily rate of pay indicated hereon shall be allowed unless specifically authorized by the department.

10. Employees who are assigned to a regular snift, whose whole time or any part thereof is between the hours of 6 p. m. and 7 a. m. shall be allowed 5 per cent in addition to their regular daily rate of pay for work performed between the hours mentioned.

11. Mechanics detailed for inspection duty on work of their trade or material used in connection with work of their trade shall be allowed \$0.48 per diem in addition to their regular daily rate of pay, but only mechanics who inspect work or material according to specifications and not those who inspect material as to its usability are entitled to the \$0.48 per diem. Members of the supervisory mechanical force shall not receive this additional allowance.

12. Layers out shall be allowed \$0.05 per hour in addition to their regular hourly rate of pay while actually engaged on such work. Layers out are mechanics who lay out work direct from blue prints for other men to machine. This does not apply to mechanics whose use of blue prints is limited to the laying off of their own work or some portion of it from blue prints and does not apply to loftsmen whose regular daily rate of pay is based on the character of work that they perform.

13. Artisans engaged in testing tanks and rivets shall be allowed \$0.48 per diem in addition to their regular daily rate of pay. This includes artisans of the ship fitters' trade, such as ship fitters, chippers, and calkers, and riveters, but does not include machinists outside employed in testing valves in tanks or plumbers employed in testing plumbing work in tanks for water tightness.

14. Painters engaged in the application of bitumastic compositions shall be allowed \$0.48 per diem, east coast, and \$0.96 per diem, west coast, in addition to their regular daily rate of pay.

15. Laborers, common, employed in scaling ships' double bottoms, fuel-oil tanks, and other closed compartments of a similar character as regards ventilation, shall be allowed \$0.24 per diem in addition to their regular daily rate of pay.

16. Joiners at the Puget Sound Navy Yard when actually engaged in insulating over hot bitumastic shall be allowed \$0.12 per hour in addition to their regular hourly rate of pay.

17. Sewers at the New York Navy Yard, when assigned to the work of cutting in the flag loft shall be allowed \$0.48 per diem in addition to their regular daily rate of pay.

18. Laborers, common, at the naval operating base, Hampton Roads, Va., shall be allowed \$0.64 per diem in addition to their regular daily rate of pay when detailed to duty in the refrigerating plant.

19. Boiler makers at the Washington Navy Yard shall be allowed \$0.05 per hour in addition to their regular hourly rate of pay when actually working on the inside of torpedo tubes in the process of rounding out the tubes, such additional allowance to remain in effect only during the period in which the present system of working this material is employed.

20. Divers shall be paid the rate of pay indicated hereon for the rating only while actually engaged on diving work.

Approved, September 4, 1920.

Effective, September 16, 1920.

JOSEPHUS DANIELS,
Secretary of the Navy.



Rate of Wages per Hour in the Building Trades, May, 1920.

THE following table, compiled by Mr. E. M. Craig, secretary of the Builders' Association of Chicago, is here reproduced with his consent. The figures are for May 1, 1920.

RATE OF WAGES PER HOUR PAID IN

City.	Masons.	Bricklayers.	Structural ironsetters.	Ornamental ironsetters.	Plasterers.	Lathers.	Hoisting engineers.
Aberdeen, S. Dak.	\$1.25	\$1.25			\$1.25	7-8c. a yd.	
Akron, Ohio	1.00	1.25	\$0.90-\$1.00	\$0.90-\$1.00	1.25	\$1.25	\$0.85-\$0.90
Albany, N. Y.	1.12½	1.12½	1.00	1.00	1.12½	1.00	1.00
Atlanta, Ga.	1.25	1.25	.40-.80	None.	1.00	1.00	
Baltimore, Md.	1.25	1.25	.85-1.00	.75-1.00	1.12½	1.00	.90
Bloomington, Ill.	1.25	1.25	1.00	1.00	1.25	1.00	.87½-.92
Boston, Mass.	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Buffalo, N. Y.	1.00	1.00	.95-1.10	.50-.75	1.00	(1)	\$44 a wk.
Burlington, Vt.	1.00	1.00			1.00	.87½	
Butte, Mont.	1.12½	1.12½	1.00	.68½	1.12½	1.00	.87½
Cedar Rapids, Iowa	1.12½	1.12½	.90		1.12½	1.00	.93½
Chicago, Ill.	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Cincinnati, Ohio	.90	1.25	1.00	1.00	1.00	.93½	.87½
Cleveland, Ohio	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Dayton, Ohio	1.25	1.00	1.00		1.25	1.15	1.00
Dallas, Tex.	1.12½	1.12½	1.00		1.12½	.93½	.87½
Davenport, Iowa	1.12½	1.12½	.90	.90	1.25	1.25	(3)
Decatur, Ill.	1.25	1.25	1.00	1.00	1.25	1.00	1.00
Denver, Colo.	1.12½	\$1.25-1.37½	1.15½	1.15½	1.25	1.12½	1.12½-1.18½
Des Moines, Iowa	1.12½	1.12½	.90	.90	1.25	1.25	(3)
Detroit, Mich.	1.25	1.25			1.25	1.00	1.10
Duluth, Minn.	1.00	1.25	.90-1.00	.90-1.00	1.12½	1.00	65-75-85c.
Edmonton, Canada	.90	.95	1.00	1.00	.90	7c. a yd.	.80
Erie, Pa.	1.25	1.25	1.00	.70	1.25	1.25	(5)
Fort Wayne, Ind.	1.25	1.25	1.25		1.00	1.00	1.00
Galveston, Tex.	1.25	1.25	1.00	1.00	1.12½	1.50	.87½
Gary, Ind.	1.25	1.25	1.25		1.25	1.25	1.25
Grand Rapids, Mich.	1.10	1.10			1.00	.85	.75-.90
Great Falls, Mont.	1.12½	1.12½	1.00	1.00	1.12½	1.12½	1.00
Hartford, Conn.	1.12½	1.12½	1.00	1.00	1.12½	1.25	60c. bunch
Idaho Falls, Idaho	1.25	1.25	None.	None.	1.25	8c. a yd.	None.
Indianapolis, Ind.	1.25	1.25	1.25	1.25	1.12½	1.00	(6)
Joliet, Ill.	1.12½					1.25	
Kansas City, Mo.	1.00	1.12½	1.10	1.10	1.20	1.10	1.00
Lafayette, Ind.	1.00	1.00			1.00	.87½	.65
Little Rock, Ark.	1.25	1.25	.87½		1.12½	.87½	
Louisville, Ky.	1.25	1.25	.75	.75	1.12½	1.00	
Memphis, Tenn.	1.25	1.25	1.00	1.00	1.00	1.00	1.00
Milwaukee, Wis.	1.25	1.25	.92½	.92½	1.12½	1.00	80c. & up.
Minneapolis, Minn.	1.25	1.25	1.00	1.25	1.12½	1.12½	1.00
Newark, N. J.	1.25	1.25	1.00	1.00	1.25	1.12½	1.12½
New Orleans, La.	1.00	1.00	1.00	1.00	1.00	1.00	.87½-1.00
New York, N. Y.	1.25	1.25	1.12½	1.12½	1.18½	1.12½	1.25
Oklahoma, Okla.	1.25	1.37½	1.00	1.00	1.37½	1.12½	.90
Omaha, Nebr.	1.25	1.25	1.00-1.15	.60-.85	1.25	1.25	1.25
Peoria, Ill.	1.25	1.25	1.00	1.00	1.25	1.00	1.00-1.12½
Philadelphia, Pa.	1.30	1.30	1.25	1.25	1.25	1.25	1.20
Pittsburgh, Pa.	1.12½	Strike.	1.25	1.25	1.15	1.12½	1.12½
Pittsfield, Mass.	1.25	1.25			1.00-1.25		.87½-.90
Portland, Oreg.	1.12½	1.12½	1.12½	1.12½	1.12½	1.00	1.12½
Providence, R. I.	1.15	1.15	1.00	1.00	1.00	1.00	1.00
Rochester, N. Y.	1.25	1.25	1.25	1.25	1.25	.90	(8)
Rock Island, Ill.	1.00	1.00	1.00	1.00	1.25	1.25	1.00
Salt Lake City, Utah.	1.00	1.25	1.12½	.75	1.25	1.12½	1.12½
San Francisco, Calif.	1.25	1.25	1.12½	.87½	1.25	1.12½	1.12½
Seranton, Pa.	.95	1.00	.87½	.75	1.00	.80	.80
Seattle, Wash.	1.12½	1.12½	1.00	1.00	1.12½	1.00	.87½-1.00
Shreveport, La.	1.50	1.50	None.	None.	1.50	1.25	1.00
Sioux City, Iowa	1.25	1.25	1.00	1.00	1.25	1.25	1.00
South Bend, Ind.	1.25	1.25	1.00		1.25	1.00	1.00
Spokane, Wash.	1.12½	1.12½	1.00	1.00	1.12½	1.00	1.00
Springfield, Ill.	1.00	1.25	1.00	1.00	1.25	1.00	.90
St. Joseph, Mo.	1.12½	1.12½	None.	None.	1.12½		1.00
St. Louis, Mo.	1.00	1.25	1.25	1.25	1.25	1.00	(11)
St. Paul, Minn.	1.25	1.25	1.00	1.00	1.12½	1.00	1.00
Tacoma, Wash.	1.12½	1.00	1.00	1.25	1.12½	\$5 a M.	1.00
Toronto, Canada	1.00	1.00	50-55-85c.		1.00	1.00	.75-.85
Troy, N. Y.	1.00	1.00	1.00	1.00	1.00	.75	
Vancouver, B. C.	1.12½	1.12½	.83½	.83½	1.12½	1.25	1.00
Washington, D. C.	1.00	1.12½	.98	.98	1.12½	1.00	1.00
Wheeling, W. Va.	1.25	1.25	1.25	1.25	1.00	1.00	1.25
Wilmington, Del.	1.30	1.30			1.00		
Winnipeg, Manitoba.	1.25	1.25	1.25		1.12½	1.00	(6)
Youngstown, Ohio	1.25	1.25	1.25	1.25	1.25	1.25	1.00

¹ Metal, 87½ cents per hour; wood, \$4.50 per thousand.

² \$5.50 to \$6.50 per thousand.

³ Single, 90 cents; double, \$1.

⁴ \$6 to \$6.50 per thousand.

⁵ Mixers, 90 cents; shovels, \$1.

⁶ \$1, \$1.12½, \$1.25.

WAGES AND HOURS OF LABOR.

115

THE BUILDING TRADES, MAY 1, 1920.

Tilesetters.	Plumbers.	Steam fitters.	Steam fitters' helpers.	Gas fitters.	Carpenters.	Stone-cutters.	Marble-cutters.
	\$0.87½	\$0.87½	\$0.60		\$0.85		
\$1.00	\$0.87½-1.00	\$0.87½-1.00			\$0.90-1.00	\$1.00-\$1.25	
	1.05	1.05		\$1.05	1.00	1.00	
1.00	.87½	.87½	.50	\$0.70-.90	.80	1.00	\$1.00
1.00	1.00	1.00	.75		.90	1.00	1.00
1.00	1.00	1.00	.65	1.00	1.00	No scale.	No scale.
1.00	1.00	1.00	.70	1.00	1.00	1.00	1.00
1.00	1.00	1.00	\$0.30-.50	1.00	1.00	1.00	1.00
	.75	.75	.40-.60	.75	.87½		
1.12½	1.12½	1.12½	.62½	1.12½	1.12½	1.06½	1.06½
	1.06½	1.06½		1.06½	.93½		
1.25	1.25	1.25		1.25	1.25	1.25	1.25
1.00	1.00	1.00	.50	1.00	1.00	.87½	1.15
	1.25	1.25	.75		1.25	.90	.90
1.00	1.15	1.15	.45	1.15	1.00	1.00	1.00
	1.25				.87½		
	1.25	1.25			1.00		
1.00	1.00	1.00	.50		1.00	1.00	
	1.18¾	1.18¾	.75	1.18¾	1.12½	1.00	1.00
	1.25	1.25			1.00		
1.00	1.10	1.10			1.00	1.25	
.87½	1.00	1.00		1.00	1.00		
.90	.85	.85	.50		.70	.85	.90
1.00	.87½	.87½	.50	.87½	1.00	1.00	
	1.00	1.00			1.00		
1.12½	1.12½	1.12½	.75	1.12½	.87½	1.25	1.00
1.25	1.25	1.25	.75	1.25	1.25	1.25	1.25
1.00	1.00	1.00		1.00	.85-.90		
	1.12½	1.12½	.75		1.00	1.00	1.00
1.00	1.00	1.00	.90	1.00	1.00	1.00	1.00
None.	1.12½	1.12½	.62½	1.25	1.00	None.	None.
1.00	1.00	1.00			1.00	1.00	.65
	1.25	1.25			1.10		
1.00	1.00	1.00	.60	1.00	1.00	1.00	1.00
1.00	1.00	1.00	\$6-\$9 a wk.	1.00	.70	1.00	None.
1.00	1.00	1.00		1.00	.80-.95		
	1.00	1.12	.55		.80		
\$1.00-1.25	1.25	1.00-1.25	.50	.75-1.25	.75-1.00	1.00	1.00
1.00	1.00	.82½	.56½	1.00	1.00	1.00	.87½
1.00	1.00	1.00	.62½	1.00	1.00	1.25	.85
1.25	1.12½	1.00	.75	1.00	1.00	1.00	1.00
1.00	.90	.90	.56½	.90	.87½	1.00	1.00
1.12½	1.12½	1.12½	.87½	1.12½	1.12½	1.12½	1.12½
1.00	1.25	1.00	.87½	1.00	1.00	1.25	1.25
1.00	1.25	1.25	.62½	1.25	1.12½		1.00
1.00	1.06½	1.06½	.50		1.00	1.00	.67½
1.00	.80-.90	1.25		.80-.90	1.12½	1.10	1.30
1.00	1.00½	1.25	.62½	1.00½	1.25	1.00	1.12½
	.90-1.00	.90-1.00	\$15-\$18 a wk		.87½		
1.12½	1.12½	1.12½	.50	1.12½	1.00	1.12½	1.12½
1.00	1.25	1.00	.75	1.00	1.00	1.00	1.00
1.00	1.00	1.00		1.00	1.00	1.00	.75
.87½	1.12½	1.12½	.50	1.12½	.87½	.87½	\$0.60-.75
1.00	1.12½	1.12½		1.12½	1.12½	1.00	1.00
1.00	1.25	1.25	.50½	1.25	1.06½	1.00	1.00
.85	.87½	.87½	.62½	.87½	.87½	.70	.87½
1.00	1.12½	1.12½	.75	1.12½	1.00	.87½	1.00
1.00	1.50	1.50	.75	Plumbers.	1.12½	1.00	1.00
.90	1.25	1.25	.75	None.	1.00	Open shop.	Open shop.
1.15	1.00	1.00	.50		1.00		
1.00	1.00	1.00	.62½	1.00	1.00	1.00	1.00
1.00	1.00	1.00	.60	1.00	1.00	1.00	1.00
1.25	1.12½	1.12½	.55	1.12½	.87½	1.00	1.00
1.00	1.25	1.25	.75	.87½	1.00	1.00	.60-.65
1.00	.87½	1.00	.60	.87½	1.00	1.12½	
1.12½	1.12½	1.12½	.75	1.00	1.00	.75	.75
1.00					.90	1.00	.65-.70
1.00	.87½	.87½	.40	.87½	1.00	.75	1.00
1.12½	.90	.90	.67½	.90	.90¾	1.00	.90
1.00	1.00	.92½	.50	1.00	.95	1.00	1.00
1.00	.93¾	.93¾	.48	.93¾	.93¾		
	1.00	1.00	.50	1.00	1.00	1.00	1.00
1.00	1.00	1.00			1.00	1.00	1.20
1.00	12 1.25	12 1.25		12 1.25	1.15	1.00	1.00

7 Strike for.

8 \$43 to \$45.50 per week.

9 Ask \$1.25.

10 Ask \$1.56.

11 Single, \$1.12½; double, \$1.25.

12 Demanding.

RATE OF WAGES PER HOUR PAID IN THE BUILD

City.	Marble setters.	Painters.	Sheet- metal workers.	Electrical workers.	Composition roofers.	Slate roofers.
Aberdeen, S. Dak.....		\$0.75-\$0.80	\$0.90	\$0.80	\$0.90	\$0.90
Akron, Ohio.....		.75- .85	\$0.85- .90	\$0.87½- 1.00	\$0.75 - .90	
Albany, N. Y.....		.95	1.00	1.00	1.00	1.00
Atlanta, Ga.....	\$1.00	.65- .76	.85	.90	.90	.75
Baltimore, Md.....	1.00	.87½	.70- .90	1.00	.80	.90
Bloomington, Ill.....	No scale.	.90	.90	1.00	.90	.90
Boston, Mass.....	1.00	1.00	1.00	1.00	1.00	1.00
Buffalo, N. Y.....	1.00	.87½	.87½	.90	.55 - .60	1.00
Burlington, Vt.....		.75	.75		.65 - .75	\$0.65- .75
Butte, Mont.....	1.12½	1.00	1.00	1.00		
Cedar Rapids, Iowa.....		.78	.87½	1.00		
Chicago, Ill.....	1.25	1.25	1.25	1.25	1.25	1.25
Cincinnati, Ohio.....	.90	.87½	.75	1.00	.70	1.00
Cleveland, Ohio.....		1.12½	1.25	1.37½	.66	1.25
Dayton, Ohio.....	1.00	.85	1.00	1.10	.80 - .90	1.00
Dallas, Tex.....		.87½	.87½	1.00		
Davenport, Iowa.....		1.00	1.00	.87½		
Decatur, Ill.....		.70		.90		
Denver, Colo.....	1.00	1.12½	1.12½	1.12½	.75	1.12½
Des Moines, Iowa.....		1.00	1.00	.87½		
Detroit, Mich.....		1.00	1.00	1.25	.85	
Duluth, Minn.....		1.00	1.00	1.00	1.00	1.00
Edmonton, Canada.....	.90	.70	.90	.70	.50	
Erie, Pa.....		.87½	.90	1.00	.80	.90
Fort Wayne, Ind.....		1.00	80-85-90c.	1.00		
Galveston, Tex.....	1.00	.87½	.90	1.00	.90	.90
Gary, Ind.....	1.25	1.25	1.25	1.25	1.15	1.15
Grand Rapids, Mich.....		.80- 1.00	1.00			
Great Falls, Mont.....		1.00	1.00	1.00	.84½	
Hartford, Conn.....	1.00	1.00	1.00	.90	.90	.90
Idaho Falls, Idaho.....	None.	1.00	1.00	1.00	None.	None.
Indianapolis, Ind.....	1.00	1.00	1.00	1.00	.50	.60
Joliet, Ill.....		1.00	1.25	1.25		
Kansas City, Mo.....	1.00	1.00	1.00	1.00	.85	1.00
Lafayette, Ind.....	None.	.87½	.70	.75	.70	.70
Little Rock, Ark.....		.90	.90	.87½		
Louisville, Ky.....	1.00	.75- .80	.65- .70	.75	.35 - .45	.75
Memphis, Tenn.....	1.00	1.00	1.00	1.00	.40	1.00
Milwaukee, Wis.....	1.00	.85	.80	.85	.77½	.77½
Minneapolis, Minn.....	1.00	1.00	.90	1.00	.85	.85
Newark, N. J.....	1.00	1.00	1.00	1.00	.87½	1.00
New Orleans, La.....	1.00	.75	1.00	1.00	.80	.80
New York N. Y.....	1.12½	1.12½	1.12½	1.12½	1.00	1.12½
Oklahoma, Okla.....	1.25	1.12½	1.25	1.00	.90	.90
Omaha, Nebr.....	1.00	1.00	1.12½	1.12½	1.00	1.00
Peoria, Ill.....	1.00	1.15	.87½	1.00	.87½	15.90
Philadelphia, Pa.....	1.30	1.00	.90-1.10	.80 - 1.12½	1.10	1.10
Pittsburgh, Pa.....	1.12½	1.12½	1.12½	1.12½	.85 - .90	Strike.
Pittsfield, Mass.....		.87½	.87½	.85 - .90		.87½
Portland, Oreg.....	1.12½	1.00	1.00	1.00	.87½	.87½
Providence, R. I.....	1.00	.90	1.00	1.00	.75	1.00
Rochester, N. Y.....	1.00	1.00	1.00	1.00	.90	.90
Rock Island, Ill.....	.87½	1.00	1.00	1.00	.80 - .85	.80- .85
Salt Lake City, Utah.....	1.00	1.00	1.00	1.12½	.56¼- .75	
San Francisco, Calif.....	1.12½	1.06¼	1.25	1.12½	1.12½	1.12½
Scranton, Pa.....	.87½	.87½	.87½	.95	.62½- .75	.87½
Seattle, Wash.....	1.00	1.00	1.00	1.12½	.93¼	.93¼
Shreveport, La.....	1.00	1.25	1.25	1.25	.75	1.25
Sioux City, Iowa.....	.90	1.00	1.00	On strike.	On strike.	On strike.
South Bend, Ind.....		.95	1.00	1.00	.65 - .85	1.00

7 Strike for.

13 Building laborers.

14 Plasterers' laborers.

WAGES AND HOURS OF LABOR.

ING TRADES, MAY 1, 1920—Continued.

Cement finishers.	Elevator constructors.	Pipe coverers.	Laborers.	Hod carriers.	Remarks.
\$0.85-\$1.00			\$0.50-\$0.60	\$0.60-\$0.65	Plumbers and steam fitters work 8 hours; other trades, 9 hours.
.85-.90	\$1.15	\$0.87½-\$1.00	.55-.60	.75-1.00	Bricklayers demanding \$1.50.
1.12½			.70	.70	
	1.00		.40	.40	Plumbers and painters are striking for increases.
1.00	1.00	1.00	.45-.50	.87½	Slate roofers \$1 July 1.
.87½	None.	1.00	.65	.65	
1.00	1.00	1.00	.67½	.70	
.85	1.12	.80	.50	.55	
1.25	1.00	1.12½	.43¼-.56¼	.50-.56¼	All trades except carpenters strike for \$1 a day increase.
.87½			.68¾	.87½	Plumbers strike for increase.
1.25	1.25	1.25	.62½	.73¾	
.90	.75	.87½	18 1.00	14 1.06¼	Sheet-metal workers 80 cents Sept 1.
1.12½	.90		.45-.50	.75	Cement finishers \$1.25 Aug. 1.
1.00	1.15		.87½	.87½	
.87½			.50	.85	
.87½	.70	.75	.50	.50	Electrical workers striking for \$1.25.
1.00		1.00	.62½	.67½	
1.12½	1.00	1.00	.75	.75	
.87½	.70	.75	.62½	.67½	Do.
.75-1.00		.93¾	.65		
.75	.85	.80	.50-.60	.50-.60	Hoisting engineers strike for \$1.
1.12½		.70	.50	.55	Sheet-metal workers \$1 Aug. 1.
1.00		.80	.45-.55	.65	Plumbers, steam fitters, and gas fitters demand \$1.25 an hour.
.87½			.65-.70	.75	Cement finishers and laborers, 9 hours.
1.25		1.25	.50	.56¼	
.70-.80			.75	.80	
.87½			.55-.65	.70-.75	Painters, hoisting engineers, cement finishers, and hod carriers work over 8 hours.
.75	.90	1.00	.62½	.87½	
.87½	None.	None.	.60	.75	
1.00	.90	.90	.62½	.75	Plumbers and steam fitters demanding \$1.25 an hour.
1.00			.50	.72½-.75	
1.07½	1.25		.75	.80	
.65		.80	.75	.90	Plumbers and steam fitters \$1.25; steam fitters' helpers 80 cents Aug. 1.
1.00			.45	.45	
1.00			.35-.40	.80	Hod carriers work 8½ hours.
.80	1.00	1.00	.30-.35	.50-.65	Most all trades "open shop."
.75	1.00	.90	50c. and up.	.75	Sheet-metal workers and cement finishers ask \$1 an hour.
1.00		.90	.60	.75	
1.25	1.12½	1.00	.87½	.87½	Plumbers \$1.25 Sept. 1; all trades ask uniform rate Sept. 1.
.75	1.00	.56¼	.40	.60	Carpenters demand \$1 an hour.
1.12½	1.12½	1.12½	.81¼	.87½	
1.12½	.90	.80	.65	.85	
1.12½	1.00	1.00	.60	.75	Elevator constructors \$1.10 Nov. 1; pipe coverers \$1.12½ Sept. 15.
1.00	\$0.60-.80		.67½	.67½	Iron setters asking \$1.25.
1.00	1.12½	.90	.75	1.10	Elevator constructors, \$1.25 Oct. 1.
1.12½	7 1.25	1.00	7.80	7 1.00	Striking: Bricklayers, \$1.50; roofers, \$1.25 Aug. 1; masons, \$1.25; plumbers, \$1.12½; gas fitters, \$1.12½ Oct. 1; and electrical workers, \$1.25.
1.00-1.25		(16)	.55½	.87½-1.00	Laborers work 9 hours.
1.00	.75	1.12½	.75	.87½	
1.00		.90	.65	.70	Plasterers work 40 hours a week.
1.25	1.00		.65	.65	
.70			.55	45-55-65c.	
1.12½			.68¾	.81¼-.87½	Plaster hod carriers paid \$1 an hour; tile setters asking \$1.12½ an hour.
1.12½	.95	1.00	.75-.93¾	.93¾-1.06¼	Carpenters and painters expect increase to \$1.12½ July 1.
(17)		.87½	.58½	.58½	Bricklayers, lathers, and laborers demand increase.
1.00	.93¾	1.12½	.75	.87½	Most work done "open shop."
1.00			40-50-60c.	.60	
.90	None.	None.	.65	.75	
1.25			.67½	.75	Laborers and hod carriers, 9 hours and "open shop."

¹⁵ Tile-slate roofers.

¹⁶ Done by helpers.

¹⁷ Outside, 58¼ cents; inside, \$1.

RATE OF WAGES PER HOUR PAID IN THE BUILD

City.	Marble setters.	Painters.	Sheet- metal workers.	Electrical workers.	Composition roofers.	Slate roofers.
Spokane, Wash.....	\$1.00	\$0.87½	\$1.00	\$1.00	\$1.00	\$1.00
Springfield, Ill.....	1.00	1.00	1.00	1.00	.75	1.00
St. Joseph, Mo.....	1.25	.80	.87½	1.00	.60	.60
St. Louis, Mo.....	1.00	1.00	.85	1.00	1.00	1.00
St. Paul, Minn.....	1.00	1.00	1.00	1.00	.80	1.00
Tacoma, Wash.....	.75	.90	1.00	1.00	.86	.86
Toronto, Canada.....	1.00	.75	.85	.87½	.65	1.00
Troy, N. Y.....	1.00	.85	1.00	.87½	1.00	1.00
Vancouver, B. C.....	1.12½	.77½	.83½	1.00	1.00	1.00
Washington, D. C.....	1.00	.90	.92½	1.00	.60 - .70	1.00
Wheeling, W. Va.....	-----	.93½	.93½	.93½	.93½	.93½
Wilmington, Del.....	-----	.90	-----	.90	-----	-----
Winnipeg, Manitoba.....	1.20	.87½	.90	.92½	-----	-----
Youngstown, Ohio.....	1.00	1.12½	1.12½	1.15	.90	1.15

ING TRADES, MAY 1, 1920—Concluded.

Cement finishers.	Elevator constructors.	Pipe coverers.	Laborers.	Hod carriers.	Remarks.
\$1.00	\$1.00	\$1.00	\$0.62½	\$0.75	
1.25	None.	.60	.60	.75	
.75	1.12½	.85	.60	.75	Sheet-metal workers and hod carriers striking for \$1 an hour.
1.25	1.00	.95	.67½	.70	
1.00	.90	.90	.61½	.80	Laborers, 9 hours; hod carriers, 8½ hours; plumbers on strike for \$1.25.
1.00	-----	1.00	.75	.87½	
.75	-----	-----	.50	.65	Plasterers' laborers, 75 cents an hour.
1.00	1.00	.87½	.45 - .50	.62½	Stonecutters on strike for \$1.
1.00	.75- .85	.80	.56¼	.65	
.90	.90	.80	.45 - .50	.62½	Elevator constructors on strike for \$1.25
-----	-----	-----	.55	.56¼	Sheet-metal workers on strike for \$1.
-----	-----	-----	.50	.60	
-----	-----	.90	.60	.60	Wages approved by the Government board.
¹² 1.15	-----	-----	.65 - .70	.65 - .70	Hod carriers demanding 95 cents an hour.

¹² Demanding.

Prevailing Hourly Wage Scale in the Building Trades on August 31, 1920.

THE following table of hourly wage scale in the building trades was compiled by the National Association of Builders' Exchanges and is reprinted from the American Contractor (Chicago) for September 4, 1920 (p. 27). It is stated that the wages given are those prevailing on August 31, 1920. Where two figures are shown they are the minimum and maximum wage, respectively.

WAGE SCALES IN THE BUILDING TRADES, COMPILED BY THE NATIONAL

City.	Carpenters.	Cement finishers.	Electricians.	Hod carriers.	Laborers.	Lathers.	Painters.	Plasterers.	Plasterers-tenders.	Bricklayers.	Elevator constructors.
Atlanta, Ga.	\$.80	\$.80		\$.40	\$.40		\$.75			\$1.25	
Buffalo, N. Y.	.60	.90	\$.90	.50	.45	\$1.25	1.00	\$.25	\$.50	1.35	\$1.00
Boston, Mass.	1.00	1.00	.90			1.00		1.00	.60	1.00	1.12
Chicago, Ill.	1.00	1.00	1.00	.70	.70	1.00	1.00	1.00	.80	1.00	1.00
Cincinnati, Ohio.	1.25	1.25	1.25		1.00	1.25	1.25	1.25	1.06½	1.25	1.25
Cleveland, Ohio.	1.00	.90	1.00	.85	.75	1.00	.87½	1.25	.85	1.25	1.00
Columbus, Ohio.	1.25	1.25		.87½	.87½	1.25	1.12½	1.25	.87½	1.25	
Dayton, Ohio.	.90	.80	1.00	.80	.65	1.10	.80	1.25	.85	1.25	1.00
Detroit, Mich.	1.00	1.00	1.10	.75	.50				.75		
Erie, Pa.	.85	.85		.85	.60	1.15	.85	1.25	.85	1.25	1.15
Grand Rapids, Mich.	1.00	1.00	1.25	1.00	1.00	1.25	1.00	1.25	1.25	1.25	1.25
Indianapolis, Ind.	1.00	1.12½	1.00	.55	.45				.45		.75
Louisville, Ky.	.85	.80		.65	.60	1.25	.87½	1.25	.65	1.25	.90
Memphis, Tenn.	1.00	.90	1.00	.75	.65	1.00	.90	1.00	.75	1.10	1.00
Milwaukee, Wis.	1.00	1.00		.72½	.50				.75	1.25	.90
Newark, Ohio.	.80	.90	1.00	.75	.40	day.	.75	1.12½	.80	1.25	.90
New York City.	.75	.75		.80	.75				.75	1.25	.90
Omaha, Nebr.	1.00	1.00	1.00	.75	.35	1.00	1.00	1.25	.75	1.25	1.00
Philadelphia, Pa.	1.00	1.00	.85	.75	.50	1.00	.85	1.12½	.80	1.25	1.00
Pittsburgh, Pa.	.90	.90	1.00	.80	.60	1.00	1.00	1.00	.80	1.12½	
Reading, Pa.	1.12½	1.12½	1.12½	.87½	.81½	1.12½	1.12½	1.18¾	.87½	1.25	1.12½
St. Joseph, Mo.	1.12½	1.12½	1.25	.50	.60	1.25	1.00	1.25	.75	1.25	1.00
Savannah, Ga.	1.12½	1.00	1.25	.75	.60	1.25	1.00	1.25	1.10	1.30	1.25
Washington, D. C.	1.25	1.12½	1.12½	1.00	.80	1.12½	1.12½	1.15	1.00	1.50	1.15
Youngstown, Ohio.	.75	.75	.90	.60	.50	1.00	.75	1.10	1.00	1.25	.90
St. Louis, Mo.	.80	.75		.60	.50				.60		
	.87½	.75	1.00	.70	.65	.80	.87½	1.00	.70	1.12½	.80
	.75	\$.56		3.25	3.25	5.25	7.00	9.00	3.50	1.00	
	1.00	day.	1.00	day.	day.	M.	day.	day.	day.	1.25	1.00
	.95	1.00	1.00		.45						
		1.00		.75	.50	1.00	.90	1.00	.75	1.25	1.25
	1.15	1.15	1.15	.87½	.80	1.25	1.12½	1.25	.90	1.25	
	1.25	1.25	1.25	.85	.67½	1.25	1.25	1.37½	.93¾	1.25	1.25

Minimum Scale of Wages in the Building Trades on 8-Hour Basis.

THE following table of minimum scale of wages on the 8-hour basis, payable in the building trades, was compiled in the office of the secretary-treasurer of the building trades department of the American Federation of Labor and included in his report at the fourteenth annual convention of the department held at Montreal, Quebec, June 2-5, 1920.¹ This information was furnished by the various local unions and in practically every case the rates are those agreed upon for the year beginning in May, 1920.

¹ Report of proceedings of the Fourteenth Annual Convention of the Building Trades Department, American Federation of Labor, held at Montreal, Quebec, June 2-5, 1920, pp. 86-89. Washington, 1920.

ASSOCIATION OF BUILDERS' EXCHANGES AND PREVAILING AUG. 31, 1920.

Gas fitters.	Hoisting engineers.	Marble cutters.	Marble setters.	Masons.	Ornamental iron workers.	Pipe coverers.	Plumbers.	Roofers.	Sheet metal.	Steam fitters.	Steam fitters' helpers.	Stonecutters.	Structural iron workers.	Tile setters.
.....	\$0.90	.....	\$1.25	.....	\$0.80	.....	\$1.00	.....	\$0.60	\$1.00	\$0.40	.....	\$0.80	\$1.25
\$1.00	1.00	.....	1.50	\$1.25	.90	.....	1.12½	\$0.80	.90	1.12½	.50	\$1.00	.90	1.35
1.00	1.00	\$1.00	1.00	1.00	.....	\$0.80	1.00	1.00	.90	1.00	.....	1.00	1.10	1.00
1.00	1.20	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	.70	1.00	1.00	1.00
1.25	1.25	.....	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.25	1.25	1.25
1.00	1.00	1.00	.90	.90	1.00	.....	1.00	.70	.80	1.00	.60	1.15	1.00	1.00
.....	1.25	1.25	1.25	1.25	1.25	.....	.....	1.25	1.25	1.25	.....	1.25	1.25	1.25
1.00	1.00	1.00	1.00	1.25	.80	1.12½	1.00	.73	.90	1.00	\$4-\$5 day.	1.10	.70	1.00
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.15	1.00	1.00	1.15	.50	1.00	1.00	1.00
1.25	75.00 wk.	.....	1.25	1.25	1.00	1.00	1.25	1.00	1.00	1.25	.62½	1.25	1.25	1.00
.....	44.00 wk.	1.00	.81	1.25	.80	.80	7.00 day.	.90	.90	7.00 day.	.45	1.00	1.10	1.00
.....	.70	.....	1.10	1.10	.80	1.00	1.00	.75	.85	1.00	.65	1.15	1.25	1.00
1.25	1.00	.65	1.00	1.25	1.25	.90	1.25	.60	1.00	1.25	.65	1.00	1.25	1.00
.75	.50	1.00	1.00	1.25	1.00	.65	1.00	.80	.80	1.12½	.45	1.00	.90	1.00
.....	1.00	1.00	1.25	1.25	1.00	1.00	1.25	.50	1.00	1.25	.50	1.00	1.00	1.25
1.00	1.00	1.00	1.00	1.25	.92½	.90	1.00	.77½	1.00	.82½	.52½	1.00	.92½	1.00
1.00	.....	1.00	1.00	1.10	.....	.....	1.00	.90	.90	1.00	.....	.....	.....	1.00
1.12½	1.25	1.12½	1.12½	1.25	1.12½	1.12½	1.12½	1.00	1.12½	1.12½	.87½	1.12½	1.12½	1.12½
1.25	1.25	1.00	1.00	1.25	1.25	1.00	1.25	1.00	1.12½	1.25	.60	1.12½	1.25	1.00
1.00	48.00 wk.	1.00	1.00	1.00	1.00	1.00	1.00	.80	.80	1.12½	.62½	1.12½	1.25	1.00
1.00	1.30	1.30	1.30	1.30	1.25	1.00	1.00	1.10	1.10	1.25	.90	1.10	1.25	1.00
1.12½	1.12½	1.00	1.00	1.25	1.25	1.00	1.12½	1.25	1.12½	1.15	.80	1.25	1.25	1.00
1.00	1.25	1.10	1.10	1.00	.65	1.00	1.00	.70	.75	1.00	.55	1.00	1.00	1.10
1.12½	1.00	1.00	1.25	1.12½	.....	.85	1.12½	.60	1.00	1.12½	.75	.....	.....	1.25
1.12½	.60	1.00	1.00	1.00	1.00	1.12½	1.12½	.80	.90	1.12½	3.20 day.	1.00	.50	\$8-\$10 day.
1.00	.70	1.00	1.00	1.00	1.00	1.12½	1.12½	.60	.60	1.12½	.....	1.00	1.00	1.00
1.00	1.00	1.00	1.00	1.00	1.25	1.00	1.00	1.05	1.00	1.00	.65	1.00	1.25	1.00
.....	1.00	.....	.....	.....	1.25	1.12½	1.18½	.90	1.12½	.....	.....	1.00	1.25	1.00
.87½	1.25	.67	1.00	1.00	Open.	1.00	1.25	1.00	1.00	1.25	.75	1.00	1.25	1.00

MINIMUM SCALE OF WAGES IN THE BUILDING TRADES ON 8-HOUR BASIS.

[746]

Locality.	As- bes- tos work- ers.	Brick- layers.	Bridge and struc- tural- iron work- ers.	Car- pen- ters.	Ce- ment fin- ish- ers.	Elec- tri- cians.	Elev- ator con- struc- tors.	Hoist- ing en- gine- ers.	Gran- ite cut- ters.	Build- ing labo- rers.	Lath- ers.	Mar- ble work- ers and pol- ish- ers.	Sheet- metal work- ers.	Paint- ers.	Plas- terers.	Plumb- ers.	Com- posi- tion roof- ers.	Slate and tile roof- ers.	Steam fitters.	Stone- cut- ters.	Tile lay- ers.	
Albuquerque, N. Mex. ¹				\$1.00		\$0.87 $\frac{1}{2}$								\$1.00	\$1.00							
Alliance, Ohio		\$1.25		1.00		1.00				\$0.60	\$0.90		\$0.95	1.00	1.10		\$1.00	\$0.95	\$0.95	\$1.00		
Alton, Ill. ¹		1.25	\$1.25	1.00	\$1.50	1.00		\$1.00		.75	25.50		1.00	.80	1.50	1.25				1.25	\$0.80	
Anderson, Ind. ¹		1.00	1.00	1.00	1.00	.90				.87 $\frac{1}{2}$				.80	1.00	1.00				1.00		
Asheville, N. C.		.87 $\frac{1}{2}$			.87 $\frac{1}{2}$	.87 $\frac{1}{2}$				.87 $\frac{1}{2}$			.75	.75	1.00	1.12 $\frac{1}{2}$				1.12 $\frac{1}{2}$		
Ashland, Ky.		1.25	1.00	1.00	.77 $\frac{1}{2}$	.87 $\frac{1}{2}$				.75			.87 $\frac{1}{2}$	.75	1.12 $\frac{1}{2}$	1.00				1.00		
Aurora, Ill. ¹	\$1.25	1.25	1.25	1.00		1.25				.75	1.25	\$1.25	1.25	1.25	1.25	1.25				1.25	1.25	\$1.25
Baltimore, Md. ¹	1.00	1.00	1.00	.80	1.00	.92 $\frac{1}{2}$	\$0.80	.90		.90			.80	.68 $\frac{1}{2}$	.87 $\frac{1}{2}$	.87 $\frac{1}{2}$		1.00		.80	1.00	
Bath, Me.		.80		.70		.62 $\frac{1}{2}$				.45			.80	.70	.80	.80				.80		1.00
Bay City, Mich. ¹			1.00	.85		.75							.70			.87 $\frac{1}{2}$				.87 $\frac{1}{2}$		
Beaver County, Pa. ¹		1.12 $\frac{1}{2}$		1.00		1.00					.87 $\frac{1}{2}$		.90	.87 $\frac{1}{2}$	1.12 $\frac{1}{2}$	1.00	.90	.90	1.00			
Bellefonte, Pa. ¹		1.25		1.00	1.25	1.25	1.00			.75	1.00		.90	.90	1.25	1.00	1.00	1.00	1.00			
Bloomington, Mont.		1.50		1.00		1.00		1.00		.87 $\frac{1}{2}$			.82 $\frac{1}{2}$	.93 $\frac{1}{2}$	1.12 $\frac{1}{2}$	1.12 $\frac{1}{2}$				1.12 $\frac{1}{2}$		
Bloomington, Ill. ¹		1.25	1.00	1.00	.87 $\frac{1}{2}$	1.00		.87 $\frac{1}{2}$		.65	1.00		.90	.90	1.25	1.00				1.00		1.00
Boise, Idaho.		1.00	1.00	1.00	.87 $\frac{1}{2}$	.87 $\frac{1}{2}$		1.00		.62 $\frac{1}{2}$			.87 $\frac{1}{2}$	.87 $\frac{1}{2}$	1.12 $\frac{1}{2}$	1.00				1.00	1.02 $\frac{1}{2}$	
Boston, Mass. ¹	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		.75	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Buffalo, N. Y. ¹		.80	1.05	1.25	1.00	1.00	1.00	1.00		.65	1.00		1.00	.87 $\frac{1}{2}$		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Butte, Mont. ¹			1.25	1.00		1.00		.87 $\frac{1}{2}$	\$1.25	.87 $\frac{1}{2}$	1.12 $\frac{1}{2}$	1.25	1.00	1.00	1.12 $\frac{1}{2}$	1.25				1.25	1.25	
Carlinville, Ill.		1.00		1.00		.90							.80	.75	1.00							
Champaign-Urbana, Ill. ¹		1.25		.80	1.00	.75		.75		.75	1.00		.70	1.25	.87 $\frac{1}{2}$			.70		.87 $\frac{1}{2}$		1.25
Charleston, W. Va. ¹		.95	1.00	.75	1.00	.81 $\frac{1}{2}$	.75	.75		.70	.87 $\frac{1}{2}$		.75	.75	1.00	.81 $\frac{1}{2}$	.75	.75	.81 $\frac{1}{2}$			
Chester, Pa. ¹		1.25	1.25	1.25	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Chicago, Ill. ¹	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	.70	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Cincinnati, Ohio. ¹	.87 $\frac{1}{2}$		1.00	.90		1.00		1.00		.75	.93 $\frac{1}{2}$		.75	.87 $\frac{1}{2}$		.85	.70	1.00		.88 $\frac{1}{2}$		
Cisco, Tex.		1.37 $\frac{1}{2}$		1.25		1.25				.62 $\frac{1}{2}$	1.50			1.25	1.62 $\frac{1}{2}$	1.37 $\frac{1}{2}$						
Cleveland, Ohio. ¹	.80	1.00	1.00	1.00	1.00	1.20	.90	.95		.65	1.00	1.00	.90	.80	1.00	1.06	.71 $\frac{1}{2}$	1.00	1.00	.90	.90	1.00
Columbus, Ohio. ¹		1.25	1.00	.90		.90	.80	1.00		.50	1.00		.90	.85	1.00	.90				.90		
Cumberland, Md. ¹		1.25	.97 $\frac{1}{2}$	.90		.87 $\frac{1}{2}$	.90	.92 $\frac{1}{2}$		.87 $\frac{1}{2}$	1.00		.87 $\frac{1}{2}$	.87 $\frac{1}{2}$	1.00	.87 $\frac{1}{2}$						
Dallas, Tex. ¹	1.00	1.12 $\frac{1}{2}$	1.00	1.00	1.00	1.00	.90	.87 $\frac{1}{2}$	1.00	.62 $\frac{1}{2}$	1.12 $\frac{1}{2}$	1.00	1.00	1.00	1.12 $\frac{1}{2}$	1.25				1.25		1.00
De Kalb, Ill. ¹		1.00		.87 $\frac{1}{2}$	1.00	1.00		.90		.75	1.00		.87 $\frac{1}{2}$	.80	1.00	.87 $\frac{1}{2}$		1.00		.87 $\frac{1}{2}$		1.00
Des Moines, Iowa. ¹	.75	1.12 $\frac{1}{2}$	.90	.90		.87 $\frac{1}{2}$	1.00	.87 $\frac{1}{2}$	.95	.75	1.00	1.00	.82 $\frac{1}{2}$	1.00	1.00	.93 $\frac{1}{2}$		1.00		.93 $\frac{1}{2}$	.87 $\frac{1}{2}$	1.00
East Liverpool, Ohio. ¹		1.12 $\frac{1}{2}$		1.00		1.00							.60	.70		1.12 $\frac{1}{2}$						
Eau Claire, Wis.		1.00		.70		.65							.90	.85		1.13 $\frac{1}{2}$				.87 $\frac{1}{2}$		
Elgin, Ill. ¹		1.00		.90		.75				.65			1.00	.90		1.13 $\frac{1}{2}$				1.13 $\frac{1}{2}$		
Elizabeth, N. J. ¹		1.00	1.10	1.00		1.00		1.00		.75	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
El Paso, Tex. ¹		1.12 $\frac{1}{2}$	1.00	1.00		1.12 $\frac{1}{2}$		.87 $\frac{1}{2}$					1.00	1.00	1.12 $\frac{1}{2}$	1.12 $\frac{1}{2}$						

MINIMUM SCALE OF WAGES IN THE BUILDING TRADES ON 8-HOUR BASIS—Concluded

Locality.	As- bes- tos work- ers.	Brick- lay- ers.	Bridge and struc- tural- iron work- ers.	Car- pen- ters.	Ce- ment fin- ish- ers.	Elec- tri- cians.	Elev- ator con- struc- tors.	Hoist- ing engi- neers.	Gran- ite cut- ters.	Build- ing labo- rers.	Lath- ers.	Mar- ble work- ers and pol- ish- ers.	Sheet- metal work- ers.	Paint- ers.	Plas- terers.	Plumb- ers.	Com- posi- tion roof- ers.	Slate and tile roof- ers.	Steam fitters.	Stone- cut- ters.	Tile lay- ers.
Portland, Oreg. ¹	\$1.00	\$1.12½	\$1.12½	\$1.00	\$1.00	\$1.00	\$1.00	\$1.12½	\$1.00	\$0.87½	\$1.00	\$1.00	\$1.00	\$1.00	\$1.12½	\$1.12½	\$0.87½	\$0.87½	\$1.12½	\$1.12½	\$1.12½
Pottsville, Pa. ¹		1.00		.70	.95	.55								.65	.95						
Ranger, Tex.				1.25						.75	1.50		1.25	1.25	1.62½	1.50			1.50		
Reading, Pa. ¹		1.00		.70		.70					.80			.65	.87½	.85					
Reno, Nev. ¹		1.12½		1.00		1.00					1.25			1.00	1.12½	1.12½					
Richmond, Va. ¹.....			.87½	.72½		.75	.85	.75					.75	.65	.75	.75			.75		
Rochester, N. Y. ¹.....	.80	1.25	1.00	1.25	1.12½	1.00			1.00	.80	1.00	1.00	1.00	1.00	1.25	1.12½	.90	1.00	1.12½	1.00	1.00
Rockford, Ill. ....		.90	1.00	.90		.87		1.00		.75	.85		.85	.70	.90	1.00			1.00		
Rock Island, Ill. ¹				1.00		1.00				.85			1.00	1.00							
Rome, Ga.		1.00		.45		.65								.56		.87½					
Salt Lake City, Utah ¹		1.12	1.00	1.00	1.00	.87½	1.00			.87½	1.00	.62½	1.00	1.00	1.12				1.12		.92½
San Antonio, Tex. ¹	1.00	1.12½	.87½	1.12½	.87½	.87½			.87½	.37½	1.00		.87½	.87½	1.12½	1.00			1.00		1.12½
Sandusky, Ohio ¹		1.25		.90		1.00		1.00						.80	1.00	1.00			1.00		
San Francisco, Calif. ¹	1.06½	1.25	1.12½	1.06½	1.12½	1.12½	1.01½	1.12½	1.06½	.75	1.12½	.81½	1.12½	1.06½	1.25	1.25	1.12½	1.12½	1.12½	1.00	1.06½
Sapulpa, Okla. ¹		1.25		1.00	1.12½					.62½			.93½	1.00	1.25	1.12½					
Seattle, Wash. ¹	1.12½	1.12½	1.00	1.00	1.12½	1.12½	1.06½	1.00		.87½	1.00		1.00	1.00	1.12½	1.12½	1.00	1.00	1.12½		1.12½
Sheboygan, Wis. ¹.....		.70		.65	.65	.70				.65	.65		.62½	.60	.70	.70			.70		
Sioux Falls, S. Dak. ¹		1.50		1.00	.95	.83½				.75			.90	.90	1.50	1.25			1.25		1.25
Somerville, N. J. ¹				1.00						.80	1.06½			.80		1.00					
Spokane, Wash. ¹	1.00	1.12½	1.00	1.00	1.00	.90		1.00	1.00	.87½	1.00	1.00	1.00	1.00	1.12½	1.12½	.75	1.00	1.12½	1.00	.87½
Springfield, Mass. ¹		1.05		.95	1.00	.95		1.00		.75	.95	1.05	1.00	.95	.95	.95			.95		
Springfield, Mo. ¹		1.12½		.87½	1.00	.87½				.62½	1.00		.87½	.87½	1.00	.87½			.87½		1.12½
St. Joseph and Benton Harbor, Mich. ¹		1.00		.90		.65					1.06½			.75		1.00					
St. Louis, Mo. ¹.....	.95	1.25	1.25	1.12½	1.25	1.00	1.25	1.25	1.12½	.67½	1.25	1.00	.85	1.00	1.25	1.25	.85	1.00	1.25	1.00	1.00
St. Paul, Minn. ¹.....	.87½	.87½	.87½	.75	.87½	.81½		.80		.47½	.81½	.92½	.80	.70	.90	.87½	.70		.87½		.85
Tampa, Fla. ¹		1.00		.80		.80		.80					.87½	.87½		.87½			.87½		
Texarkana, Ark.-Tex. ¹		1.25		.87½	1.00	.75				1.12½			.87½		1.25	.87½	.87½				
Topeka, Kans. ¹		1.12½	.75	.87½	1.00	.87½				.62½	1.00			.85	1.00	1.12½				1.00	
Toronto, Ontario, Canada ¹.....		.90	.80	.75	.65	.80	.75	.75	.75	.50	.75		.65	.65	.75	.75			.75	.75	.90
Trenton, N. J. ¹		1.00	1.25	1.00	1.00	1.00				.75	1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00
Trinidad, Colo. ¹		1.25		1.00		.90				.75	.85		.87½	1.00	1.25	1.00			1.00		
Tucson, Ariz. ¹		1.25		1.12½	1.12½	1.12½				.75	.87½		1.00	1.00	1.12½	1.12½			1.12½		
Walla Walla, Wash. ¹		1.12½		.87½	.75	.87½				.62½	1.00		1.00	.87½	1.12½	1.00			1.00	1.12½	1.12½
Washington, D. C. ¹.....	.80		.98		1.00	.90			1.00	.62½	1.00		.92½	.90		.87½			.92½		1.00
Waterbury, Conn. ¹		1.00		.62½		.62½		.75					.85	.62½		.75					
Watertown, N. Y. ¹				1.00										.67	1.00	.75					

[748]

Wausau, Wis. ....	.75		.55		.50				.45	.55		.60	.45	.85	.75			.75		
West Palm Beach, Fla. ¹	1.00		.87½		1.00				.43½	.87½			.87½	.85	1.00					
Williamsport, Pa. ¹	1.00		1.00		1.00								.75	.85	.85					
Winnipeg, Manitoba, Canada ¹ ..	.80	1.00	.75	.70	.75	1.00			.55	.80	.95	.73½	.70	1.00	.80	.60		.80	1.00	1.00
Winona, Minn. ¹	1.00		.80		.75							.80	.75	1.00	.87½			.87½		1.00
Yonkers, N. Y. ¹	1.25		1.00	1.00	1.00		1.12½		.87½	1.12½		1.00	1.00	1.25	1.00	.90	1.00	1.00		

¹Saturday half holiday in this locality.

Increase in Wages of Longshoremen on Coastwise Piers.

LONGSHOREMEN on the coastwise piers at New York who have been on strike since last April, demanding an increase of wages, returned to work about the middle of August at the same rates of wages, that is, 65 cents an hour with \$1 an hour for overtime, and with the same working hours and other conditions that prevailed during 1919. On September 1, however, the coastwise companies posted a notice increasing the wages to 72 cents an hour for day work and \$1.10 for overtime, all other conditions remaining the same.

Earnings of Time Workers and Pieceworkers in the Men's Clothing Industry of the Boston Market.

A LABOR survey of the men's clothing industry of the Boston market was made in April, 1920, by the employment manager of the Clothing Manufacturers' Association of Boston. This survey embraces 25 inside shops and 28 contract shops, and includes 2,561 employees, or about one-third of the workers in this industry in the Boston market.

The table following gives a comparison of the earnings of time workers and pieceworkers, as shown by this survey, both by shops and by occupations, all occupations not having both time workers and pieceworkers being omitted:

EARNINGS OF TIME WORKERS AND PIECEWORKERS IN MEN'S CLOTHING INDUSTRY OF BOSTON MARKET, APRIL, 1920, BY SHOPS AND BY OCCUPATION AND SEX.

By shops.

Section of establishment.	Number of workers.				Average weekly earnings or wages.			
	Pieceworkers.		Week workers.		Pieceworkers.		Week workers.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Coat shops.....	343	238	865	715	\$53.73	\$29.00	\$40.91	\$23.94
Pants shops.....	126	36	9	70	49.65	23.50	35.00	22.01
Vest shops.....	58	43	20	38	55.13	32.56	41.30	23.47
Total, all shops..	527	317	894	823	51.28	28.85	40.85	23.64

By occupation and sex.

Occupation and sex.	Number of workers.		Average weekly earnings or wages.	
	Piece-work.	Week work.	Piecework.	Week work.
COATS.				
Basters:				
Males.....	110	53	\$45.85	\$38.09
Females.....	8	10	31.38	24.00
Button sewers.....	7	35	31.29	27.11
Buttonhole makers:				
Hand.....	78	16	35.26	31.13
Machine.....	2	3	28.00	34.00
Canvas basters.....	6	47	35.33	25.68

EARNINGS OF TIME WORKERS AND PIECEWORKERS IN MEN'S CLOTHING INDUSTRY OF BOSTON MARKET, APRIL, 1920, BY SHOPS AND BY OCCUPATION AND SEX—
Concluded.

By occupation and sex—Concluded.

Occupation and sex.	Number of workers.		Average weekly earnings or wages.	
	Piece-work.	Week work.	Piecework.	Week work.
COATS—concluded.				
Collar basters.....	5	29	\$44.00	\$30.24
Collar makers.....	26	23	53.77	41.39
Finishers.....	117	185	23.75	23.94
General hand workers:				
Males.....	1	19	19.00	38.58
Females.....	4	129	24.50	21.15
General tailors.....	1	60	66.00	38.78
Helpers and learners:				
Males.....	5	12	24.60	28.50
Females.....	3	30	15.33	16.93
Lapel makers.....	2	5	37.00	22.80
Lining makers.....	25	14	52.72	42.79
Operators:				
Males.....	1	44	66.00	40.66
Females.....	1	15	25.00	26.13
Pocket makers.....	57	24	55.88	53.63
Pressmen.....	75	71	59.11	53.20
Seamers.....	1	33	59.00	59.09
Shapers.....	10	37	49.50	46.00
Sleeve basters.....	2	28	51.00	23.25
Sleeve makers, females.....	1	40	30.00	26.38
Trimmers.....	21	20	44.00	41.95
Under basters.....	1	29	64.00	42.72
PANTS.				
Basters, females.....	18	5	26.89	24.20
Buttonhole makers.....	1	1	33.00	30.00
Finishers.....	18	40	20.11	21.28
Off pressers.....	16	3	58.44	41.67
VESTS.				
Basters:				
Males.....	7	3	33.57	35.00
Females.....	24	4	33.46	20.25
Finishers.....	4	25	31.75	23.36
Off pressers.....	12	2	71.08	48.00
Operators, males.....	30	10	60.03	48.30
Trimmers.....	6	4	28.67	25.50

Some Factors Affecting the Relation Between Hours and Output in Great Britain.

IT IS well understood that in many operations output is not directly proportioned to the length of time worked, and that up to a certain point production may be increased by reducing hours. Where this point lies is a hard matter to determine, as output is the result of many factors, and except where experiments are made under careful control there is no assurance that a change of hours may not be accompanied by other changes, each having its own effect upon productivity. Two recent studies by the English Industrial Fatigue Research Board deal with two factors which are frequently ignored in the inquiries by which investigators seek to determine the most effective length for a working day.

The first¹ treats of the length of time required to establish the effect upon output of a change of hours. In earlier studies it was

¹ Medical Research Council and Department of Scientific and Industrial Research. Reports of the Industrial Fatigue Research Board. No. 6. The speed of adaptation of output to altered hours of work. London, 1920. 33 pp.

shown that "when a reduction in hours of work is followed by an increased rate of production, this increase does not show itself at once." The present study is an attempt to determine how long it may take for the new rate of production to be established.

Studies were made of the rate of output of men engaged in steel works, of tin-plate-mill men, of women working at fuse production, of youths boring top caps, and of men sizing fuse bodies, data being secured for a considerable period before and after a reduction in hours was made. The period of adjustment to the shorter hours varied markedly with the kind of work. In the case of the steel melters, the men were changed from 12-hour to 8-hour shifts; for two months there was no definite improvement of output, but then production began to mount irregularly, and reached its maximum nearly 13 months after the reduction in hours. The men were paid a piece rate both before and after the change, so that they had every incentive to maintain their production. The tin-plate-millmen showed a striking difference, as when their hours were changed from 8 to 6 it took them only about two months to establish their new equilibrium of production, their hourly output, compared with that of the 8-hour period, being as 111.4 to 100.2.

The explanation of this more rapid adjustment presumably depends on the character of the work. The tin-plate-mill men work in groups of four on repetition work, the complete cycle of which is usually repeated every 90 minutes or so. They are a self-contained unit, who, practically speaking, are independent of the other workers in the factory. The steel melters usually work in groups of three, but there is much more variety in their occupation, and the average charge of steel, though it usually takes about 14 hours to work, may sometimes take only 10 hours, and at others 25 hours, according to the time required for mending the furnace, charging it, and so on. Also, the steel melters are greatly dependent on other men, such as the chargers, gas-producer men, and others, for their speed of production, and the interplay of the numerous and correlated forces concerned is likely to take longer to adjust than that of the comparatively simple forces found in the rolling of tin plates.

In the case of the women engaged in fuse production the effect of a reduction was manifested twice, as at first hours were reduced from 12 to 10 a day, and then, some six or seven months later, Sunday work was given up. When the 10-hour day was adopted, 4 weeks elapsed before the hourly output showed any change; then it began to rise, and attained a moderately steady level 14 weeks after the reduction of hours. When Sunday labor was abolished, there was a period of 3 weeks without any improvement; then an increase began, and a new level was reached about 17 weeks after the Sunday work ceased.

In the case of the youths boring cap tops, a period of 15 to 20 weeks was required for the establishment of a new equilibrium. This was light work, but the speed depended largely upon the working of automatic machinery, so that the human factor counted for less than it did in some other occupations. In the case of the men who were sizing fuse bodies, hours were reduced from 12 to 10. Hourly output began to rise after the first fortnight, and after 10 weeks it attained a fairly steady level, being to the production under the 12-hour system as 120 to 100. It was maintained at this level for about five months and then Sunday labor, which had been required intermittently, was given up altogether, whereupon hourly output began to rise almost at once, and reached a new level about 9 weeks after the change.

A curious result was noticed in certain work on shells at which men and women were both employed, the women operating lathes, and the men setting their tools, bringing up supplies, and so on. The men worked $63\frac{1}{2}$ hours a week, and the women $44\frac{1}{4}$. The shifts were then changed so that both men and women worked 54 hours a week, whereupon the women's hourly output at once increased. It is suggested that this result was due to the better work done by the men under the shorter hours.

However eager a semiskilled woman might have been to attain a maximum output, she could not achieve much if the tool setter was too tired to attend promptly to her lathe, and the laborer too weary to keep her fully supplied with material.

The second report,² which is regarded as only preliminary, "describes the individual differences in output that exist in various processes in the cotton industry and illustrates the extent to which in each process production depends on human, as opposed to mechanical, efficiency." It is of special interest as illustrating the part which the human factor plays even in an industry which is supposed to be so largely governed by machine speed as cotton textile manufacturing.

In order to make the necessary comparisons, it was decided to take the wages earned as a measure of output. This step was possible because in cotton-mill processes in England the piece-rate system prevails, and the piece rates have been worked out by long experiment in such a way as to represent very fairly the relative skill and effort required to produce a given result. Obviously, if a group of employees, weavers, for instance, are working at piece rates on material of the same nature, if their looms are running at the same speed, if the pick and reed, the weft and twist, etc., are the same, either their earnings or the number of yards each produced might be used to measure their comparative output. If, however, they are working on different materials, the number of yards produced by each can not be used to measure their comparative output, since a yard of one kind of goods may involve far more effort in production than a yard of another kind. Owing, however, to the adjustment of piece rates to the difficulty of the work, the earnings may still be used to measure the comparative expenditure of effort put forth by each one. In other words, a unit of wage payment represents a certain amount of productive capacity which has been put in effect, and whether that capacity produces one yard of a fancy weave or two yards of a plain and coarse weave is immaterial, so far as concerns a measurement of the relative capacity of the persons concerned.

In general, then, the earnings for a period of at least eight weeks have been taken. The average earnings for the group compared have been taken as 100, and the others have been modified to suit this base. "Thus, if the actual average wage of weavers is 33s. 9d. and the highest and lowest wages earned are respectively 38s. 2d. and 29s. 6d., these values on the new scale would be 100, 113, and 87."

In this way the variations of each weaver from the average have been indicated, and a similar process has been followed for each group of workers. The following table shows the range of variation in the various processes studied:

² Medical Research Council and Department of Scientific and Industrial Research. Reports of the Industrial Fatigue Research Board. No. 7. Individual differences in output in the cotton industry. London, 1920. 13 pp. Textile series No. 1.

RELATIVE PRODUCTIVITY, AS MEASURED BY VARIATIONS IN WAGES (PIECE RATES)
IN DIFFERENT PROCESSES.

Process.	Number of cases.	Relative productivity as measured by wages.			Mean variation.
		Maximum.	Minimum.	Average.	
Weaving (fancy).....	423	132	65	100	10.0
Winding.....	46	119	75	100	8.3
Weaving (plain).....	752	126	73	100	6.0
Slubbing.....	17	109	91	100	4.7
Drawing.....	22	108	89	100	4.0
Intermediate.....	15	108	94	100	3.2
Roving.....	27	109	92	100	2.0
Spinning (ring).....	51	109	92	100	2.0
Spinning (mule).....	32	107	91	100	1.9

It is suggested that the degree of variation shown here indicates the relative importance of the human factor in production. Where the variation is small, the machine probably dominates and the worker can do but little to increase output, but where there is much variation the human element is far more important.

Of the various operations considered in the present inquiry, spinning, either mule or ring, is the process in which the least individual differences exist, while weaving and winding give rise to large individual variations in output. Thus the human element in weaving and winding is of great importance, and suggests that it is in these processes rather than in spinning that efficiency may be increased and fatigue reduced by the elimination of waste in method and movement. This does not mean that reform in the conditions of spinning is either impossible or unnecessary; on the contrary, there is much work to be done in this department in the discovery of the best methods and conditions of work and a comparison of the fatigability of the operatives at different times of the day and week.

Apart from their intrinsic interest, these two studies are important for the bearing they have upon methods of studying the relation between hours of work and output. At present there is in the United States a strong movement, strongly opposed, for the reduction of the working day, and so-called studies of the effect of reduced hours upon productivity have been brought forth to show that reduction below a certain standard, which standard usually happens to be the hours now prevailing in the industry under consideration, will infallibly react disastrously upon production. Very few of these are based upon anything more fundamental than a mere comparison of output before and after the change of hours, regardless of other changes which may have occurred at the same time. Moreover, the comparison not infrequently consists of an employer's statement that after a change of hours such and such a difference in output was observed. If, however, it may be months before the effect of a reduction in hours is obtained, the observer's estimate, even if correct as to fact, is apt to have been made without consideration of a factor so important that its omission may alter the whole result and make his calculation valueless.

Again, where the dominance of machinery over production varies with different operations, as in a cotton mill, a given length of working hours may affect differently the output of various groups, and the best hours for the plant as a whole may need to be determined by a series of careful experiments as to the relative importance of each operation. Thus a change of hours which might mate-

rially increase the output of the weavers might have little or no effect upon the productivity of the mule spinners, or might even affect it adversely. For which group should the hours of the mill be calculated? Evidently the proper length of a working day in a given industry is an exceedingly complex matter, which deserves far more careful study than has yet been given it in this country if our industries are ever to be put upon a really efficient basis.

Wages of Steel Workers in Newcastle, Australia.

ACCORDING to a recent report from the United States consul at Newcastle, Australia, a new award, retroactive to January 15, 1920, and to continue for three years from that date, has been made to the employees of the Newcastle Steel Works.

The award seeks to obviate Sunday work as far as possible, and with this end in view shift workers are not expected to work on Sunday, except those employed at blast furnaces, open-hearth furnaces, and coke ovens, employees required for repairs, alterations, and renewals, and employees of the rolling mill when rolling steel plates. Twelve months are allowed in which to arrange for the restriction of Sunday work.

In work requiring continuous operation the working time must be divided into six shifts, the employees working in rotation, and men on shift work are not to be employed more than 8 hours in any one day without being paid for overtime at the rate of time and one-half. Shift workers, except those designated as Monday to Saturday shift workers, are paid time and one-quarter for work done on Sunday and the recognized holidays, and the Monday to Saturday shift workers are paid double time for work on Sunday, Good Friday, Christmas Day, and Eight-hour Day, and time and one-half for any other holidays mentioned in the award. From 8 a. m. on Sunday to 8 a. m. on Monday is regarded as Sunday work.

The daily rates of pay for the different classes of work are as follows:

DAILY RATES OF PAY OF STEEL WORKERS IN NEWCASTLE, AUSTRALIA.

[1 s. at par=21.3 cents; 1 d. at par=2.03 cents.]

Occupation.	Rate per day.	Occupation.	Rate per day.
<i>Blast furnaces.</i>	<i>s. d.</i>	<i>Blast furnaces—Continued.</i>	<i>s. d.</i>
Blast furnace keepers:		Leading ladle men:	
7-day.....	17 9	7-day.....	14 9
6-day.....	17 8	6-day.....	14 8
Pipe fitters:		Ladle men:	
7-day.....	16 10	7-day.....	14 5
6-day.....	16 9	6-day.....	14 4
Laborers, cast house floor:		Cinder pot men:	
7-day.....	14 1	7-day.....	14 2
6-day.....	14 0	6-day.....	14 1
Laborers, other:		Pourers:	
7-day.....	13 9	7-day.....	14 9
6-day.....	13 8	6-day.....	14 8
Stove cleaners:		Charge wheelers:	
7-day.....	15 9	7-day.....	14 3
6-day.....	15 8	6-day.....	14 2

DAILY RATES OF PAY OF STEEL WORKERS IN NEWCASTLE, AUSTRALIA—Concd.

Occupation.	Rate per day.	Occupation.	Rate per day.
<i>Blast furnaces—Concluded.</i>		<i>Rail mills.</i>	
Leading charge tippers:		Rollers:	
7-day.....	14 9	First year.....	16 6
6-day.....	14 8	Second year.....	18 6
Assistant charge tippers:		Third year.....	20 6
7-day.....	14 5	Fourth year.....	22 6
6-day.....	14 4	Fifth year.....	24 6
Stove tenders:		Sixth year.....	26 6
7-day.....	17 3	After sixth year.....	28 11
6-day.....	17 2	Guide setters.....	20 11
<i>Open-hearth department.</i>		Tilting table wrench men.....	16 2
First helpers:		Heaters, one furnace.....	19 1
7-day.....	19 3	Heaters' assistants.....	14 9
6-day.....	19 2	<i>Rail-finishing mills.</i>	
Second helpers:		Straighteners.....	18 2
7-day.....	17 3	Gaugers.....	13 9
6-day.....	17 2	Inspectors.....	14 9
Third helpers (first 6 months):		Magnet men.....	
7-day.....	14 9	Camberers.....	
6-day.....	14 8	Chippers.....	
Third helpers (after 6 months):		Drillers.....	14 1
7-day.....	15 9	Enders.....	
6-day.....	15 8	Saw sharpeners.....	
Yard laborers:		Gaggers.....	
7-day.....	13 9	Hotbed greasers.....	
6-day.....	13 8	Stampers.....	
Gas men:		Loaders.....	
7-day.....	15 3	Lacers.....	
6-day.....	15 2	Painters.....	
First ladle men:		Hot saw butt pullers.....	13 8
7-day.....	16 3	Tallymen.....	
6-day.....	16 2	Straighteners.....	
Second ladle men:		Laborers.....	
7-day.....	14 3	Bed greasers (other than hotbed).....	
6-day.....	14 2	Rail and angle straighteners.....	15 8
Ladle loamers:		<i>12-inch mills.</i>	
7-day.....	15 6	Heaters.....	18 3
6-day.....	15 5	Heaters' assistants.....	14 9
Leading operators, 1,000-ton mixer:		Roughers.....	18 2
7-day.....	16 3	Shearsmen.....	14 9
6-day.....	16 2	Shearsmen's assistants.....	14 1
Slag pit laborers:		<i>8-inch mills.</i>	
7-day.....	14 8	Heaters.....	18 3
6-day.....	14 7	Heaters' assistants.....	14 9
<i>Blooming mills.</i>		Roughers.....	22 2
Rolling:		Shearsmen.....	14 9
First year.....	16 6	Shearsmen's assistants.....	14 1
Second year.....	18 6	Rod mill heaters.....	20 9
Third year.....	20 6	Rod mill heaters' assistants.....	15 2
Fourth year.....	22 6	Finishers and assistant rollers.....	20 2
Fifth year.....	24 6	<i>Steel foundry.</i>	
Sixth year.....	26 6	Open hearth:	
After sixth year.....	28 11	First helpers.....	19 3
Shearsmen and manipulator men.....	16 2	Second helpers.....	17 3
Soaking pit heaters.....	20 4	<i>Other workers.</i>	
Bottom makers.....	17 4	Wharf laborers.....	16 2
Gas men.....	15 3	Launch drivers.....	14 10
Ash men.....	13 10	Shunters.....	15 3
Shearsmen, helpers and crop men.....	14 1	Head cooks (per week).....	86 6
Wrench men.....	14 2		
All other adult workers.....	13 8		

Wages and Hours of Labor in Lyon, France.

IN a recent report received through the Department of State from the American consul at Lyon, France, the daily rates of wages and hours of labor for various occupations in that city are given.

The daily wages of workers in the building trades, of bakers, electricians, and street railway employees are reported, for 1914, 1919, and 1920, as follows:

[756]

DAILY WAGES OF BAKERS, ELECTRICIANS, AND EMPLOYEES ON STREET RAILWAYS, AND IN THE BUILDING TRADES, 1914, 1919, AND 1920.

[1 franc at par=19.3 cents.]

Occupation.	Wages in 1914. ¹	Wages in 1919. ²	Wages in 1920. ³
	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>
Bakeries:			
Bakers, first class.....	6.00	19.00	21.00
Bakers, second class.....	5.00	16.00	18.00
Building trades:			
Cement workers.....	8.00	18.00	20.00
Excavators.....	6.00	18.00	20.00
Iron workers.....	6.50	18.00	20.00
Masons.....	7.00	18.00	20.00
Painters.....	7.50	18.00	20.00
Plasterers.....	7.50	18.00	20.00
Plumbers.....	7.00	18.00	20.00
Tinners.....	7.00	18.00	20.00
Woodworkers.....	7.00	18.00	20.00
Electricians:	6.50-7.50	20.00	20.00
Street railways:			
Conductors.....	4.50-5.50	14.00-15.00-16.00	16.00-17.00-18.00
Motormen.....	4.75-5.75	14.00-15.00-16.00	16.00-17.00-18.00
Extra men.....		13.00	16.00

¹ For 12 to 16 hours a day in bakeries, 10 hours in building trades and for electricians, and 9 to 10 hours for street railway employees.

² For 8 hours a day for building trades and street railway employees; others not reported.

³ For 8 hours a day.

The following are the mean daily wages paid to metal workers in the Rhone region, the hours of work being eight a day:

MEAN DAILY WAGES PAID TO METAL WORKERS IN THE RHONE REGION.

[1 franc at par = 19.3 cents.]

Occupation.	Wages.	Occupation.	Wages.
	<i>Francs.</i>		<i>Francs.</i>
Fitters, filers:		Ordinary laborers—Concluded.	
Mechanics, metallurgy.....	20.68	Electricity.....	14.95
Automobiles.....	24.56	Foundry.....	14.12
Electricity.....	20.85	Cold-metal laborers—foundry.....	15.80
Foundry.....	20.10	Hot-metal laborers—foundry.....	16.10
Fitters, automobile:		Woodworking machinists—automobiles.....	18.80
Motors.....	22.10	Repair mechanics:	
Chassis.....	20.98	Mechanics, metallurgy.....	19.00
Repairs.....	20.26	Automobiles.....	18.40
Fitters, tools:		Wire drawing.....	21.00
Mechanics, metallurgy.....	21.07	Joiners:	
Wire drawing.....	20.80	Mechanics, metallurgy.....	18.94
Fitters, copper work—foundry.....	20.66	Electricity.....	23.00
Borers—mechanics, metallurgy.....	19.09	Carriage men—automobiles.....	22.00
Trimmers, dressers—electricity.....	12.92	Carriage repair men—automobiles.....	20.98
Winders on bobbins—electricity.....	20.80	Tool grinders—mechanics, metallurgy.....	16.86
Coppersmiths and boilersmiths:		Pattern makers:	
Mechanics, metallurgy.....	19.88	Mechanics, metallurgy.....	26.10
Automobiles.....	24.52	Automobiles.....	31.20
Furnace men, wire drawing.....	18.50	Molders—foundry.....	20.50
Boiler men, wire drawing.....	16.10	Engine fitters—mechanics, metallurgy.....	18.92
Foremen, electricity.....	22.00	Engine fitters, assistant—mechanics, metallurgy.....	16.09
Clippers, iron plate.....	17.00	Mortise men—mechanics, metallurgy.....	22.89
Mechanics, metallurgy.....	15.26	Toolmakers—mechanics, metallurgy.....	22.15
Electricity.....	17.60	Painters—mechanics, metallurgy.....	18.70
Controlling-machine men—electricity.....	18.80	Borers—mechanics, metallurgy.....	18.67
Men on roller bridge—mechanics, metallurgy.....	18.80	Stampers—mechanics, metallurgy.....	16.80
Electricians:		Polishers—automobiles.....	21.00
Mechanics, metallurgy.....	20.06	Correctors:	
Automobiles.....	21.10	Mechanics, metallurgy.....	18.20
Electricity.....	19.45	Automobiles.....	19.82
Packers—electricity.....	15.20	Electricity.....	16.60
Wire stretchers—wire drawing.....	21.80	Riveters—mechanics, metallurgy.....	18.20
Founders and casters—foundry.....	22.00	Autogenous solderers—mechanics, metallurgy.....	21.80
Blacksmiths—mechanics, metallurgy.....	21.44	Turners:	
Countersinkers:		Mechanics, metallurgy.....	21.42
Mechanics, metallurgy.....	21.67	Automobiles.....	25.80
Automobiles.....	23.15	Electricity.....	20.85
Electricity.....	18.04	Parallel turners—automobiles.....	23.72
Masons—mechanics, metallurgy.....	18.76	Vertical turners—automobiles.....	25.10
Ordinary laborers:		Sketchers—mechanics, metallurgy.....	21.83
Mechanics, metallurgy.....	15.02	Wire drawers—wire drawing.....	19.40
Automobiles.....	14.87		

The daily wage scale as reported by the metallurgical workers' union, May 7, 1920, is as follows:

DAILY WAGE SCALE OF METALLURGICAL WORKERS, 1920.

[1 franc at par=19.3 cents.]

Occupation.	Minimum wage.	Maximum wage.	Occupation.	Minimum wage.	Maximum wage.
	<i>Francs.</i>	<i>Francs.</i>		<i>Francs.</i>	<i>Francs.</i>
Ordinary mechanics.....	24.00	28.00	Fitters.....	26.00	28.80
Tool edgers.....	24.00	27.20	Electricians, finishers, winders.....	28.00	32.00
Special workers (on hot or cold).....	22.00	24.00	Ordinary electricians.....	24.00	30.00
Oilers.....	22.00	24.00	Coppersmiths, boiler makers.....	24.00	27.60
Laborers.....	18.00	24.00	Molders.....	26.40	32.00
Skilled women.....	16.00	-----	Ironworkers.....	22.00	30.00
Unskilled women.....	12.00	-----	Founders, smelters.....	24.00	28.80
Pattern makers, mechan- ics.....	32.00	40.00	Carpenters.....	24.00	30.00

The following daily wages are reported as being paid in a large automobile factory near Lyon, the hours of work per day being eight:

DAILY WAGES PAID IN A LARGE AUTOMOBILE FACTORY NEAR LYON, FRANCE.

[1 franc at par=19.3 cents.]

Occupation.	Daily wages.	Occupation.	Daily wages.
	<i>Francs.</i>		<i>Francs.</i>
Skilled mechanics.....	26.00 to 30.00	Ordinary unskilled laborers.....	16.00 to 20.00
Ordinary mechanics, carpenters, etc.....	22.00 to 26.00	Unskilled female laborers at ma- chines.....	12.00 to 20.00
Unskilled laborers working at ma- chines.....	20.00 to 24.00	Unskilled female hands (sweepers, etc.).....	11.20 to 16.00
Bricklayers, masons, etc.....	20.00 to 24.00		

As a result of a strike in 1919, the following scale of minimum daily wages is in force in the silk industry, the hours of work per day being eight. It is reported that the strikes of 1920 did not alter these minimum rates.

DAILY WAGES IN THE SILK INDUSTRY IN LYON.

[1 franc at par=19.3 cents.]

Occupation.	Daily wages.	Occupation.	Daily wages.
	<i>Francs.</i>		<i>Francs.</i>
Drying and testing.....	10	Winders or spinners.....	9
Silk throwing and twisting.....	10	Twillers.....	9
Weaving.....	10 to 16	Sorters.....	8
Reel men and reel women.....	11	Warp folders.....	7
Throwers and twisters.....	12	Reelers.....	7
Warpers.....	12	Weighers.....	12

Recent Collective Agreements and Wage Awards in Germany.

Compiled by ALFRED MAYLANDER.

THE wage schedules and hours of labor fixed during the seven months ending December 31, 1919, in Germany for various occupations in a number of collective agreements and arbitration awards have been compiled below in a table. A similar table, covering the first five months of 1919, was published in the MONTHLY LABOR REVIEW of October, 1919 (pp. 153-160). Reports on wage movements in the German daily press and in trade journals have again been used as sources for this compilation.

Collective bargaining is becoming more and more popular among employers and workers in Germany, especially in the large industries. The only large labor organization repudiating the principle of collective bargaining is the German Metal Workers Federation. On June 22, 1919, at a general meeting of the Berlin administration of this federation, a resolution was passed declaring "that the federation was on principle opposed to the conclusion of a collective agreement for the metal industry of Greater Berlin." Commenting on this resolution, the *Börsen-Zeitung*¹ says:

The employers in the metal industry have frankly, most strenuously, and to the last struggled against collective agreements. Such agreements have for years been the aim of the workers, and anyone who did not favor long-term collective agreements was regarded as a social backslider. Even as late as February 1, 1919, after long and wearisome discussion, a collective agreement in the Berlin metal industry was decided upon. This was to be retroactive to December 9, 1918. Yet now, in less than half a year, the Berlin metal trade, under the influence of its radical leaders, turns its back upon the principle. It was expected that as time went on these agreements would lead to peaceful and settled relations. The rejection of the principle of collective bargaining doubtless heralds fresh labor troubles, which, in the interests of national economic reconstruction, are seriously to be regretted.

The collective agreements covered in the table below indicate that the upward movement of wages is continuing in Germany. Most of the agreements are concluded for very short terms, or if concluded for a longer term, contain a clause permitting a revision of the wage rates in case of a further rise in the cost of living. All of the agreements and awards provide for substantial increases in wages which in some instances amount to over 30 per cent. The hours of labor vary between 44 and 48 per week, one agreement only, that of gas fitters and plumbers, providing a 41-hour week. The agreement covering the coal mines in the Ruhr district fixes a 7-hour shift "bank to bank" for workers below ground.

A majority of the agreements indicate a tendency in favor of resumption and continuance of piecework. In agreements providing for piecework pieceworkers are as a rule guaranteed the minimum time rates, and in some instances a certain percentage above the minimum time rates. In a few highly skilled trades, such as engravers, chasers, gold and silver smiths, the agreements concluded prohibit piece and home work. Nearly all the agreements contain clauses with respect to the granting of annual vacations with pay to workers. The duration of the vacation varies according to length of service.

Owing to the continued unsettled condition of German exchange the wage rates are quoted in the table in marks without conversion into the equivalent in American money.

¹ *Börsen-Zeitung*. Berlin, June 25, 1919.

WAGE RATES, HOURS OF LABOR, ETC., FIXED BY COLLECTIVE AGREEMENTS AND ARBITRATION AWARDS IN GERMANY DURING THE LAST SEVEN MONTHS OF 1919.

Industry group, occupation, and locality.	Rate of wages per hour.	Hours of labor.	Method by which scale was fixed.	Duration of award or agreement.		Remarks.	Source.
				From—	To—		
Textile industry (Saxony):	Marks.						
Knitters (males)—		Not given....	Collective agreement between the employers' association in the Saxon textile industry, the German Textile Workers' Union, and the collective agreement committee of the embroidery association.	Not given....	Not given....	The agreement is valid for the whole of Saxony and the two principalities of Reuss.	Der Konfektionär, Berlin, Sept. 4, 1919.
Time rate.....	1.25 to 1.55						
Piece rate.....	1.45 to 1.80						
Knitters (females)—							
Time rate.....	.85 to 1.05						
Piece rate.....	1.00 to 1.20						
Helpers—							
Males.....	.45 to 1.25						
Females.....	.45 to .85						
Textile industry (Augsburg):							
Weavers—		...do.....	Association of South German Textile Manufacturers and German Textile Workers' Union.	...do.....	...do.....	The new rates represent an increase of 50 pfennigs per hour for men and of 40 pfennigs for women.	Münchener Neueste Nachrichten, Munich, Oct. 23, 1919.
Males.....	1.80						
Females.....	1.50						
Textile industry (Aix-la-Chapelle):							
Weavers (males and females)...	1.85	48 per week...	Collective agreement between employers and workers in the textile industry at Aix-la-Chapelle.	...do.....	...do.....	Overtime to be avoided as far as possible; when absolutely necessary, to be paid for at time and a half. The question of overtime to be discussed with the workers' committee. Piece rates to be the same for men and women, and to be fixed so that the worker may on the average earn 10 per cent more than the average time wage in his or her own category.	Der Konfektionär, Berlin, Nov. 27, 1919.
Dyers, winders, fullers, etc. (males).	1.75						
Carders and machine framers (males).	1.50						
Darners (females).....	1.44						
Doublers and winders (females).	.90						
Threaders and all other women workers over 18.	.90						
Girls, 16 to 18 years.....	.75						
Boys, 16 to 18 years.....	.80						
Chemical dyeing and cleaning establishments (Berlin):							
Dyers, washers, cleaners, ironers, firemen, engineers, etc.	2.70						

17301

[761]

Semiskilled workers, deliverers, drivers—							
First 6 months.....	2.10	Not given.....	Award by the Joint Industrial League of the Northeast German Textile Industry.	.....do.....	.....do.....	} Piece rates are raised 33¼ per cent. Overtime is to be paid for at time and a quarter rates; Sunday and night work at time and a half.	} Vorwärts, Berlin, Sept. 15, 1919.
After first 6 months.....	2.20						
Ironers and cleaners (females)	1.80						
Unskilled women workers over 20 years—							
First 6 months.....	1.40						
After first 6 months.....	1.50						
Young men and boys under 20 years.	1.00 to 2.00						
Girls under 20 years.....	.70 to 1.30						
Busshelmen.....	2.30						
Milliners (Berlin):							
Girls up to 16 years and apprentices.	¹ 30.00 to 75.00	} 48 per week.....	} Collective agreement between the Employers' Association of the Millinery Trade of Berlin and the Union of Hat and Felt Goods Workers.	}do.....	} Dec. 31, 1919	} To pieceworkers are guaranteed the minimum rates of time-rate workers. Piece rates to be fixed conjointly by the employer, the head forewoman, and the workers' committee. The guaranteed wages are to be paid in full even when there is scarcity of work. The apprenticeship term is to be 2 years. A fortnight's notice to be given on dismissal. Six days' vacation with full pay to be granted after 4 months' service, 10 days in the second year of service, 12 days in the third to fifth year, and 18 days in the sixth year.	} Der Konfektionär, Berlin, July 3, 1919.
Trained assistants.....	² 36.00 to 45.00						
Fancy hat workers.....	² 25.00 to 55.00						
Model makers.....	² 60.00						
Trimmers.....	¹ 200.00 to 275.00						
Forewomen.....	¹ 300.00						
Dressmaking and millinery trades (Cottbus):							
Apprentices—		} 48 per week between Mar. 1 and Whitsunday and between Sept. 1 and Dec. 31; for the rest of the year 46 hours per week.	} Collective agreement between the organized employers and workers in the dressmaking and millinery trades of Cottbus.	}do.....	}do.....	} No one is to be employed on Sundays and holidays. Overtime is to be paid at double rates plus 25 per cent. During the slack season workers must be laid off in turn. Laying off may be avoided by shortening the hours of labor throughout and reducing salaries in proportion. The apprenticeship term is to be 2 years; one week's vacation to be granted after 1 year's service, and 2 weeks after 2 years.	} Der Konfektionär, Berlin, Aug 28, 1919.
First year.....	³ 30.00						
Second year.....	³ 40.00						
Skilled workers—							
First year after apprenticeship.	³ 85.00						
Second year after apprenticeship.	³ 115.00						
Third year after apprenticeship.	³ 135.00						
Fourth year.....	³ 150.00						
Fifth year.....	³ 165.00						
Trimmers:							
Semiskilled.....	³ 175.00						
Skilled.....	³ 225.00						
Forewomen.....	³ 285.00						

¹ Minimum rates per month.

² Minimum rates per week.

³ Per month.

WAGE RATES, HOURS OF LABOR, ETC., FIXED BY COLLECTIVE AGREEMENTS AND ARBITRATION AWARDS IN GERMANY DURING THE LAST SEVEN MONTHS OF 1919—Continued.

Industry group, occupation, and locality.	Rate of wages per hour.	Hours of labor.	Method by which scale was fixed.	Duration of award or agreement.		Remarks.	Source.
				From—	To—		
Dressmaking and millinery trades (Cottbus)—Concluded.	<i>Marks.</i>						
Workers who make alterations and embroiderers—							
First year after apprenticeship.	3 90.00	48 per week between Mar. 1 and Whitsunday and between Sept. 1 and Dec. 31; for the rest of the year 46 hours per week.	Collective agreement between the organized employers and workers in the dressmaking and millinery trades of Cottbus.	Not given....	Dec. 31, 1919	No one is to be employed on Sundays and holidays. Overtime is to be paid at double rates plus 25 per cent. During the slack season workers must be laid off in turn. Laying off may be avoided by shortening the hours of labor throughout and reducing salaries in proportion. The apprenticeship term is to be 2 years; one week's vacation to be granted after 1 year's service, and 2 weeks after 2 years.	Der Konfektionär, Berlin, Aug. 28, 1919.
Second year after apprenticeship.	3 125.00						
Third year after apprenticeship.	3 140.00						
Fourth year after apprenticeship.	3 160.00						
Fifth year after apprenticeship.	3 175.00						
Fitters.....	3 200.00						
Ladies' ready-made clothing, retail (Berlin):							
Alteration hands (females)—		48 per week...	Collective agreement.	...do.....	Not given....	Overtime to be paid at time and one-third for first 3 hours, time and two-thirds for the next 3 hours; overtime beyond that and Sunday and holiday work, double time. Six days' vacation with full pay after one year's service, rising to 12 days after 3 years' service. Local arbitration board to be established to decide all disputes between employers and workers.	Der Konfektionär, Berlin, Nov. 27, 1919.
Grade 1.....	4 87.84						
Grade 2.....	4 81.60						
Grade 3.....	4 73.44						
Button industry (Germany):							
Skilled workers over 18 years—		46 hours in localities of class 1, 47 hours in those of class 2, and 48 hours in those of classes 3 and 4.	Collective agreement between the Central Union of German Button Manufacturers and the Woodworkers' Union.	Nov. 3, 1919	Apr. 1, 1920; may be revised after Feb. 15, 1920, if changed conditions justify such revision.	The agreement covers 29 districts scattered over all Germany. Minimum and average wages are fixed according to locality and age for skilled and unskilled workers. Piece-work rates are fixed in such a manner that a 20 per cent increase on the average time rate may be earned. Three days' vacation is to be granted after 3 months' service, and for each additional year of service 1 day until 6 days are reached. Disputes are to be settled by local arbitration boards, whose decision may be appealed to the central arbitration board for the woodworking industry.	Correspondenzblatt der Generalkommission der Gewerkschaften Deutschlands, Berlin, Nov. 8, 1919.
In localities of class 1.....	5 2.30 (2.70)						
In localities of class 2.....	5 2.10 (2.40)						
In localities of class 3.....	5 1.75 (1.95)						
In localities of class 4.....	5 1.60 (1.70)						
Machine hands (females)—							
In localities of class 1.....	5 1.25 (1.50)						
In localities of class 2.....	5 1.10 (1.35)						
In localities of class 3.....	5 .90 (1.10)						
In localities of class 4.....	5 .85 (.95)						

[762]

Boot and shoe industry (Munich): Skilled workers—	Males over 21 years.....	3.32	} 47 per week...	Collective agreement between association of shoe manufacturers and representatives of their workers.	Nov. 1, 1919	Not given....	All workers employed up to Nov. 1, 1919, by a member of the employers' association receive a lump sum bonus as follows: Workers under 16, 100 marks; between 16 and 18, 130 marks; 18 to 21, 180 marks; over 21, 250 marks; and 30 marks for each child under 15.	Münchener Neueste Nachrichten, Munich, Dec. 16, 1919.
	Females over 21 years.....	2.75						
Woodworking industry (Germany):								
Skilled workers (males)—			} Beginning with Aug. 25, 1919, class 1, 46 hours; class 2, 47 hours; classes 3 to 6, 48 hours. Beginning Nov. 15, 1919, classes 1 and 2, 46 hours; classes 3 and 4, 47 hours; classes 5 and 6, 48 hours.	Award of the central wage board of the woodworking industry.		The award was made Aug. 22, 1919, and accepted by the workers' organizations, but the employers have so far declined to ratify it. The workers' organizations are attempting to make local agreements on the basis of this national award.	The award provides also for a high-cost-of-living bonus varying in the case of skilled male workers between 25 and 35 pfennigs per hour; in the case of unskilled male workers between 20 and 30 pfennigs; and in the case of female and juvenile workers between 15 and 25 pfennigs. The pay of apprentices is to amount in the first year to one-twelfth of the minimum pay of skilled workers; in the second year to one-eighth; in the third year to one-fourth; and in the fourth year to one-half. Three days' vacation are to be granted after 6 months' service. This vacation is to be increased by 1 day for each year of service up to a total vacation of 6 days.	Correspondenzblatt der Generalkommission der Gewerkschaften Deutschlands, Berlin, Sept. 27, 1919.
In localities of class 1.....	5 2.45 (2.55)							
In localities of class 2.....	5 2.25 (2.55)							
In localities of class 3.....	5 2.10 (2.30)							
In localities of class 4.....	5 2.00 (2.15)							
In localities of class 5.....	5 1.90 (2.00)							
In localities of class 6.....	5 1.80 (1.90)							
Unskilled workers (males)—								
In localities of class 1.....	5 2.15 (2.55)							
In localities of class 2.....	5 1.95 (2.25)							
In localities of class 3.....	5 1.80 (2.00)							
In localities of class 4.....	5 1.70 (1.85)							
In localities of class 5.....	5 1.60 (1.70)							
In localities of class 6.....	5 1.50 (1.60)							
Skilled workers (females)—								
In localities of class 1.....	5 1.55 (1.95)							
In localities of class 2.....	5 1.40 (1.70)							
In localities of class 3.....	5 1.30 (1.50)							
In localities of class 4.....	5 1.25 (1.40)							
In localities of class 5.....	5 1.20 (1.30)							
In localities of class 6.....	5 1.15 (1.25)							
Unskilled workers (females)—								
In localities of class 1.....	5 1.35 (1.75)							
In localities of class 2.....	5 1.20 (1.50)							
In localities of class 3.....	5 1.10 (1.30)							
In localities of class 4.....	5 1.05 (1.20)							
In localities of class 5.....	5 1.00 (1.10)							
In localities of class 6.....	5 .95 (1.05)							
Moldings and frame factories (South Germany):								
Skilled workers—			} 44 per week...	Collective agreement between the German Woodworkers' Federation and the Association of South German Moldings and Frame Makers.	Not given....	Not given....	The rates fixed are minimum rates, and are to be increased on Oct. 15, 1919, by 10 per cent. All workers are to have 6 days' vacation per year with full pay.	Münchener Neueste Nachrichten, Munich, Sept. 18, 1919.
Males.....	2.32							
Females.....	1.40							
Unskilled workers—								
Males.....	2.15							
Females.....	1.20							
Apprentices—								
First year.....	4 20.00							
Second year.....	4 25.00							
Third year.....	4 30.00							

² Per month.

⁴ Per week.

⁵ Minimum rate; the rate shown within parentheses is the average rate.

WAGE RATES, HOURS OF LABOR, ETC., FIXED BY COLLECTIVE AGREEMENTS AND ARBITRATION AWARDS IN GERMANY DURING THE LAST SEVEN MONTHS OF 1919—Continued.

17641

Industry group, occupation, and locality.	Rate of wages per hour.	Hours of labor.	Method by which scale was fixed.	Duration of award or agreement.		Remarks.	Source.
				From—	To—		
	<i>Marks.</i>						
Coal mines (Ruhr district):						The agreement affects 430,000 workers. In specified mines in the south of the Ruhr district rates 5 to 7½ per cent lower than those shown here are to be effective. Female workers' wages are to be one-third lower than those of men of the same occupational and age group. Lights and tools are to be provided free and repairs to be executed free of charge. Explosives to be furnished at cost. Married men receive in addition to their wages 20 pennings per shift for each child under 14 years and are furnished 120 metric centners (about 12 long tons) of coal per year at the price of 50 pennings per centner f. o. b. mine. A Sunday rest of 24 hours beginning Sunday at 6 a. m. is provided, and an annual vacation of from 3 to 6 days with full pay. The hiring of labor is to be effected through the equipartisan employment office of the Mining Federation. Labor disputes are to be settled by the district committee of the Joint Industrial League. Workers who in addition to their regular work in the mines perform other work subject to compulsory insurance are to be discharged. Overtime on week days is to be compensated at the rate of time and a quarter; on Sundays at the rate of time and one-half, and on the 1st day of January, Christmas, Easter, and Pentecost at the rate of double time.	Soziale Praxis, Berlin, Nov. 27, 1919, and Correspondenzblätter General-Kommission der Gewerkschaften Deutschlands, Berlin, Nov. 22, 1919.
Contract workers—		7-hour shift "bank to bank." In mines where 50 per cent of the workers below ground work in a temperature above 28° Celsius the shift is to be 6½ hours, and in mines with a still higher temperature 6 hours; 8 hours per day for workers above ground.	Collective agreement between mine owners and mine workers' organizations.	(Concluded Oct. 25, 1919. Retroactive to Oct. 1, 1919.	(Dec. 31, 1919. After that date the agreement may be canceled on 1 month's notice.		
Miners.....	§ 14.00						
Trammers—							
First 6 months.....	§ 11.00						
After 6 months.....	§ 12.00						
Other workers below ground—							
Juvenile workers 16 to 18 years.....	7 12.50 to 14.00						
Men over 18 years.....	7 17.00 to 21.00						
Skilled mechanics.....	7 22.00 to 24.00						
Workers above ground—							
At banks, loading yards..	§ 2.10 to 2.65						
At machines, in shops, and building operations.	§ 2.35 to 2.65						
Foremen.....	§ 2.85						
Laborers.....	§ 2.15 to 2.25						
Tar distillery; coking plants; establishments for the production of by-products—							
Workers.....	§ 2.30 to 2.55						
Foremen.....	§ 2.75						
Soldiers.....	§ 3.25						
Briquet makers.....	§ 2.45 to 2.75						
Brick kiln workers.....	§ 2.25 to 2.75						
Juvenile workers under 15 years.....	§ 1.00 to 1.20						
Other workers (over 16 years) above ground.....	§ 1.40 to 2.25						

Gas fitters and plumbers (Munich):							
Gas fitters—							
Helpers—							
First year.....	\$ 1.90	} 41 per week...	} Collective agreement between the boss plumbers' organization and the Gas Fitters, Plumbers, and Coppersmiths' Union of Munich.	} Retroactive to Apr. 23, 1919.	} Not given....	} The following extra allowances per hour are to be paid for overtime: Repairs, 25 per cent; regular work on buildings, 50 per cent; night, Sunday and holiday work, 75 per cent. Special rates are fixed for work outside Munich according to distance. Piecework is forbidden.	} Münchener Neueste Nachrichten, Munich, June 11, 1919.
After first year.....	\$ 2.10						
Assistant installers.....	\$ 2.30						
Fully qualified installers..	\$ 2.50						
Plumbers—							
Journeyman—							
First year after apprenticeship.....	\$ 1.40						
Second year after apprenticeship.....	\$ 1.80						
Thereafter until age of 21.....	\$ 2.20						
Fully qualified.....	\$ 2.60						
Slaters (Munich):							
Journeyman.....	2.65	} 44 per week...	} Collective agreement for the slaters' industry concluded before the conciliation board of the industrial court.	} Apr. 23, 1919	}do.....	} The following supplemental payments are allowed: For work at a distance, 30 per cent; work in the suburbs, 25 per cent; overtime and Sunday work, 33½ per cent; work on towers over 35 meters high, 33½ per cent; work with pickled laths, 10 per cent. Drivers to receive for overtime 2.50 marks per hour extra; other workers time and a quarter for overtime and time and one-half for Sunday work. An allowance of 8 marks per day to be granted for work at a distance, traveling time to be reckoned as work.	} Münchener Neueste Nachrichten, Munich, June 11, 1919.
Journeyman, first year.....	2.20						
Helpers who have been in the trade over 3 months.....	2.40						
Helpers, others.....	2.30						
Asphalt workers (Berlin):							
Laborers and yardmen.....	2.35	} 48 hours per week. 12-hour day for drivers, including intervals for meals.	} Collective agreement between employers' and workers' organizations.	} Oct. 1, 1919	}do.....	} Drivers to receive for overtime 2.50 marks per hour extra; other workers time and a quarter for overtime and time and one-half for Sunday work. An allowance of 8 marks per day to be granted for work at a distance, traveling time to be reckoned as work.	} Vorwärts, Berlin, Oct. 9, 1919.
Skilled men (melters, mixers, cutters, levelers, etc.).....	2.50						
Foremen and all persons in responsible positions.....	2.70						
Women.....	1.80						
Youths under 18.....	1.75						
Drivers.....	4 130.00						
Painters (Rhineland, Westphalia):							
Journeyman.....	9 2.30	Not given....	Collective agreement.	Not given....	.....do.....		Correspondenzblatt, Berlin, Aug. 16, 1919.
Confectionery and chocolate industry (Germany):							
Skilled workers (males)—						} The wages shown here are basic wages, to which is to be added the local bonus heretofore paid. This local bonus varies according to the size of the locality. Its maximum amount is 20 per cent of the basic wage. Male and female workers holding responsible positions and those performing heavy work are to receive 1 mark extra per day. The basic wage plus 10 per cent is guaranteed to piece-rate workers.	} Correspondenzblatt, Berlin, Oct. 25, 1919.
Under 20 years.....	10 1.55	}do.....	} Award of the National Department of Labor.	} Oct. 1, 1919	} Oct. 1, 1920		
Over 20 years.....	10 1.90						
Unskilled workers (males)—							
14 to 16 years of age.....	10 .75						
Over 16 to 18 years of age.....	10 1.00						
Over 18 to 20 years of age.....	10 1.30						
Over 20 years of age.....	10 1.60						
Female workers—							
14 to 16 years of age.....	10 .65						
Over 16 to 18 years of age.....	10 .75						
Over 18 to 20 years of age.....	10 .95						
Over 20 years of age.....	10 1.05						

⁴ Per week.

⁶ Basic wage per shift.

⁷ Minimum rates per shift.

⁸ Minimum rates per hour.

⁹ Minimum rate.

¹⁰ Basic wage.

WAGE RATES, HOURS OF LABOR, ETC., FIXED BY COLLECTIVE AGREEMENTS AND ARBITRATION AWARDS IN GERMANY DURING THE LAST SEVEN MONTHS OF 1919—Continued.

Industry group, occupation, and locality.	Rate of wages per hour.	Hours of labor.	Method by which scale was fixed.	Duration of award or agreement.		Remarks.	Source.
				From—	To—		
Flour mills (Berlin):	<i>Marks.</i>						
Roller tenders, millers (even when acting as sackers), firemen, machinery tenders, roller groovers, handicraftsmen of all kinds.	4 117.50	}do.....	{ Award of the conciliation board.	} Sept. 15, 1919	} Not given....	{ Any wages now in force higher than those fixed by the award to continue. Boiler-cleaning work (interior), 20 pfennigs per hour extra; overtime during the week, time and a quarter; Sunday work, time and a half.	{ Vorwärts, Berlin, Oct. 28, 1919.
Unskilled men, boiler cleaners, ground-floor workers, coal teamsters.	4 112.50						
Women	4 70.00						
Barge-building yards (Hamburg):							
Skilled men over 20 years of age.	2.75	}do.....	{ Award of the Hamburg Demobilization Commission sitting as an arbitration board.	} First pay day in August, 1919.	}do.....	{ Annual vacation is to be granted. Statutory holidays to be paid for as full workdays. The award was accepted by the employers on condition that no strike took place and that all extra pay should be earned on piecework.	{ Schiffbau, Hamburg, Oct. 22, 1919.
Unskilled men over 20 years of age.	2.50						
Skilled men—							
In the first 2 years after apprenticeship.	2.00						
Afterwards up to 20 years of age.	2.30						
Youths up to 15 years of age..	.75						
Youths 15 to 16 years of age..	1.10						
Youths 16 to 17 years of age..	1.40						
Youths 17 to 19 years of age..	1.70						
Youths 19 to 20 years of age..	1.90						
Apprentices—							
First year	9 24.00						
Second year	9 34.00						
Third and fourth years...	9 48.00						
Zincography and copperplate printing (Germany):							
First year after apprenticeship.	11 70.00	} 47 per week...	{ Collective agreement concluded by a joint committee of the trade.	} Jan. 1, 1920	} Jan. 1, 1921	{ The wage rates shown here are basic minimum wages. Up to Mar. 31, 1920, these wages are to be supplemented by a cost-of-living bonus of 20 per cent. The minimum wage rates are also guaranteed to piece-rate workers. Overtime is to be paid for at the rate of time and a third on week days, time and a half on Sundays, and double time on legal holidays. Vacation is to be granted as follows: Journeymen to be allowed 4 days after 1 year's service, rising	{ Correspondenzblatt, Berlin, Nov. 22, 1919.
Second year after apprenticeship.	11 75.00						
Third year after apprenticeship.	11 80.00						
Skilled workers—							
21 to 24 years of age.....	11 85.00						
Over 24 years of age.....	11 95.00						

[7661]

<p>Block engravers (Germany): First year after apprenticeship. \$ 1.00 Second year after apprenticeship. \$ 1.80 Third year after apprenticeship. \$ 2.00 Skilled workers— 21 to 24 years of age..... \$ 2.20 Over 24 years of age..... \$ 2.50</p>	<p>\$ 1.00 \$ 1.80 \$ 2.00 \$ 2.20 \$ 2.50</p>	<p>8 per day. On the eve of Easter, Pentecost, Christmas and New Year, 6 hours.</p>	<p>.....do.....</p>	<p>Nov. 1, 1919</p>	<p>Oct. 31, 1920</p>	<p>to 12 days after 8 years' service. Apprentices to be granted 6 days' annual vacation. Overtime may be worked at the request of the employer after the approval of the workers' representative has been given. Overtime pay: First and second hour, 25 per cent extra; each additional hour on the same day, 50 per cent extra; for work on Sundays and legal holidays, 75 per cent extra. Annual vacation: After 1 year's service, 3 days; for each succeeding year, 1 day more until a total of 6 days is reached. Apprenticeship term, 3½ years. Apprentices are to be granted 6 days' annual vacation and a fixed weekly board allowance up to 24 marks. One apprentice is allowed to every 6 journeymen. No home work to be given out. Tools to be furnished by the employer. The hiring of journeymen to be effected exclusively through equipartisan labor exchanges. Works councils to be recognized in all establishments.</p>
<p>Engravers, chasers, gold and silver workers (Munich): Engravers working for independent masters— During first year of apprenticeship. \$ 1.60 Journeymen under 21 years. \$ 2.00 Journeymen over 21 years. \$ 2.10 Engravers working for firms— Journeymen under 21 years. \$ 2.10 Journeymen over 21 years. \$ 2.40 Gold and silver workers— During first year of apprenticeship. \$ 1.10 to 1.50 Journeymen under 21 years. \$ 1.50 to 2.10 Journeymen over 21 years. \$ 2.10 to 2.60 Women under 21 years... \$.80 to 1.20 Women over 21 years..... \$ 1.20 to 1.80</p>	<p>\$ 1.10 \$ 1.60 \$ 2.00 \$ 2.10 \$ 2.40 \$ 1.10 to 1.50 \$ 1.50 to 2.10 \$ 2.10 to 2.60 \$.80 to 1.20 \$ 1.20 to 1.80</p>	<p>44 per week....</p>	<p>{ Collective agreement concluded by employers' and workers' organizations.</p>	<p>{ Not given....</p>	<p>{ Not given....</p>	<p>{ Piecework and home work are prohibited. Annual vacation: 4 days after 1 year's service, increasing to 12 days after 10 years' service.</p>

Correspondenzblatt, Berlin, Nov. 22, 1919.

Münchener Neueste Nachrichten, Munich, Sept. 18, 1919.

⁴ Per week.

⁹ Minimum rate.

¹⁰ Basic wage.

¹¹ Minimum basic wages per week.

[7671]

WAGE RATES, HOURS OF LABOR, ETC., FIXED BY COLLECTIVE AGREEMENTS AND ARBITRATION AWARDS IN GERMANY DURING THE LAST SEVEN MONTHS OF 1919—Concluded.

[768]

Industry group, occupation, and locality.	Rate of wages per hour.	Hours of labor.	Method by which scale was fixed.	Duration of award or agreement.		Remarks.	Source.
				From—	To—		
Engravers, chasers, gold and silver workers (Munich)—Con.	Marks. \$ 1.70	44 per week...	{ Collective agreement concluded by employers' and workers' organizations. }	{ Not given.... }	{ Not given.... }	{ Piecework and home work are prohibited. Annual vacation: 4 days after 1 year's service, increasing to 12 days after 10 years' service. }	Munchn Neueste Nachrichten, Munich, Sept. 18, 1919.
Brass workers—							
During first year of apprenticeship.	\$ 2.20						
Journeyman under 21 years.	\$ 2.40						
Journeyman over 21 years.	\$ 3.30						
Gold and silver smiths (Berlin):	\$ 2.75	46½ per week..	{ Collective agreement concluded by employers' and workers' representatives. }	{ do..... }	{ do..... }	{ Overtime rates: First 2 hours, 25 per cent extra; for the next two, 50 per cent; for any further hours and Sunday work, 100 per cent. All home work for those employed in the workshops is forbidden, and the consent of the workers' committee must be obtained in the case of home workers by trade. }	Vorwärts, Berlin, Sept. 5, 1919.
Setters, jewel mounters, goldsmiths, embossers.							
Repairs, makers-up, silver-cutlery makers.	\$ 2.65						
Helpers—	\$ 1.75						
Males.....	\$ 1.75						
Females.....	\$ 1.75						
Women polishers.....	\$ 2.00						
Youths—	\$ 2.50						
First year after apprenticeship.							
Second year after apprenticeship.							
Dust and trash collection (Berlin):	\$ 159.90	8 per day.....	{ Agreement terminating a strike. }	{ Oct. 21, 1919 }	{ Apr. 30, 1920 }	{ Each dust cart to make 3 rounds and clear 100 dust bins a day. Drivers of 3 or 4 horses to get 5 marks more a week. Sunday afternoon work in stables will be performed in rotation by drivers, who are to get from 6 to 9 marks extra. For shoeing the horses, 2 marks a month will be granted for each horse. Six days' vacation will be granted after a year's service, and an additional day for each succeeding year up to 15 days. After 4 weeks' service 2 pairs of overalls will be supplied free to each worker. }	Vorwärts, Berlin, Oct. 23, 1919.
Drivers of dust carts.....							
Drivers' assistants.....							
Loaders.....							
Stablemen.....							
Yard workers.....							
Fitters and crane workers....	\$ 135.00						

Transport workers, chemical industry (Berlin):			Collective agreement between the employers' association in the chemical industry and the transport workers' association.	July 1, 1919	Oct. 1, 1919	Workers under 20 are to receive 80 per cent of the rates shown here. The wages of stablemen include overtime of not more than 3 hours a week.	Vorwärts, Berlin, Aug. 21, 1919.
Chauffeurs.....	4 125.00	10 hours per day with a 2-hour interval.					
Drivers (horse).....	4 115.00						
Elevator men.....	4 110.00						
Stable men.....	4 110.00						
Transport workers, lumber yards (Berlin):			Collective agreement between Berlin lumber yard proprietors and the transport workers' association.	Not given....	Not given....	Piecework is to continue where it is in force at present. In yards in which before the conclusion of the agreement the rate of 2.25 marks was paid the new minimum hourly rate is to be 2.75 and 2.80 marks.	Vossische Zeitung, Berlin, Aug. 28, 1919.
Yardmen and drivers.....	9 2.65	Not given....					
Heavy transport industry (Berlin):			Award of a wages commission.	...do.....	...do.....	Workers engaged by the hour to get 2.50 marks per hour. Sunday work is to be paid for at the rate of double time. The workers' committees are granted a joint right of decision in cases of appointment and dismissal.	Vorwärts, Berlin, Aug. 11, 1919.
Drivers of heavy vehicles.....	4 114.00	8 hours' actual work per day within a time limit not exceeding 10 hours.					
Drivers of light vehicles.....	4 98.00						
Drivers under 18 years.....	4 68.00						
Stablemen and cleaners.....	4 114.00						
Drivers of light vehicles of smaller earning capacity.	4 80.00						
Transport workers, metal industry (Berlin):			Collective agreement between employers' and workers' organizations.	Retroactive to May 2, 1919.	...do.....	The collective agreement entails an increase in wages ranging from 50 to 70 pfennigs an hour.	Vossische Zeitung, Berlin, June 11, 1919.
Men—		46½ and 47 per week.					
Unskilled.....	12 2.00 to 13 2.10						
Semiskilled.....	13 2.10 to 13 2.30						
Skilled.....	12 2.20 to 13 2.30						
Women—							
Unskilled.....	12 1.20 to 13 1.30						
Semiskilled.....	12 1.40 to 13 1.50						
Skilled.....	12 1.45 to 13 1.50						

4 Per week.

9 Minimum rate.

12 Initial rate.

13 Rate after 6 months.

Wages in Italy, 1914 to 1919.

UP TO very recent times official comparative statistics as to the movement of wages in Italy were nonexistent. Of late the policy of the Italian Government with respect to wage statistics seems, however, to have undergone a change, for in a recent issue of its monthly bulletin¹ the newly created Ministry of Labor and Social Welfare makes for the first time an attempt to determine the increase in wages at the end of 1919 as compared with the first half of 1914. This first attempt covers three industry groups—the metal-working and machinery industry, printing and bookbinding, and the textile industry. The wage rates shown in the bulletin are average wages for a normal workday. Overtime or piecework wages were not considered. The wage rates for each industry, tabulated by Provinces and occupations, are reproduced below:

TABLE 1.—AVERAGE DAILY WAGE RATES IN VARIOUS INDUSTRY GROUPS IN ITALY, BY PROVINCES AND OCCUPATIONS, FIRST HALF OF 1914, AND LAST QUARTER OF 1919.
1 lira at par=19.3 cents.]

Industry group and Province.	First half 1914.	Last quarter 1919.	First half 1914.	Last quarter 1919.	First half 1914.	Last quarter 1919.	First half 1914.	Last quarter 1919.	First half 1914.	Last quarter 1919.
	<i>Compositors.</i>		<i>Printers.</i>		<i>Bookbinders.</i>					
<i>Printing and book-binding.</i>	<i>Lire.</i>	<i>Lire.</i>	<i>Lire.</i>	<i>Lire.</i>	<i>Lire.</i>	<i>Lire.</i>				
Turin.....	5.51	17.21	5.22	16.96	4.40	14.74	.....	.....	.....	.....
Bergamo.....	5.00	15.00	.....	.....	5.00	10.00	.....	.....	.....	.....
Brescia.....	4.83	18.33	4.83	18.33	4.00	14.16	.....	.....	.....	.....
Milan.....	6.27	16.32	6.17	16.93	4.74	14.90	.....	.....	.....	.....
Pavia.....	4.50	14.17	4.50	14.17	4.50	14.17	.....	.....	.....	.....
Verona.....	4.66	13.26	4.66	12.86	4.66	12.15	.....	.....	.....	.....
Venice.....	5.33	15.00	5.83	15.83	5.33	15.00	.....	.....	.....	.....
Reggio nell' Emilia.....	4.66	15.00	4.66	15.00	4.66	15.00	.....	.....	.....	.....
Florence.....	4.66	10.75	5.00	10.86	4.17	9.57	.....	.....	.....	.....
Perugia.....	3.75	11.66	3.75	11.66	3.75	11.66	.....	.....	.....	.....
	<i>Machinists.</i>		<i>Lathe hands.</i>		<i>Adjusters.</i>		<i>Molders.</i>		<i>Blacksmiths.</i>	
<i>Metal-working and machinery industry.</i>	<i>Lire.</i>	<i>Lire.</i>	<i>Lire.</i>	<i>Lire.</i>	<i>Lire.</i>	<i>Lire.</i>	<i>Lire.</i>	<i>Lire.</i>	<i>Lire.</i>	<i>Lire.</i>
Turin.....	4.34	15.92	4.27	15.63	4.22	15.90	4.57	15.94	4.23	15.85
Genoa.....	7.00	16.00	6.00	11.80	6.00	12.74	7.00	18.65	6.00	12.87
Brescia.....	5.62	14.00	5.87	20.03	5.66	18.60	5.33	21.01	5.50	16.40
Milan.....	5.75	15.50	6.66	16.80	6.25	15.25	5.22	15.37	6.04	16.45
Bologna.....	4.20	17.20	.....	.....	.....	.....	.....	.....	.....	.....
Naples.....	3.50	10.00	3.50	10.00	3.70	10.00	.....	.....	.....	.....
	<i>Silk spinning.</i>		<i>Spinning.</i>		<i>Weaving.</i>					
<i>Textile industry.</i>	<i>Lire.</i>	<i>Lire.</i>	<i>Lire.</i>	<i>Lire.</i>	<i>Lire.</i>	<i>Lire.</i>				
Novara.....	1.27	3.35	1.35	4.00	.....	.....	.....	.....	.....	.....
Turin.....	.....	.....	1.26	4.43	2.00	a 7.10	.....	.....	.....	.....
Como.....	1.10	3.51	1.50	4.59	1.93	a 7.48	.....	.....	.....	.....
Bergamo.....	.96	3.24	1.15	4.05	.....	.....	.....	.....	.....	.....
Brescia.....	.90	3.12	1.15	4.43	.....	.....	.....	.....	.....	.....
Milan.....	.97	2.74	1.30	3.22	.....	.....	.....	.....	.....	.....

^a Men only.

¹ Italy. Ministero per il Lavoro e la Previdenza Sociale. Bollettino del Lavoro e della Previdenza Sociale. Vol. XXXIII, Nos. 4 and 5, pp. i, 337 ff. Rome, 1920.

According to the preceding compilation of wage rates by the Italian Ministry of Labor, wages in the three industry groups covered varied greatly from Province to Province during the period 1914-1919. Wages in the northern Provinces were considerably higher than in the central and southern Provinces. In the printing and book-binding trades the increase in wages for the above period amounted, roughly speaking, to about 200 per cent, on an average. In the metal-working and machinery industry wages increased by about 180 to 200 per cent. In the textile industry wages in Italy as in all other countries were much lower than in other industry groups. Prewar wages in this industry varied between 0.90 lira (\$0.174, par) per day for silk spooling in the Province of Brescia and 2 lire (\$0.386, par) for weavers in the Province of Turin. The range of average daily wages during the last quarter of 1919 for silk spooling was 2.74 to 3.51 lire (\$0.529 to \$0.677, par), for spinning 3.22 to 4.59 lire (\$0.621 to \$0.886, par), and in weaving mills male operatives received an average daily wage of 7.10 to 7.48 lire (\$1.37 to \$1.444, par). The Ministry of Labor announces that it will continue to publish comparative wage statistics for the most important industries and these will be reported in the MONTHLY LABOR REVIEW currently.

In addition to the above comparative wage statistics based on investigations conducted by the Ministry of Labor itself the Italian Labor Bulletin, in a section devoted to "Changes in wages and hours of labor," publishes wage statistics compiled by chambers of commerce and industry, or reported by prefectures, private firms, the press, etc. These data occupy such a considerable space in the bulletin that only some of the most important can be reproduced in the MONTHLY LABOR REVIEW.

The most recent issue of the Italian Labor Bulletin (April-May, 1920) contains comparative wage statistics for the years 1914 to 1919, compiled by the Chamber of Commerce and Industry of Brescia. These statistics have been compiled after the model of those published by the German Statistical Office, i. e., the daily average wage rates of entire industry groups are shown and not those of individual trades or occupations. As Brescia is situated in the heart of the most important industrial region of Italy, these statistics are representative, and as they are given for half-yearly periods they also clearly illustrate the trend of wages in Italy during the period of the war and during the first year of peace. For this reason these statistics are reproduced below in table form:

TABLE 2.—AVERAGE DAILY WAGE RATES IN THE CITY OF BRESCIA, ITALY OF VARIOUS INDUSTRY GROUPS, 1914 TO 1919.

[1 lira at par=19.3 cents.]

Industry group.	1914		1915		1916		1917		1918		1919	
	First half.	Second half.	First half.	Second half.	First half.	Second half.	First half.	Second half.	First half.	Second half.	First half.	Second half.
<i>Average Daily Wage Rates.</i>												
Peat digging.....	0.82	0.70	0.76	0.69	0.80	0.81	1.15	1.17	1.81	1.95	2.24	2.71
Stone quarrying.....	1.96	1.95	2.23	2.59	2.50	2.72	3.07	3.54	3.70	4.13	4.77	6.46
Lime and cements.....	3.41	3.39	2.78	3.05	3.45	3.69	4.11	4.76	6.19	7.28	5.86	7.43
Woodworking.....	2.64	3.13	3.28	3.23	3.77	4.10	4.72	4.84	4.77	5.13	8.45	8.60
Chocolate industry.....	1.61	1.97	2.42	2.49	2.07	2.02	1.37	1.27	2.84	3.17	4.05	5.78
Milling (flour) industry.....	1.75	1.79	3.04	3.48	3.69	3.71	5.64	5.36	5.41	6.57	8.74	12.04
Brewing industry.....	1.68	1.96	2.14	2.92	3.36	3.43	3.87	4.38	4.32	5.44	7.96	9.00
Liquor industry.....	3.85	3.83	3.92	3.70	5.48	6.19	7.23	8.03	9.38	12.47	13.47	17.84
Tanning.....	2.92	2.34	2.14	2.52	2.43	2.49	3.18	3.66	3.96	4.56	6.67	9.22
Paper mills.....	1.29	1.37	1.78	1.92	1.95	1.99	2.26	2.00	2.50	2.95	3.89	5.40
Button industry.....	3.63	3.36	3.64	3.68	4.19	4.67	5.26	6.09	6.21	7.07	8.27	12.08
Iron and steel industry.....	4.15	3.86	4.70	5.55	7.10	7.99	9.12	8.65	9.73	10.42	12.47	13.68
Machinery industry.....	2.40	1.82	2.48	2.91	3.76	4.68	5.22	6.14	6.59	8.89	11.93	12.17
Naval gun factories.....	2.33	2.31	2.03	2.90	3.10	4.22	4.39	4.52	5.72	5.85	7.04	11.19
Agricultural implements.....	2.50	2.48	2.64	3.41	5.29	5.35	6.62	5.94	6.42	8.12	7.21	11.88
Flatiron factories.....	2.78	2.72	1.91	1.97	2.87	3.25	3.62	3.75	3.88	4.68	5.74	7.25
Electrical apparatus.....	1.94	1.56	1.67	2.18	3.32	4.37	4.67	4.68	6.80	6.65	5.57	9.25
Couch factories.....	3.93	3.86	2.87	3.39	3.25	4.29	6.00	5.97	6.80	6.65	5.97	9.25
Building trades.....	1.77	1.72	1.78	1.80	1.87	2.08	2.23	2.49	2.61	3.34	3.52	5.26
Woolen mills.....	2.03	1.94	1.99	2.04	2.10	2.13	2.56	2.77	3.17	3.85	4.25	5.98
Cotton mills.....	.93	.97	.87	1.09	1.00	1.21	1.08	1.66	1.45	1.97	2.41	3.32
Silk mills.....	1.38	1.36	1.34	1.49	1.60	1.76	1.83	2.15	2.49	3.05	3.66	5.46
Hosiery factories.....	1.08	1.13	1.75	2.12	2.02	2.14	2.33	2.67	3.08	3.10	4.00	5.66
Tanning extracts factories.....	3.79	3.82	3.65	3.87	3.99	4.27	4.25	5.36	7.02	7.40	10.30	15.81
Match factories.....	1.06	1.13	1.04	.87	1.00	1.15	1.24	1.64	1.73	2.08	3.08	4.43
Dye works.....	1.71	1.91	2.09	2.46	2.51	2.53	2.65	2.84	2.90	2.93	3.71	6.37
Glass industry.....	3.04	2.96	3.26	4.30	4.14	4.52	4.69	4.51	5.68	6.15	7.51	9.72
Castor oil factories.....	2.81	2.57	2.53	2.64	3.49	3.84	4.50	4.35	4.70	7.01	9.52	9.47
Wax industry.....	2.30	2.26	2.22	2.09	2.31	2.49	3.37	3.28	3.34	3.75	4.32	6.06
Barite factories.....	1.32	1.32	1.32	1.43	2.55	2.78	3.40	3.32	3.96	4.31	3.93	4.16
Chemical fertilizer factories.....	3.59	3.73	3.19	3.70	4.33	5.17	6.11	6.96	8.11	9.12	10.62	11.78
Gas works.....	4.01	4.23	4.33	4.09	5.64	6.37	6.10	7.15	8.26	10.53	10.93	14.09
Electric light and power plants.....	3.30	3.85	4.17	4.29	4.05	3.75	6.12	5.87	6.01	8.00	10.63	15.75
Printing trades.....	3.86	3.79	3.90	4.31	4.18	4.37	4.98	4.85	5.29	6.05	8.60	11.80
<i>Index Numbers (First half, 1914=100).</i>												
Peat digging.....	100	85	93	84	98	99	140	143	221	238	273	332
Stone quarrying.....	100	99	114	127	132	139	157	170	189	211	243	330
Lime and cement.....	100	99	82	90	101	108	121	140	182	213	172	218
Woodworking.....	100	119	124	122	143	155	179	183	181	194	320	326
Chocolate industry.....	100	117	143	147	122	120	81	128	168	188	240	342
Milling (flour) industry.....	100	107	98	112	119	119	181	188	174	211	281	387
Brewing industry.....	100	102	51	73	98	101	234	186	215	362	450	514
Liquor industry.....	100	117	127	174	200	204	230	207	257	324	457	555
Tanning.....	100	99	102	96	142	161	188	209	244	324	348	463
Paper mills.....	100	102	93	110	106	109	139	160	173	199	291	403
Button industry.....	100	71	93	100	101	104	118	104	130	154	203	281
Iron and steel industry.....	100	93	100	101	114	129	145	168	171	195	228	333
Machinery industry.....	100	93	113	134	171	193	220	208	234	251	300	330
Naval gun factories.....	100	76	103	121	157	195	218	256	275	370	497	507
Agricultural implements.....	100	99	87	124	133	181	188	194	245	251	302	480
Flatiron factories.....	100	99	106	136	212	216	196	202	257	325	289	475
Electrical apparatus.....	100	98	79	71	103	117	130	135	140	168	206	261
Couch factories.....	100	80	86	112	171	225	241	241	189	215	302	665
Building trades.....	100	101	73	86	83	109	153	152	173	169	142	235
Woolen mills.....	100	97	101	102	106	118	126	141	148	189	221	297
Cotton mills.....	100	96	98	100	103	105	126	136	156	190	209	295
Silk mills.....	100	104	94	117	108	130	116	178	156	212	259	357
Linen mills.....	100	99	97	108	116	128	133	156	180	221	265	397
Hosiery factories.....	100	105	162	196	187	198	234	247	285	287	370	524
Tanning extracts factories.....	100	93	96	102	105	113	112	141	185	195	267	338
Match factories.....	100	107	98	82	94	108	117	155	163	196	291	418
Dye works.....	100	112	122	144	147	148	155	166	170	171	217	373
Glass industry.....	100	97	107	141	136	149	154	148	187	202	247	320
Castor oil factories.....	100	91	90	94	124	137	160	155	167	249	339	337
Wax industry.....	100	98	97	91	100	108	147	143	171	163	188	290
Barite factories.....	100	100	100	108	193	211	258	252	300	327	298	315
Chemical fertilizer factories.....	100	104	89	103	121	144	170	194	226	254	296	328
Gas works.....	100	105	108	102	141	159	152	178	205	263	273	351
Electric light and power plants.....	100	117	123	130	123	114	185	178	182	242	322	477
Printing trades.....	100	98	101	112	108	113	129	126	137	157	223	306

A study of Table 2 with a view to obtaining a picture of the trend of wages in Italian industry during the six-year period 1914-1919 brings out the fact that from the beginning of the war up to the middle of 1915 wages in the majority of industry groups went below the prewar level. In a few industries, such as peat digging, brewing, the manufacture of electrical apparatus, the building trades, in match, castor oil, and wax factories wages remained below the prewar level even up to the end of 1915. In most other industries, however, a gradual upward trend of wages set in in the second half of 1915 and, as a rule, continued up to the end of 1918. Beginning with 1919 the rise of wages assumed a phenomenal character, so that at the end of 1919 wages in some industries had risen over 100 and even 200 per cent over those prevailing at the end of 1918. Compared with prewar wages the increase in the various industry groups ranged between 118 per cent (lime and cement) and 565 per cent (couch factories). In all industries, with the exception of lime and cement, the button industry, the manufacture of electrical apparatus, the building trades, woolen and cotton mills, and the wax industry, the rise in wages was in excess of 200 per cent.

Another fact brought out by Table 2 is the great disparity in wage rates from industry to industry. In peat digging, for instance, the average daily wage rate during the second half of 1919 was 2.71 lire (\$0.523, par), and in silk mills 3.32 lire (\$0.641, par), as compared with that of 14.09 lire (\$2.719, par) in gas works, 15.75 lire (\$3.04, par) in electric light and power plants, 15.81 lire (\$3.051, par) in tanning extracts factories, and 17.84 lire (\$3.443, par) in tanneries.

In order to obtain an idea of the economic significance of the increase in wages during the period 1914-1919 the relation of this increase to that in the cost of living must be studied. Unfortunately there are no data available as to the cost of living in Brescia. Such data are, however, available for Milan, which is only about 50 miles distant from Brescia. The monthly municipal bulletin of the city of Milan² shows that the cost of living for December, 1919, of a workman's family composed of 5 persons (husband, wife, and child over 10 years of age and 2 children under 10 years of age) has increased 186.8 per cent as compared with the cost of living for the first half of 1914. Milan being a much larger city than Brescia, it seems only fair to assume that the cost of living in the former can not be lower than in the latter. If, however, the cost of living has increased only 186.8 per cent during the period under review and wages in nearly all industries have increased by more than 200 per cent, one must arrive at the conclusion that, in contrast to other countries, industrial wages in northern Italy have increased in a measure which more than offsets the increase in the cost of living.

The monthly municipal bulletin of the city of Milan (May, 1920, p. 199) contains a table showing current wage rates for May, 1920, for a number of industrial occupations. The table is reproduced:

² Citta di Milano. Bollettino municipale mensile di cronaca amministrativa e statistica. Vol. 36, No. 1. Milan, 1920, p. 47.

TABLE 3.—HOURLY AND WEEKLY WAGE RATES FOR VARIOUS INDUSTRIAL OCCUPATIONS IN THE CITY OF MILAN, ITALY, MAY, 1920.

[1 lira at par=19.3 cents.]

Industry and occupation.	Wage rates.			
	Per hour.		Per week of 48 hours.	
	Minimum.	Maximum.	Minimum.	Maximum.
<i>Printing trades.</i>				
Book and job printing:	<i>Lire.</i>	<i>Lire.</i>	<i>Lire.</i>	<i>Lire.</i>
Apprentices.....	0.97	2.21	46.51	105.99
Compositors—				
Hand.....	2.72	3.00	130.52	144.12
Machine.....	2.87	3.10	137.82	148.92
Newspapers:				
Makers-up.....	3.14	3.64	150.66	174.66
Compositors—				
Hand.....	3.23	3.39	154.26	162.66
Machine.....	3.09	.....	148.56	156.36
Pressmen:				
First and second.....	2.02	3.29	97.13	158.16
Assistant.....	1.80	3.04	86.29	146.16
Press feeders.....	1.10	.....	53.04	.....
Hand-press operators.....	1.48	2.28	70.99	109.50
<i>Metal-working and machinery industry.</i>				
Male workers:				
Over 18 years.....	1.67	2.52	80.16	120.96
14 to 18 years.....	.62	1.25	29.76	60.00
<i>Gilding and lacquering.</i>				
Male workers:				
Over 18 years.....	2.85	.....	136.80	.....
Under 18 years.....	.95	2.10	45.60	100.80
<i>Bakers (bread).</i>				
Peeler.....	.....	.....	96.00	130.70
Mixer.....	.....	.....	87.70	130.70
Third hand.....	.....	.....	78.00	113.25
Fourth hand.....	.....	.....	80.58	103.75
Fifth hand.....	.....	.....	.....	103.75
<i>Barbers.</i>				
Journeymen.....	.....	.....	100.00	130.00
Apprentices.....	.....	.....	65.00	90.00
<i>Building trades.</i>				
Masons.....	2.60	.....	124.80	.....
Masons' apprentices.....	2.30	.....	110.40	.....
Hod carriers.....	2.00	.....	96.00	.....
Laborers:				
Adult.....	1.70	.....	81.60	.....
Juvenile.....	1.20	.....	57.60	.....
Taxicab drivers.....	.....	.....	120.00	.....

MINIMUM WAGE.

New Minimum Wage in the Mercantile Industry, Fort Smith, Ark.

THE Minimum Wage and Maximum Hour Commission of Arkansas has recently established the minimum wage to be paid female employees in the mercantile industry in the city of Fort Smith. The order (No. 2) is dated at Little Rock August 4 and became effective on September 1. Its provisions follow:

The minimum wage to be paid female employees in the mercantile industry in the city of Fort Smith, Ark., shall be:

1. For experienced female employees, not less than \$13.25 per week.
2. For inexperienced female employees, not less than \$11 per week.
3. Nothing in this order prevents employers from paying more than the rates fixed by the commission as the minimum rates.
4. This order applies to all females employed in the mercantile industry (establishments) in the city of Fort Smith, Ark.
5. These rates are based on full-time work, by which is meant the full number of hours required per week by employers and permitted by the laws of the State.
6. For the purpose of defining and determining "experienced female employees" and "inexperienced female employees," section 7, act 275, acts 1915, and acts amendatory thereto, shall govern in the meaning of this order.
7. No person, firm, or corporation shall employ or permit any female to be employed in any mercantile establishment except in accordance with the provisions of this order of the minimum wage and maximum hour commission and the statutes governing the employment of females.
8. Copy of this order shall be posted by employers in all establishments affected thereby.

This order shall become effective on September 1, 1920, and shall be in force and effect from said date, until amended or revoked.

The order was based on the following budget adopted by the commission:

	Amount per week.
Board and room.....	\$8.00
Clothing.....	3.00
Laundry.....	.45
Street-car fare.....	.72
Church.....	.10
Recreation.....	.30
Insurance.....	.15
Savings account.....	.20
Incidentals.....	.33
	13.25

Consideration was given by the commission to the fact that employees in mercantile establishments purchase their clothing for less than other workers and are given bonuses and premiums.

The commission states that "only the necessities of life are included in the budget. Nothing is allowed for vacation, doctor or dentist, oculist, newspapers and magazines, self-improvement, or benefit associations, all of which are included in budgets estimated by commissions in other States in making wage awards.

Recent Minimum Wage Determinations by New South Wales Board of Trade.

THREE minimum wage determinations have recently been made by the New South Wales Board of Trade, covering three districts known, respectively, as the Newcastle district, the south coast area, and the central tablelands area. These awards are based on inquiries into cost of living, which was found to be for the respective areas as follows: £3 16s. 6d. (\$18.61, par); £3 17s. 6d. (\$18.86, par), and £3 18s. (\$18.98, par). These amounts were fixed as the minimum weekly rates of wages for adult males in the three districts, the daily and hourly rates being fixed as follows: Newcastle district, 12s. 9d. (\$3.10, par) per day and 1s. 7½d. (38.8 cents, par) per hour; south coast area, 12s. 11d. (\$3.14, par) per day and 1s. 7¾d. (39.3 cents, par) per hour; central table lands area, 13s. (\$3.16, par) per day and 1s. 7½d. (39.5 cents, par) per hour. The awards are dated at Sydney April 19, May 11, and July 8, respectively.

COOPERATION.

Comparative Study of the Cooperative Movement in Various Countries.¹

By FLORENCE E. PARKER.

INTEREST in the cooperative movement in the United States brings up the question of the relative development and status of the movement in other countries. In the present article an attempt is made to bring together statistics for certain of the European countries and to compare the movements in these countries. Lack of comparable statistics and, in some cases, a total lack of statistics, has made this difficult. For some of the countries most important from the cooperative standpoint there are few figures with regard to cooperation. Other countries, like the United Kingdom, Germany, and Switzerland, publish very complete figures each year. The United States is not included in the tables, because of the fact that no comprehensive statistical investigation has been made in this country. Where information is at hand the United States is included in the discussion of each point, though not presented statistically in the table. In most cases, however, only general statements can be made.

A special attempt is made to show the effect of the war on the consumers' cooperative movement in Europe.

Development of Various Types of Cooperative Societies.

IN THE following table is shown for 14 countries the number and per cent of cooperative societies of each type in the latest year for which figures are available.

NUMBER AND PER CENT OF COOPERATIVE SOCIETIES OF EACH SPECIFIED TYPE, BY COUNTRY.

<i>Number.</i>								
Country.	Year.	Credit societies.	Insurance societies.	Agricultural societies.	Workers' societies.	Consumers' societies.	Other societies.	Total.
Austria.....	1915	12,380	.....	3,548	1,286	1,433	649	19,296
Belgium.....	1908	629	66	808	221	400	213	2,337
Denmark.....	1915	13	.....	3,047	.....	1,562	.....	4,622
Finland.....	1914	512	.....	798	45	517	428	2,300
France.....	1911	3,946	.....	8,706	497	2,951	.....	16,100
Germany.....	1918	19,793	.....	8,048	1,029	2,277	5,137	36,284
Greece.....	1918	.....	.....	820	.....	.....	^a 97	917
Hungary.....	1916	2,609	800	667	.....	1,915	81	6,072
Italy.....	1919	(b)	.....	425	2,351	3,814	425	7,015
Netherlands.....	1917	796	64	909	18	1,065	531	3,383
Russia.....	1919	26,500	.....	8,500	5,000	40,000	.....	80,000
Spain.....	1918	.....	.....	24	(c)	218	.....	242
Switzerland.....	1918	444	750	5,281	107	1,706	2,298	10,586
United Kingdom.....	1918	(b)	(b)	(b)	95	1,364	15	1,474

^a Includes all types of societies; not reported separately.

^b Not reported.

^c Included with "Agricultural societies;" not reported separately.

¹ For sources of information see list at end of article.

NUMBER AND PER CENT OF COOPERATIVE SOCIETIES OF EACH SPECIFIED TYPE,
BY COUNTRY—Concluded.*Per cent.*

County.	Year.	Credit societies.	Insurance societies.	Agricultural societies.	Workers' societies.	Consumers' societies.	Other societies.	Total.
Austria.....	1915	64.2	.....	18.4	6.7	7.4	3.4	100.0
Belgium.....	1908	26.9	2.8	34.6	9.5	17.1	9.1	100.0
Denmark.....	1915	.3	.....	65.9	.....	33.8	.....	100.0
Finland.....	1914	22.2	.....	34.7	2.0	22.4	18.6	100.0
France.....	1911	24.5	.....	54.1	3.1	18.3	.....	100.0
Germany.....	1918	54.6	.....	22.2	2.8	6.3	14.1	100.0
Greece.....	1918	.....	.....	89.4	.....	.....	10.6	100.0
Hungary.....	1916	43.0	13.2	11.0	.....	31.5	1.3	100.0
Italy.....	1919	(¹)	.....	6.1	33.5	54.4	6.1	100.0
Netherlands.....	1917	23.5	1.9	26.9	.5	31.5	15.7	100.0
Russia.....	1919	33.1	.....	10.6	6.3	50.0	.....	100.0
Spain.....	1918	.....	.....	9.9	(²)	90.1	.....	100.0
Switzerland.....	1918	4.2	7.1	49.9	1.0	16.1	21.7	100.0
United Kingdom.....	1918	(¹)	(¹)	(¹)	6.4	92.5	1.0	100.0

¹Not reported.²Included with "Agricultural societies"; not reported separately.

As the above table shows, so far as number of cooperative societies is concerned, Russia far outstrips all the other countries, with 80,000 societies, more than twice the number of her nearest competitor, Germany. This huge number of societies becomes the more impressive when it is recalled that the movement there had a later beginning than in England. In the latter country the movement began in 1844; in Russia the formation of cooperative societies was not made legal until after the release of the peasants from serfdom in 1863. Perhaps in no country in the world has the movement, once started, grown so rapidly as in Russia. In Spain, on the other hand, cooperation has been the least successful of the countries shown. As is seen, in 1918 there were only 242 societies of all kinds in that country.

It is interesting to note the relative growth of the different phases of cooperation in the countries for which data are available. In Austria, Germany, and Hungary the credit society predominates. Austria, where credit societies formed 64.2 per cent of the total number of cooperative societies in 1914, surpasses even Germany, the parent country of the credit form of cooperation, where these societies formed in 1918 only a little over half of all types of societies. Hungary, like Austria, has been influenced by the development of the cooperative movement in Germany, and has also developed the credit society to a greater extent than the other forms of cooperative organization. In Hungary, however, the credit society may now have lost its predominant position, since it is stated that while other forms of cooperation prospered during the war, the credit society barely held its own, though efforts are now being made toward its greater development.

In Belgium 26.9 per cent of the whole number of societies are of the credit type. The expansion of this form of cooperative effort is due to the work of the Catholic clergy in the agricultural districts. Town banks and industrial credit societies were comparatively few

in 1908, numbering only 61, while the agricultural credit societies numbered 568.

The credit society has been little developed in the United States. Only nine States² have legislation permitting the formation of credit unions and cooperative banks. In Massachusetts this type of society has been very successful. On October 31, 1918, there were 186 cooperative banks and 59 credit unions in operation in Massachusetts, having a combined membership of 264,860 persons.

Insurance societies form a small part of the movement in all countries, being nonexistent in the majority of those shown. The absence of cooperative insurance is more apparent than real, however, since this form of cooperative activity is often carried on as part of the functions of the agricultural society or the consumers' society.

Workers' societies, also known as the "self-governing workshops," in which the workers own the stock, do the work, and receive the profits, are, like the insurance society, a small part of the movement as a whole. It seems to be conceded that this form of cooperation has, in most countries, the least likelihood of success, though it has been tried in most of them. This type of society is Italy's peculiar contribution to the cooperative movement, and as the table shows, Italy is the only country in which it forms an important part of the movement. Italian labor societies are of two sorts, those consisting of day laborers who work in gangs, under an elected leader, on materials furnished by the contract giver, and so-called "industrial" societies, which are engaged in production and furnish their own materials. The labor gangs receive aid from the Government, though only in the form of preferential treatment in the awarding of contracts. The industrial societies, however, manufacture for the open market. These societies have had great success in Italy, and it is said that in some Provinces they have practically driven private contractors out of business. The cooperative labor societies of Reggio were given the work of constructing the Reggio-Crano Railway, and have for the last 10 years been responsible for its management. Workers' societies in Belgium formed, in 1908, 9.5 per cent of the whole number of societies. Their present status in the movement is not known. Russia has about 5,000 of these societies, found in a variety of industries, such as the manufacture of clay ware, felt, toys, hardware, etc. Germany is said not to have cooperative workers' societies in the form in which they appear in other countries, though it has what are called "associations of small producers." The members of these associations, while they buy the material, own and use the machinery and market the product collectively, nevertheless begin and end as independent producers, the product of each worker remaining his own. In Great Britain and Ireland there are 95 associations of workers, most of which find their market in the consumers' movement. Even that market is limited, since the consumers' societies, both independently and through their wholesale society, carry on their own cooperative production of many articles. In France the workers' societies have been successful and growing, particularly in such industries as public works, the building trades, and the printing and paper trades. The success of these societies is, however, said to be due in

² Massachusetts, New York, North Carolina, Oregon, Rhode Island, South Carolina, Texas, Utah, and Wisconsin.

large measure to State aid as well as to private philanthropy. The State has rendered assistance in three ways—through cheap loans made through the cooperative bank of the Workers' Productive Associations of France, through gifts of money to individual societies, and through preferential treatment on Government contracts. So far as is known there are few workers' productive societies in the United States. Of these, the majority are probably to be found in the Puget Sound region of the Pacific coast. In that region the workers operate shingle mills, laundries, a milk condensary, a slaughterhouse, a packing plant, a fish cannery, a bakery, and a dairy, though not all on a strictly cooperative basis. Most of these were started as a result of strikes in the industry. In the eastern States workers' societies are represented by several cigar factories, a knit goods factory, a shoe factory, and a window-glass manufacturing establishment. Other enterprises backed by trade-unions are reported to be in process of organization. A cooperative tailoring establishment has recently been opened by a New York clothing workers' union.

Agricultural societies are predominant in the cooperative movements of Belgium, Denmark, France, Greece, Switzerland, and the United States. The term "agricultural society" is not altogether satisfactory, however, inasmuch as it is used variously to include farmers' marketing associations, farmers' supply associations, and associations combining the functions of purchase and sale. Thus, the figures given in the table probably include in many instances consumers', insurance, and credit societies organized by farmers. The farmers' marketing association has been developed to a high degree in Finland, the Netherlands, and above all, in Denmark. No up-to-date figures are available for the United Kingdom. In 1914 there were 975 agricultural societies, most of which were supply societies, and therefore really consumers' or distributive organizations. This branch of cooperation is the one branch of the movement which can be said to have achieved absolute success in the United States, though the consumers' movement is making progress. According to a United States Bureau of Markets investigation there were in 1917 between 5,000 and 10,000 farmers, purchasing and marketing associations in the United States. The farmers' organizations in this country take the form of grain elevator companies, creameries, cheese factories, insurance companies, and associations for the marketing of fruit, grain, live stock, and produce of various kinds. The business of these farmers' societies amounts to many millions of dollars annually.

Agricultural societies, in the sense of being societies for collective farming, are found in few countries. Italy and Roumania have societies of this type. Italy has two kinds of "collective lease-holding societies." Those of Lombardy and Sicily rent land which they parcel out to the families of the society, each family cultivating the land on its own responsibility; those of Emilia work the land in common and then share the harvest. In 1919 there were more than 100,000 acres being cultivated by these Italian farming societies. The societies of Roumania have also been very successful, being characterized by the progressive, scientific spirit shown by them. They make a practice of hiring experts to advise with regard to selection of seeds, rotation of crops, and farming methods, and as a result have doubled the yield of the land taken over by them.

With regard to the development of consumers' societies, the United Kingdom, as would be expected, stands out preeminent, more than 90 per cent of the cooperative societies being of this type.

Finland and Holland have the most evenly developed movement, the three chief branches—credit, agricultural, and consumers' societies—being about equal in extent.

Consumers' Societies.

THE consumers' society, in its general organization, varies little from country to country. The cooperative, or Rochdale, principles on which the movement is based, are the same in all countries. Economic conditions and national tastes do, however, modify the application of the principles and determine the form of activity of the society.

Of late years interest in the consumers' society has been increasing. This interest, which has been stimulated by the increasing cost of living and the difficulty experienced by the worker in making ends meet, has shown itself in the rapid expansion of this branch of the movement. In the following table is shown for certain countries the number of consumers' cooperative societies in the latest year for which figures are available. For comparative purposes the number of societies in each country in 1909 is also given.

GROWTH OF CONSUMERS' COOPERATIVE MOVEMENT SINCE 1909 IN SPECIFIED COUNTRIES.

Country.	Number of societies in 1909.	Latest year for which figures are reported.	Number of societies reported in latest year.
Austria.....	1,285	1914	1,433
Czecho-Slovakia.....	186	1918	440
Denmark.....	² 1,300	1915	1,562
Finland.....	506	1918	² 575
France.....	2,491	1918	2,233
Germany.....	2,270	1918	2,277
Hungary.....	³ 1,579	1916	1,915
Italy.....	³ 1,897	1919	3,814
Netherlands.....	352	1917	1,065
Poland.....	(⁴)	1918	² 2,240
Roumania.....	15	1916	340
Russia.....	⁵ 5,500	1919	40,000
Spain.....	(⁴)	1918	218
Sweden.....	(¹)	1918	² 1,060
Switzerland.....	³ 1,030	1918	1,706
United Kingdom.....	1,428	1918	1,364

¹ Year 1908.

² Approximate.

³ Year 1910.

⁴ Not reported.

⁵ Year 1912.

These consumers' societies include those dealing in general merchandise, as well as those confining themselves to one line of goods, such as coal, wine, drugs, meat, bakery goods, etc. Cooperative restaurants are common in countries on the Continent.

The operations of the cooperative societies in various countries are shown in the following table:

OPERATIONS OF CONSUMERS' COOPERATIVE RETAIL SOCIETIES IN SPECIFIED COUNTRIES.

Country.	Year.	Number of consumers' societies reporting.	Number of members.	Average number of members per society.	Amount of sales.	Average annual sales per society.	Average annual sales per member.
Austria.....	1916	636	490,717	772	\$39,815,136	\$62,602	\$81.14
Belgium.....	1912	205	170,748	833	9,181,702	44,789	53.77
Czecho-Slovakia.....	1918	440	135,000	307	14,210,000	32,295	10.53
Denmark.....	1915	1,562	243,855	156	24,297,148	15,555	99.64
Finland.....	1916	486	181,752	374	31,391,126	64,591	172.71
France.....	1918	2,233	1,129,684	506	109,065,724	48,842	96.55
Germany.....	1918	2,277	2,900,000	1,274	181,648,907	79,776	62.64
Hungary.....	1910	992	156,563	158	7,758,042	7,821	49.55
Italy.....	1915	1,970	2 411,358	208	30,270,354	15,366	73.87
Netherlands.....	1918	405	219,140	541	(1)	.....	.....
Norway.....	1918	235	67,910	289	12,901,493	54,900	189.98
Poland.....	1918	560	120,000	214	(1)	.....	.....
Roumania.....	1916	340	16,000	47	(1)	.....	.....
Spain.....	1918	218	32,302	148	3,860,000	17,706	119.50
Sweden.....	1918	771	204,906	266	38,557,617	50,010	188.17
Switzerland.....	1918	461	341,826	741	45,855,985	99,471	134.15
United Kingdom.....	1918	1,364	3,846,531	2,820	755,076,227	553,575	196.30

¹ Not reported.² 1,977 societies reporting.

It is seen that by far the largest number of cooperators reported is possessed by the United Kingdom, whose societies number in their membership 3,846,531 persons. Germany, with 2,900,000 cooperators, is a close second. These two countries also have the largest average number of members per society, though the average society in the United Kingdom is more than twice the size of the average German society. Roumania, Spain, Denmark, and Hungary all have very small societies, the size ranging from 47 to 158 persons. So far as figures showing size of society can be obtained for a series of years, Hungary appears to be the only country in which the society is growing smaller. In that country the average society declined in size from 179 in 1901 to 158 persons in 1910. Denmark and Italy have shown little change since 1910. On the other hand Czecho-Slovakia, Finland, France, Germany, Norway, Switzerland, and the United Kingdom all show a considerable increase in the average size of the society, particularly during the war period. This increase is probably due to two causes: (1) During the war the membership of the cooperative societies was increased because of the fact that as long as supplies lasted the cooperative societies in all countries sold goods to their members at prewar prices, a circumstance which naturally proved a great inducement toward joining a cooperative society; and (2) a process of amalgamation is going on in many countries.

In total amount of sales and in average sales per society the English movement leads. Even the movement of Germany does only about 25 per cent of the amount of business done by the English societies.

As compared with France, England, and Germany, the movement in the United States makes a poor showing, with its estimated membership of only about 500,000 persons; its sales however are placed at about \$200,000,000 per year. In size of society, also, the United States falls behind the European nations. Figures collected by the Bureau of Labor Statistics show that the average membership of the associations studied was 427.

In average sales per member the United Kingdom again leads, with annual purchases of \$196.30 per member. In the Scandinavian countries the members also show loyalty to the cooperative store. Spain shows a surprisingly large expenditure per member, considering the backward state of the movement in that country. Czecho-Slovakia, Hungary, and Belgium show the lowest annual amount purchased per member. This showing, however, is hardly fair to either Belgium or Hungary, both because it represents prewar conditions and because in Belgium many of the societies are bakeries only.

The table below gives details with regard to the capitalization of societies:

AVERAGE AMOUNT OF SHARE CAPITAL PER SOCIETY AND PER MEMBER OF CONSUMERS' COOPERATIVE RETAIL SOCIETIES IN SPECIFIED COUNTRIES.

Country.	Year.	Number of societies reporting.	Number of members.	Amount of share capital.	Average amount of share capital per society.	Average amount of share capital per member.
Austria	1915	399	314,814	\$1,200,698	\$3,009	\$3.81
Belgium	1912	205	170,748	885,202	1,879	2.26
Czecho-Slovakia	1917	304	83,028	511,551	1,683	6.16
Germany	1918	2,277	2,900,000	35,131,180	15,429	12.11
Hungary	1910	992	156,563	714,757	721	4.57
Italy	1915	1,970	411,358	1,610,121	1,308	14.83
Sweden	1918	771	204,906	2,055,171	2,666	10.03
Switzerland	1917	434	324,948	1,318,759	3,038	4.06
United Kingdom	1918	1,364	3,846,531	262,981,888	192,802	68.37

¹ "Working capital"; share capital not reported separately.

In amount of share capital per member the countries differ widely, ranging from \$2.26 in Belgium to \$68.37 in the United Kingdom. Among the countries shown, Germany, the magnitude of whose cooperative movement most nearly approaches that of England, shows a capitalization per member less than one-fifth that of the latter country. This is explained by the fact that while the size of the share is about the same in both countries—about \$7.30 in Germany and from \$5 to \$10 in England—the German cooperator rarely takes more than one share, preferring to deposit his money in the savings department of his society, whence it can be withdrawn at short notice. This loan capital also the member may use as the basis for purchases on credit, which is not the case with share capital. Austria, Belgium, Hungary, Switzerland, and Czecho-Slovakia all show a very low capitalization per member. It must be recalled again with regard to Belgium that many of the societies are bakeries. The Austrian movement is admittedly undercapitalized, and this fact was forcibly demonstrated during the first few weeks of the war, when a run on the savings departments of the societies, by means of the deposits in which the Austrian cooperative business is chiefly carried on, came near proving fatal to the whole consumers' cooperative movement. In Denmark capital is raised not through the issue of capital stock, but by loans obtained on the security of the members' individual and collective liability. Figures are not available showing the amount of share capital of the French consumers' cooperative societies; it is not probable, however, that they would show any greater amount of stock per member than is held in the German

movement. Neither are corresponding figures available for societies in the United States as a whole. A study made by the Bureau of Markets of 60 typical cooperative stores in the United States gives data from which the average amount of share capital per society can be obtained, but figures for membership are not shown. The average amount per society was \$16,628, a larger figure than in any of the European countries except the United Kingdom.

Wholesale Societies.

In most of the countries where the movement has reached any considerable size, the retail societies have established their own cooperative wholesale society. England was of course the first to undertake this step, in 1864, followed four years later by Scotland, which country was inspired to do so by the success of the English organization. To the United States belongs the doubtful honor of being the latest country to establish a national wholesale, this being done in September, 1918, though district wholesales have been in operation for the past decade. The following statement shows the countries which have wholesale societies, the location of the headquarters, and the year in which the society was established, the countries being arranged in the chronological order of the establishment of the society.

YEAR OF ESTABLISHMENT AND LOCATION OF NATIONAL WHOLESALE SOCIETIES, BY COUNTRIES.

Country.	Location of central office of wholesale.	Year of establishment.	Country.	Location of central office of wholesale.	Year of establishment.
England.....	Manchester....	1864	Spain.....	Barcelona....	1900
Scotland.....	Glasgow.....	1868	Belgium.....	Antwerp.....	1901
Netherlands.....	Rotterdam....	1890	Finland.....	Helsingfors..	1904
Switzerland.....	Basel.....	1890			1917
Germany.....	Hamburg.....	1892	Austria.....	Vienna.....	1905
Denmark.....	Copenhagen..	1896	Norway.....	Christiania..	1907
Hungary.....	Budapest....	1898	Czecho-Slovakia.....	Prague.....	1909
Russia.....	Moscow.....	1898	Italy.....	Milan.....	1911
Sweden.....	Stockholm...	1899	Poland.....	Warsaw.....	1911
France.....	Paris.....	1900	United States.....	Chicago.....	1918

¹The "S. O. K."

²The "O. T. K."

Finland, as is seen, has two consumers' wholesale societies—the Consumers' Cooperative Wholesale Society (the "S. O. K.," as it is called, from the initial letters of its Finnish name), established in 1904, and the Finnish Cooperative Wholesale Society (the "O. T. K."), established in 1917 as a result of a dispute between the agricultural and industrial members of the movement, causing the withdrawal of the latter and the formation of their own wholesale. France until 1912 had two wholesale societies. In that year, however, the two amalgamated to form a national organization.

All of the wholesale associations noted in the above table are consumers' organizations, the farmers' organizations in most countries having their own society. Finland, however, has a wholesale, the Hankkija, which acts as a joint wholesale for the farmers' federation and for the consumers' stores connected with it; the same is true of

Ireland. The United States also has a district wholesale society of this type, the Cooperative Wholesale Society of America, located in St. Paul. This society maintains separate departments which buy for the consumers' societies affiliated with it and market the produce of the farmers' associations.

The following table shows the operations of the consumers' wholesale societies in the latest year for which figures can be obtained.

OPERATIONS OF CONSUMERS' COOPERATIVE WHOLESALE SOCIETIES IN SPECIFIED COUNTRIES.

Country.	Year.	Number of affiliated societies.	Amount of sales.	Net saving.	Reserve fund.	Share capital.
Austria.....	1915	(1)	\$5,872,444	\$21,684	\$96,357	(1)
Belgium.....	1910	108	2,865,113	500	4,825	\$18,723
Czecho-Slovakia.....	1916	(1)	1,081,562	13,446	18,306	40,600
Denmark.....	1918	1,604	19,843,537	(1)	(1)	(1)
Finland.....	1918	494	20,789,156	697,805	1,930,000	82,821
France.....	1919	1,088	15,172,345	153,449	19,632	231,272
Germany.....	1918	(1)	24,871,000	310,828	4,106,928	2,380,000
Hungary.....	1918	2,140	25,735,351	242,658	(1)	(1)
Italy.....	1918	(1)	1,737,000	(1)	(1)	(1)
Netherlands.....	1917	228	4,020,120	46,974	(1)	(1)
Norway.....	1918	(1)	1,585,986	(1)	(1)	(1)
Poland.....	1918	(1)	2,618,000	(1)	(1)	(1)
Sweden.....	1918	(1)	7,501,248	(1)	(1)	(1)
Switzerland.....	1918	767	25,035,911	203,320	482,500	259,045
United Kingdom:						
England.....	1918	1,200	317,139,877	781,258	(1)	15,552,054
Scotland.....	1918	261	97,539,415	2,666,808	(1)	3,023,007
Ireland ³	1918	511	4,449,159	36,630	(1)	126,407

¹ Not reported.

² The Belgian wholesale was reported to be doing a business of approximately \$675,500 a month in 1918-19.

³ Joint wholesale for farmers' and consumers' societies.

Production by Consumers' Societies.

The next step in the development of the consumers' movement, after the establishment of the wholesale society, is the production of the necessary supplies. This step has already been undertaken to a greater or less extent in nearly all the countries under discussion. In most cases the production is carried on by the wholesale society, though even where this is the case individual societies may undertake their own manufacture of certain articles, particularly things like bakery goods, where speed in delivery is essential. In Hungary the wholesale society has organized a separate company, the majority of whose shares are held by the wholesale, to carry on production.

In Denmark, Finland, France, Germany, Great Britain, Hungary, Netherlands, Russia, and Switzerland, the cooperative movement has entered the field of manufacture. Here Great Britain again leads, in the volume of production carried on, the value of goods produced by the manufacturing departments of the English and Scottish wholesale societies amounting in 1918 to \$115,112,658. Not even Great Britain, however, produces the variety of articles manufactured by the wholesale society of Denmark. Germany's wholesale also is a large manufacturer, turning out goods to the value of \$4,733,820 in 1918. The products of the manufacturing departments of the French wholesale society in 1919 were valued at \$1,312,667.

Soap, shoes, flour, preserves, and matches are the things most generally produced, though clothing, butter or oleomargarine, tobacco, candy, spices, and chemicals are each produced by the wholesale of three different countries. Cocoa or chocolate, tea, wines, bacon, sugar, sirup, cheese, wheat, brooms and brushes, rope, coal, motor trucks, bicycles, rubber, bricks, barrels, tar, cement, cart wheels, and hosiery are some of the other articles manufactured by consumers through their wholesale society.

In some cases the cooperatives have been forced into manufacture through the refusal of private wholesalers to sell them supplies. This was the cause of the entrance of the English wholesale society into the manufacture of soap, of the Swedish society into the production of margarine, of the Swiss society into the making of shoes, and of the Danish society into the production of cement.

Cooperation and the Government.

The basic principle of cooperation being that of self-help, it follows that the development of the movement should come from within the movement itself. England and Switzerland are typical examples of what can be done by the unaided effort of the cooperators themselves. In certain countries, however, the cooperative movement has been aided by the Government. In Hungary the Government has aided in the establishment of nearly all the societies now existing. Since 1913 the Austrian movement has had the advantage of a reduction in fees and taxes. A law was passed in Greece in 1914 whose purpose was the encouragement of the formation of cooperative societies. The Danish movement has also been favored, though inadvertently, by legislation. In that country the commercial law provided that, in order to restrict competition, no new retail shops should be opened within a certain radius of any town. This provision was, however, held not to apply to cooperative societies which confined their sales to members. Accordingly, cooperative stores could be opened as near to a town as was desired, and their convenient location led many persons to become members. The Government has also rendered assistance in educational and propaganda work, and through the work of its scientists. The cooperative movement of France has been aided from time to time by grants and loans of money, a policy which has had anything but a favorable effect in developing the self-reliance and strength of the movement of that country. Finnish cooperators have also been favored by State loans, but this has been done in only a few instances and is regarded unfavorably by the cooperators themselves.

In other countries, notably Germany and Russia, so far from being aided by the Government the movement has until recent years been regarded with hostility by it.

Until recently it could be said that, in general, cooperators, on their part, did not participate, as cooperators, in politics. It was felt that the cooperative movement was an economic and not a political one. This feeling has, in some countries, undergone a change, and in these cases the movement can now be said to have a definite political color. In Denmark and Switzerland the movement maintains an attitude of strict neutrality toward politics. It is said that it has been only its rigid exclusion of all political and religious questions that has

enabled the Irish cooperative movement to attain its present degree of success in agriculture. Up to 1917 the English cooperators, also, had kept out of politics. In that year, however, the first step was taken toward active participation. The movement did not ally itself with any existing political party; it formed its own, the Cooperative Party, although it gives its support in certain cases to Labor candidates. In Austria, Belgium, and the Netherlands the movement is divided politically. Of the two big federations in Austria, one maintains a neutral attitude while the other adheres to the Social-Democratic Party, which it aids from time to time with funds. In Belgium and the Netherlands there are three divisions in the movement—the Roman Catholics, the “neutrals,” and the Socialists. In the Socialist societies of the former country all members must belong to the Socialist Party. In the latter country the neutral and Socialist societies have amalgamated and it is not known what the stand of the new body will be with regard to politics. In Italy most of the societies are neutral, though in Socialist districts many display a leaning toward that political faith. The Italian People's Party is favored by the National Federation of Cooperative Societies, and is by it “intrusted with the political representation of the cooperative movement.” The Russian, movement as a whole is neutral. Until 1912 France had two federations, one neutral, the other Socialist. In that year, however, they amalgamated to form a national federation which is neutral politically.

Effects of the War.

The immediate effect of the war on the cooperative movement was practically the same in all the European countries. The declaration of war was followed by a food panic during which all people who had ready money rushed to lay in supplies of foodstuffs. Immediately prices went up in the private stores. The cooperative stores, however, continued sales at usual prices, both to members and nonmembers. The result was that they were soon overwhelmed with trade and their supplies disappeared so fast that it was only a question of time until they would have nothing left to supply the members of the societies. The next step was, therefore, the issuance of orders to sell only to members, which brought about such an unprecedented number of applications for membership that new members had to be refused for a time until conditions began to return to somewhere near the normal.

All this naturally resulted in the expansion of the movement with regard to membership. In Germany this expansion was aided by the removal of the Government prohibition against membership in a cooperative society on the part of State and municipal employees.

In all countries in which the movement has reached any considerable proportions the cooperative societies rendered great service as stabilizers of prices. They were also active in relief work, that of Hungary taking the form of support of military hospitals, while in France the societies opened milk-supply stations and undertook the organization of soup kitchens and workrooms for the unemployed and the carrying of supplies to the soldiers at the front.

As the war continued, the cooperative societies in nearly all countries experienced difficulty in securing supplies. Supplies of many things were rationed by the Governments, often on a prewar basis of membership, which meant inadequate supplies for the greatly expanded cooperative society. The wholesale societies were particularly affected, since under the system of Government issue of supplies the wholesale society was eliminated, the supplies being issued directly to the retail societies.

As would be expected the movement of Belgium and northern France suffered especially from the war, both from difficulty in obtaining supplies and from destruction of property. The movement of Belgium is, however, regaining its position. In northern France the cooperators often had the experience of seeing their store the only building spared in the bombardment of the town by the Germans, many of whom were cooperators.

In general, it may be said that the war had a stimulating effect on the movement, resulting in the establishment of new societies, an increase of membership, and a total increase of business.

As to a real increase of business per member, the same can not be said. Comparable figures showing, for prewar years, the average amount spent by each member of the society at his cooperative store are obtainable only for four countries. The following statement shows for these four countries the rate of increase in the amount so spent up to the outbreak of the war and during the war period:

PER CENT OF INCREASE IN AVERAGE AMOUNT OF SALES PER MEMBER DURING THE PREWAR AND WAR PERIODS, AND IN COST OF FOOD DURING THE WAR PERIOD.

Country.	Prewar period.		War period.		
	Years.	Per cent of increase in average amount of sales per member.	Years.	Per cent of increase in average amount of sales per member.	Per cent of increase in cost of food.
France.....	1910-1914	8.2	1914-1918	44.4	188
Germany.....	1910-1914	9.6	1914-1918	17.9	² 109
Great Britain.....	1910-1914	1.9	1914-1918	40.1	110
Switzerland.....	1910-1914	10.1	1914-1918	33.8	130

¹ Decrease.

² From July, 1914, to October, 1916.

From the data shown in the above table it can hardly be maintained that the war has resulted in a greater loyalty of the member to his society. In the years immediately preceding the war the average annual amount spent by each cooperator at his own store showed an apparent small increase, though to what extent this was offset by increasing prices is uncertain, since cost of living figures are not available for those years. The figures for the war period do show this relation, and it is evident that the cooperative societies have little cause for exultation, and those of Germany least of all. In that country, in spite of the fact that the cost of food increased 109 per cent, average sales to each cooperator decreased 7.9 per cent. This may, of course, be explainable on the ground of the inability of the societies to obtain supplies, and may not be due to the defection

of the members. Practically the same showing, though in less degree, is made by the other countries. France, with an increase of 188 per cent in cost of food, showed an increase in average sales per person of only 44.4 per cent; and Switzerland with food prices 130 per cent above their prewar level showed an increase in sales of only 33.8 per cent. In England the discrepancy, though great, does not reach the extremes shown in France and Switzerland.

The discrepancy between sales and increased prices would no doubt be reduced somewhat if figures for the increase in the prices of the total family budget could be obtained, since food prices probably advanced more than prices for other articles of family use. Even allowing for this reduction, however, it is evident that the cooperative movement, though in almost all countries greatly increased in extent during the war, has not become more intensified. The very increase in membership may itself have operated to bring down the average amount of expenditure per member. Some of this increase is no doubt ephemeral, and it may be that the new members, not imbued with the cooperative spirit and with the difficulty of obtaining supplies elsewhere removed, are reducing the amount of their patronage at the cooperative store.

One favorable effect the war has undoubtedly had. It has demonstrated the advantage of the large society and has hastened the amalgamation of small societies. This process, as stated before, is going on in many countries. Small societies operating in certain districts are amalgamating to form one big society. In Belgium the societies of whole Provinces are uniting in this way. The same process is going on in Austria, particularly in Vienna where three societies have amalgamated, forming a society of more than 400,000 members, and will soon be joined by a fourth. The German movement has been carrying out the amalgamation process for some time. In that country it is usual for one society in a district to absorb all the others, the membership of the district society sometimes including as many as 100,000 members. In France, also, since the establishment of the National Federation in 1912, more stress is being laid on the fusion of small societies. In the city of Paris the societies have amalgamated to form the Cooperative Union of Paris.

Extent of the Consumers' Cooperative Movement.

The present extent of the consumers' movement is indicated by the proportion of the population supplied by the cooperative societies. It is estimated by the French National Federation of Consumers' Cooperative Societies in its yearbook for 1920 that in France between one-eighth and one-tenth and in Finland about one-fourth of the population are cooperators. The German societies allow only one member per family. On the basis of the "standard family" of five, the German consumers' cooperative movement with its 2,900,000 members, supplies a little over 22 per cent of the population. The figure for the United Kingdom is not so easily arrived at, since many of the English societies also admit into membership both husband and wife. Mr. Percy Redfern, in his book, "Cooperation for All," estimated in 1915 that there were about 500,000 woman members of cooperative societies. Allowing the same rate of increase in membership among the women as among the total membership since 1915—26 per cent—there were in 1918 about 630,000 woman members. Taking this factor into consideration and again using the

"standard family" as a basis, it would indicate that 41 per cent of the population are connected with the consumers' cooperative movement. Allowing for increase in population, it is probably safe to say that between one-third and two-fifths of the population are supplied by the cooperative movement. Figures are not available for the consumers' branch of the Russian movement, but according to Mr. Zelenko, of the New York branch of the Moscow Narodny Bank, all branches of the movement combined reach 100,000,000 persons. Danish consumers' cooperative societies are estimated to supply nearly one-half of the Danish people.

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EMPLOYEES' REPRESENTATION.

Self-Government in the Building Industry in Great Britain.

TWO years ago the MONTHLY LABOR REVIEW gave an account of a proposed plan for industrial self-government in the building trades of Great Britain.¹ At that time the plan had been indorsed by the trade-unions of the industry, which were proposing a conference with the employers' federations, with a view to putting the industry as a whole on a new footing. A recent publication of the Garton Foundation gives an account of the progress of the movement.²

By the middle of 1917, employers and employees had agreed that the industry should be organized for combined rather than for opposed action, and had adopted the general principles of the plan originally proposed. These provided for a council or parliament, composed of representatives of employers and employees in equal numbers who should deal with questions affecting the industry as a whole. Under this heading would come, for instance, efforts to standardize wages throughout the country, the prevention of unemployment, the advancement of technical training and research, and the consideration of such questions as industrial control and status of labor, scientific management and increase of output, a closer association between commercial and æsthetic requirements, and the like. Eventually it was decided that this council should consist of 132 members, representing not only the federated employers and employees, but also the various associations of specialist craftsmen who had their own unions but did not come into the large federations. The council, as formed, was recognized by the Government as "the official standing consultative committee to the Government on all questions affecting the industry it represents," and a liaison officer was furnished to attend all meetings, although without a vote. Provision was made for setting up district and regional councils, under the central body, each being formed in much the same way, the works committee of each firm being the final unit of organization.

The report declares that in the two years during which the council has been in existence it has been distinguished for the absence of partisan alignment.

In all its two and a half years' experience, it has never had a "party" vote, and as one of its members has well said, "they were not on the council either as operatives or employers, but were all intent on lifting up the trade."

Its most important work has been carried on through committees which have been considering and reporting upon the various problems presented by the industrial situation, as it affects the building trades,

¹ MONTHLY LABOR REVIEW, October, 1918, pp. 54-61.

² Garton Foundation. The industrial council for the building industry. London, Harrison & Sons. 153 pp.

following the war. The report of the committee on education and apprenticeship concerning apprenticeship was briefly noted in a recent number of the REVIEW.³ The committee on safety and welfare has presented a report on the dangers of woodworking machinery and the best methods of guarding against them, which has been submitted to the various industrial councils concerned, with the idea that if they approve its findings it shall be handed to the Home Secretary to be used as the basis for legal regulations. But the most important work yet done is found in the report of the committee on scientific management, which, appointed in February, 1919, made an interim report on public service in the building industry in August, 1919, which has attracted considerable attention as being almost the first authoritative expression of the view that the end sought—a permanent improvement in production—"can not be fully attained except as the corollary of democratic control and organized public service."

The committee begins by giving some outline of the purpose it sought to accomplish:

We have glimpsed the possibility of the whole building industry of Great Britain being welded together into one great self-governing democracy of organized public service, uniting a full measure of free initiative and enterprise with all the best that applied science and research can render. * * *

We believe that the great task of our industrial council is to develop an entirely new system of industrial control by the members of the industry itself—the actual producers, whether by hand or brain—and to bring them into cooperation with the State as the central representative of the community whom they are organized to serve. Nothing short of this will produce the full development of the "team spirit" in industry, which is the key to the whole problem of production; nothing short of this is worthy of the high ideals for which our industrial council stands.

Taking up the subject of output, the committee finds that there are four main factors responsible for its limitation: The fear of unemployment, the disinclination of operatives to make unrestricted profit for private employers, the lack of interest in the industry evidenced by operatives, owing to their nonparticipation in control, and inefficiency, both managerial and operative.

Unemployment and Unemployment Pay.

TO REDUCE unemployment, the committee recommends the formation of local, regional, and central employment committees, to consist of an equal number of employers and employees, with one architect on each, appointed from a professional association. Their first duty would be to regularize the demand for building by two lines of effort:

1. At the approach of slack periods, by accelerating new building enterprises, both public and private, with the cooperation of architects and local authorities.
2. Conversely, at periods of congestion, by advising building owners to postpone the construction of such works as are not of an urgent character.

These methods would lessen but could not do away with unemployment, so as a second measure the report recommends that the Building Trades Parliament should approach the representatives of other industries and the public authorities with a view to investigating the possibility of "dovetailing" or seasonal interchange of labor. It is suggested that during slack seasons in their own trade

³ "Report on apprenticeship in the building industry, Great Britain," in MONTHLY LABOR REVIEW May, 1920, pp. 119-122.

building employees could be used to advantage in such work as afforestation, road making, the preparation of sites for housing schemes, and the demolition of unsanitary or condemned areas in preparation for improvements.

However, even with all possible measures to prevent unemployment in force, it is probable that it will continue to exist for some time at least, so the question of unemployment pay is taken up. The committee indorses unreservedly the principle that the industry should maintain its workers, whether or not it can furnish them continuous employment.

We further recommend that in cases of unavoidable unemployment, the maintenance of its unemployed members shall be undertaken by the industry through its employment committees, and that the necessary revenue should be raised by means of a fixed percentage on the wages bill, and paid weekly to the employment committee by each employer on the joint certificate of himself and a shop steward or other accredited trade-union representative.

* * * * *

While the collection of this revenue should be carried out by the employment committees, the payments should be made by periodical refund to the trade-unions, who would thus become an important integral part of the official machinery and would distribute the unemployment pay in accordance with the regulations prescribed by the industrial council and its committees.

The unemployment pay recommended is to be half a man's full pay, supplemented, in the case of a married man, by one-tenth of his full wage for his wife and for each of his children, up to four, under 16 years of age. Every worker should be entitled to one week's holiday during the summer, to be paid at the same rate and from the same fund as the unemployment pay.

The committee fully realized that these plans mean a considerable increase in the cost of carrying on the industry. It is proposed that this shall be met from two sources:

The workers by more concentrated effort must increase efficiency beyond the present standard; and management and capital must consent to a limitation being imposed upon their earnings, and should be prepared to adopt methods on their their side which will lead to greater output.

The proposal to limit the returns to capital and management is probably the most radical suggestion in the whole report, but the committee points out that not only is it necessary in order to secure funds for the unemployment program, but that its adoption will go far to increase the good will of the workers, and to end the more or less unconscious restrictions on output due to an unwillingness to work for unlimited profits for employers. Fixing the managerial salaries, however, seemed likely to be a task of much difficulty, especially since in the smaller businesses the employer is frequently both owner and manager, and often has no idea as to the division of his returns between these two rôles. After much discussion, the following plan was adopted.

We finally decided to recommend that the salaries of management might be ascertained by each "employer-manager" declaring what salary he has received, or what he regards as his due. These declarations should be periodically reviewed by the employment committee appointed under this scheme, the first review to ascertain data for possible revision in order to develop a recognized standard of remuneration.

The proper return to capital was an even more complex matter, for interest depends on security as well as on the price of money.

If interest is to be limited, the element of uncertainty should be removed, and security can be given only in return for a measure of control. "Supervision, limitation, guarantees form, therefore, the triple keystone of the plan we now propose." Briefly, the plan is that approved capital, invested in the building industry and registered annually after audit, shall receive a limited but guaranteed rate of interest. The rate has not yet been worked out, but it is recommended that the guaranty shall apply to all firms in the industry, except where failure to earn it is declared by the committee upon the advice of the auditors to be due to incompetent management. Of course this plan involves the regular employment of qualified accountants to audit each business, a plan which is regarded as likely to result in much incidental benefit, tending to "add greatly to the efficiency of every firm engaged therein." At least, it will tend to set up some standard of managerial efficiency based on observed results.

It is regarded as certain that after all legitimate expenses are met, the industry as a whole will show a surplus—the fund from which at present profits are drawn. Concerning this, the following recommendations are made:

1. That the amount of the surplus earnings of the industry shall be publicly declared every year and accompanied by a schedule of the services to which the money has been voted.

2. That it shall be held in trust by a national joint committee of the Building Trades Industrial Council, and shall be applied to the following common services, which will be developed under the control of the industry as a whole:

- (a) Guaranty of interest on approved capital.
- (b) Loans to firms in the industry for purposes of development.
- (c) Education and research in various directions for improvement of the industry, both independently and in cooperation with other industries.
- (d) Superannuation schemes for the whole registered personnel of the industry.
- (e) Replacement of approved capital lost through no fault of the management.
- (f) Such other purposes as may be thought desirable.

The committee recognized that the adoption of the plans proposed would make the building trades attractive both to workers and employers, and it therefore recommended that restrictions should be placed upon the admission of both. The employment committees, studying the whole development of the industry should periodically notify trade-unions of the number of new members who could be absorbed, and these should be admitted to registration "after a suitable trade test or evidence of previous service in the industry." The admission of new employers is to be regulated with equal care, "in order to insure that a high standard of efficiency is established and maintained in this connection."

Scientific Management.

TAKING up the question of scientific management, the committee recommends the adoption of an accurate system of cost accounting which shall render it possible to determine at any time the proportion of the cost of the various items of labor to the total cost, the proportion of establishment charges to total costs, the proportion of the other factors involved, and departmental costs. Other recommendations are for more recognition of exceptional ability on the part of operatives, and more opportunity for them to take positions of greater responsibility;

that care should be taken to provide a sufficiency of plant, and that material should be arranged with a view to affording continuity of employment for the ultimate handler of the material; that workshops should be specially built or adapted for the purpose in view, and should contain the best devices for the most efficient manipulation of the material; that the personal comfort of the operatives should be provided for by canteens, sanitary arrangements, and the like. Finally, it is strongly urged that works committees should be established, in which "management and labor may exchange their specialist knowledge and discuss questions of mutual interest."

Conclusion.

SUMMING up the report, the committee declares its belief that the measures recommended will secure the following results:

- Freedom and security for initiative and enterprise.
- Complete removal of the fear of unemployment.
- Salaries to management commensurate with ability.
- Hire of capital at the market rate of good securities.
- Provision of common services controlled by the whole industry, and financed from its surplus earnings.

The report was signed by all of the employee members and three of the employer members of the committee. Five employer members presented a statement that while agreeing with some of the proposals contained in the report they did not see their way to sign it without important reservations. The report naturally gave rise to much discussion in the industrial council, the disagreement centering around the question of whether the motive of service or of private gain furnished the strongest incentive. Finally, the following resolution, proposed by one of the employer members who had not signed the report, was unanimously adopted:

That the council receive the report and ask the committee to further examine the possible effects of the application of the principles it sets forth, in the light of the criticisms which the present discussion has evoked.

The report is still (August, 1920) under discussion, and has apparently given rise to serious disagreement in the council.

Meanwhile, in various sections of the country, efforts have been made to put its principles into effect. One of the first of these was at Manchester, where the local section set up a building guild committee and proposed to the city council to cooperate in building 2,000 houses to relieve the local housing shortage. Its proposal was to do this at 10 per cent above actual cost, this margin being held necessary for meeting overhead charges, for the purchase of plant, for building up reserves, and for pay for unemployment due to sickness, accidents, shortage of work or stress of weather.⁴

For some reason the proposal met with much opposition. The first objection was that the committee lacked financial guaranties. This was met by pointing out that since the city council was to advance raw materials and wages only as needed, the work done would always furnish a full protection for the advances made. Not long afterward, an arrangement was made between the cooperative wholesale societies and the building councils whereby the former were

⁴ Ways and Means (London), February 21, 1920. Supplement, p. IV.

to furnish raw materials whenever the building councils might need them, in any quantities desired. This did away with the necessity for the municipal council to provide the raw material, and left it responsible only for meeting wage bills which would be credited against the purchase value of the houses the municipality was to take over. A series of annoying delays and futile objections followed, until at present it appears doubtful whether, in spite of the pressing need for houses, the city will ever avail itself of the proffer. An attempt of a similar character of the local building council at Irlam to undertake house building for the urban district council seems to have met with a similar fate.

Meanwhile, in London, undeterred by the obstacles thrown in the way of the local branches, the district council of building trade operations is planning to set up a so-called building guild, and to carry on building operations under the plan outlined in the report to the national council. A prospectus announcing their intention was issued in May, 1920, but as yet no information has been received as to the success of the movement.

EMPLOYMENT AND UNEMPLOYMENT.

Employment in Selected Industries in August, 1920.

THE Bureau of Labor Statistics received and tabulated reports concerning the volume of employment in August, 1920, from representative establishments in 13 manufacturing industries and in bituminous coal mining. Belated returns were received and incorporated in the figures in these tables after the press notices relating to the same were put out. Hence, the figures will differ from those of the press notices. The figures for August, 1920, when compared with those from identical establishments for August, 1919, show increases in the number of people employed in 6 industries and decreases in 8. The largest increase, 20.8 per cent, appears in cigar manufacturing, while an increase of 23.6 per cent is shown in both men's ready-made clothing and car building and repairing. Respective decreases of 52.3 per cent and 15.8 per cent are shown in woolen and leather.

Increases in the amount of pay roll for August, 1920, as compared with August, 1919, are reported for 11 industries, while decreases are reported for 3 industries. The largest increases, 96.4 per cent, 62.9 per cent, and 49.3 per cent, appear in car building and repairing, cigars, and paper making. Woolen shows a decrease of 42.4 per cent and leather a decrease of 8.5 per cent.

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS IN AUGUST, 1919, AND 1920.

Industry.	Estab- lish- ments report- ing for August, both years.	Period of pay roll.	Number on pay roll.			Amount of pay roll.		
			August, 1919.	August, 1920.	Per cent of in- crease (+) or de- crease (-).	August, 1919.	August, 1920.	Per cent of in- crease (+) or de- crease (-).
Iron and steel.....	98	½ mo..	156,918	168,337	+ 7.3	\$10,580,298	\$12,495,567	+18.1
Automobile manufacturing.	45	1 wk..	140,714	136,289	- 3.1	4,050,488	4,849,128	+19.7
Car building and repairing..	53	½ mo..	60,598	74,877	+23.6	2,825,357	5,548,778	+96.4
Cotton manufacturing.....	56	1 wk..	57,017	57,763	+ 1.3	1,025,696	1,309,439	+33.5
Cotton finishing.....	17	.do....	12,851	12,504	- 2.7	278,662	526,712	+17.2
Hosiery and underwear.....	61	.do....	29,657	27,233	- 8.2	500,234	513,627	+ 2.7
Woolen.....	52	.do....	49,761	23,734	-52.3	1,080,546	622,829	-42.4
Silk.....	45	2 wks.	15,800	11,489	- 8.3	573,847	599,980	+ 3.7
Men's ready-made clothing.	41	1 wk..	24,660	30,484	+23.6	626,365	913,807	+45.9
Leather manufacturing.....	33	.do....	18,220	15,333	-15.8	456,793	417,848	- 8.5
Boots and shoes.....	74	.do....	61,478	55,097	-10.4	1,362,055	1,309,316	- 3.9
Paper making.....	54	.do....	27,918	32,262	+15.6	650,966	971,862	+49.3
Cigar manufacturing.....	43	.do....	10,582	13,630	+28.3	172,219	280,565	+62.9
Coal mining (bituminous)..	78	½ mo..	21,997	20,639	- 6.2	1,202,165	1,510,272	+25.6

In comparing the reports of the same industries for August, 1920, with those for July, 1920, 2 industries show an increase in the number of persons on the pay roll and 12 a decrease. Respective increases

of 9.8 per cent and 1.4 per cent are shown in car building and repairing and paper making. Woolen shows a decrease of 5.9 per cent and leather manufacturing a decrease of 5.2 per cent. A decrease of 5 per cent is reported for both automobiles and hosiery and underwear.

When compared with July, 1920, the pay rolls in August, 1920, show increases in 6 industries and decreases in 8. The greatest increase, 30.2 per cent, appears in car building and repairing, while the smallest increase, 0.7 per cent, is shown in coal. A decrease of 7.5 per cent took place in men's ready-made clothing. Respective decreases of 5.9, 5.0, and 4.8 per cent are shown in woolen, hosiery and underwear, and leather.

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS IN JULY AND AUGUST, 1920.

Industry.	Estab- lish- ments report- ing for July and August.	Period of pay roll.	Number on pay roll.			Amount of pay roll.		
			July, 1920.	August, 1920.	Per cent of in- crease (+) or de- crease (-).	July, 1920.	August, 1920.	Per cent of in- crease (+) or de- crease (-).
Iron and steel.....	99	½ mo..	170,021	168,522	- 0.9	\$12,045,900	\$12,470,838	3.5
Automobile manufacturing.	48	1 wk..	142,181	135,115	- 5.0	4,752,516	4,812,817	+ 1.3
Car building and repairing..	54	½ mo..	68,604	75,354	+ 9.8	4,288,042	5,581,322	+30.2
Cotton manufacturing.....	51	1 wk..	55,560	54,409	- 2.1	1,313,397	1,293,291	- 1.5
Cotton finishing.....	16	do...	12,125	12,046	- .7	325,379	314,282	- 3.4
Hosiery and underwear....	60	do...	29,189	27,722	- 5.0	551,073	523,659	- 5.0
Woolen.....	50	do...	19,407	18,259	- 5.9	520,303	489,397	- 5.9
Silk.....	46	2 wks.	15,337	15,062	- 1.8	614,825	625,069	+ 1.7
Men's ready-made clothing.	41	1 wk..	31,049	29,605	- 4.7	960,355	888,599	- 7.5
Leather manufacturing.....	34	do...	16,370	15,524	- 5.2	443,133	421,881	- 4.8
Boots and shoes.....	74	do...	55,716	55,309	- .7	1,347,675	1,314,525	- 2.5
Paper making.....	55	do...	32,719	33,186	+ 1.4	941,195	1,004,329	+ 6.7
Cigar manufacturing.....	48	do...	14,769	14,744	- .2	311,678	311,041	- .2
Coal mining (bituminous)...	86	½ mo..	23,882	23,740	- .6	1,744,872	1,756,328	+ .7

In addition to the data presented in the above tables as to the number of employees on the pay roll, 89 plants in the iron and steel industry reported 132,791 employees as actually working on the last full day of the pay period reported for August, 1920, as against 126,045 for the reported pay-roll period in August, 1919—an increase of 5.4 per cent. Figures given by 91 establishments in the iron and steel industry for August and July, 1920, show that 136,155 employees were actually working on the last full day of the pay period reported for in August, 1920, as against 140,599 for the period in July, 1920—a decrease of 3.2 per cent.

Changes in Wage Rates.

IN 11 of the 14 industries there were establishments reporting increases in wage rates during the period July 15 to August 15, 1920, while a firm in one of these industries reported a decrease. A number of firms did not answer the inquiry relating to wage changes, but in such cases it is probably safe to assume that no changes were made.

Iron and steel.—An increase of 15.6 per cent was given by one mill to 6.8 per cent of the men, while 63 per cent of the men in another mill were given an increase of 15 per cent. One establishment reported two increases granted during this period; one, an increase of 9.9 per cent, affecting approximately 6 per cent of the force, and the other, an increase of \$2.38 per day, affecting 2.4 per cent of the men. One firm granted an increase of 8.2 per cent to 30 per cent of the employees and another firm gave a 5.6 per cent increase to 87 per cent of the employees. Four plants reported an increase of 6 per cent, affecting approximately 71 per cent of the force in the first plant, 61 per cent in the second, 54 per cent in the third, and 51 per cent in the fourth. One mill gave a 5 per cent increase to 50 per cent of the men.

Automobiles.—An increase of about 10 per cent was granted by one establishment, but the percentage of employees affected was not stated. One concern gave a 3 per cent increase to 2 per cent of the men. A decrease of 10 per cent, affecting 65 per cent of the force, was reported by one firm.

Car building and repairing.—A large proportion of car-building employees were affected by the decision handed down by the United States Railroad Labor Board on July 20, 1920, and made retroactive to May 1, 1920. The exact effect of this decision can not be measured, but it is doubtless the greatest factor in the changes in wage rates noted by this report, which shows an increase of approximately 20 per cent in the general wage level.

Cotton manufacturing.—All of the employees in one firm were given an increase of 15 per cent.

Cotton finishing.—Twenty per cent of the force in one establishment received an increase of 15 per cent.

Men's ready-made clothing.—A general increase, ranging from 5 to 10 per cent, was given to all pieceworkers in one factory.

Leather.—All the employees in one tannery received an increase of about 9 per cent. Another concern granted an increase of 5 per cent to 4 per cent of the force. One establishment gave a bonus for full-time service.

Boots and shoes.—One factory gave an increase of 11.4 per cent to 1.4 per cent of the employees.

Paper making.—The entire force in one mill was granted an increase of 10 per cent, while an increase of 35 cents a day was given to all employees in another mill. One establishment reported an increase of 5.5 per cent to about 6 per cent of the force, and another establishment reported a 6.1 per cent increase to 8.6 per cent of the force.

Cigars.—Respective increases of approximately 8 per cent and 10 per cent were granted to all employees in two concerns.

Coal mining.—In one mine the entire force received an increase as follows: Eighty-five cents per day to men; 50 cents per day to boys; 17 cents per ton to contract workers; and 14 per cent to yardage men. In another mine 70 per cent of the men received increases. All the day men were awarded an increase of 85 cents per day. The amount received by the other workers was not stated. For both mines the increase received was in lieu of a 14 per cent increase heretofore paid. Respective increases of 10 per cent and 20 per cent were granted to all employees in two mines.

Report of Employment Exchanges in the United Kingdom.

AS reported by the British Labor Gazette for August, 1920, the operations of the employment exchanges for the five weeks ending July 9, 1920, are summarized as follows: The average daily number of applications from workpeople, of vacancies notified, and of vacancies filled during the five weeks was 9,887, 4,179, and 2,933, respectively.

Compared with the previous month the daily average of applications from workpeople showed a decrease of 6.7 per cent, while the daily average of vacancies notified and vacancies filled showed decreases of 12.1 per cent and 9.7 per cent, respectively.

The average daily number of applications from adults was 8,369—5,693 men and 2,676 women. There were 3,299 average daily vacancies reported—1,760 men and 1,539 women. The average number of positions filled daily was 2,301—1,302 men and 999 women; which when compared with the previous month shows a decline of 12 per cent among men and 7.3 per cent among women.

Among the occupational groups in which positions were filled by men, building and construction of works, with 17.7 per cent of the total number of men; engineering and iron founding, with 15.7 per cent; and general laborers, with 17.6 per cent, were the largest. Sixty-five per cent of the women were placed in domestic service and 4.8 per cent in the dressmaking trades.

As regards juveniles, 22,967 applications were received from boys, 13,854 vacancies were notified, and 9,830, or 71 per cent, were filled.

The number of applications received from girls was 22,561, and the number of vacancies notified for girls 12,527. Of the vacancies notified, 9,085, or 72.5 per cent, were filled.

Of the total vacancies filled for juveniles, 12 per cent were filled by applicants who thus obtained their first situation since leaving school.

The following table shows, for men and women, the number of applications from workpeople, vacancies notified, and vacancies filled during the five weeks ending July 9, 1920.

APPLICATIONS FROM WORKPEOPLE, VACANCIES NOTIFIED, AND VACANCIES FILLED DURING FIVE WEEKS ENDING JULY 9, 1920.

Group of trades. ¹	Applications from workpeople.		Vacancies notified.		Vacancies filled.	
	Men.	Women.	Men.	Women.	Men.	Women.
Building.....	19,008	.....	11,507	.....	6,892	.....
Construction of works.....	2,634	.....	2,520	.....	2,035	.....
Engineering and iron founding.....	34,468	2,019	7,977	714	6,160	623
Shipbuilding.....	12,003	.....	2,444	.....	2,202	.....
Construction of vehicles.....	2,097	.....	1,121	.....	645	.....
Miscellaneous metal trades.....	4,056	1,512	1,068	693	777	575
Domestic service.....	4,430	40,388	1,753	32,061	1,212	19,492
Commercial and clerical.....	6,776	4,568	2,027	1,640	1,565	1,127
Conveyance of men, goods, and messages.....	20,795	1,534	3,665	713	3,039	642
Agriculture.....	4,071	2,258	3,028	1,713	2,376	1,160
Textiles.....	3,590	3,759	869	1,760	607	1,157
Dress (including boots and shoes).....	3,496	5,463	513	1,788	376	1,445
Food, tobacco, drink, and lodging.....	2,150	2,700	610	1,653	494	1,441
General laborers.....	36,213	8,620	7,534	413	6,887	321
All other trades.....	15,009	7,456	6,178	3,034	3,826	2,015
Total.....	170,796	80,277	52,814	46,182	39,073	29,998

¹ Casual occupations (dock laborers and coal laborers) are excluded from this table and from all the figures above. The number of casual jobs found for work people in these occupations during the period was 4,524.

Resettlement and Unemployment in the United Kingdom.¹

THE total number of unemployed people in the United Kingdom on out-of-work donation and unemployment benefit on August 13, 1920, was 213,587. Of this number 135,439 were demobilized members of His Majesty's forces or of the merchant services, and the remaining 78,148 (70 per cent men) were civilians belonging to the insured industries and therefore drawing unemployment insurance. Of the ex-service people, 36,108 also belonged to the insured industries and would have been eligible to unemployment insurance had they not been drawing the greater out-of-work donations, making a total of 114,256 workpeople unemployed out of a total of 3,818,834 in the insured industries. Unemployment in these industries as indicated by these figures was, therefore, 2.99 per cent. Two-thirds of this unemployment was in the three great industries—engineering and iron founding, building and works of construction, and ship-building. The remaining 99,331 unemployed ex-service workers, who belonged to the uninsured industries, represented 0.70 per cent only of the 14,100,000 in those industries.

On the same date, August 13, 1920, the employment exchange live registers comprised 229,659 men, 50,243 women, and 34,887 juveniles, making a total of 314,789 who were seeking employment through the exchanges, as compared with the total of 1,242,673 who were on the employment exchange live register on May 2, 1919, the time of most acute unemployment since the armistice.

Under the national scheme for the employment of disabled ex-service men 177,949 disabled men had been placed with the enrolled firms up to August 6, 1920, while there were still 6,599 vacancies, and 15,214 disabled men were on the employment exchange "disabled" live register.

The appointments department, which is engaged in placing ex-service men and civilians of the type, generally speaking, above the ordinary clerk, had up to August 13 succeeded in placing 38,260 men, and had on its live register 7,069 officers, 6,767 other ranks, and 2,001 civilians.

The out-of-work donation scheme inaugurated with the beginning of demobilization has been continued to the present time, by extensions and special extensions,² for the benefit of ex-service men. Civilian donations ceased one year after the armistice, and donations to ex-members of His Majesty's forces were to have ceased on July 31, 1920, but they have been further extended until November 8, 1920, at which time the new unemployment insurance act becomes operative. The general principles and conditions of the new extension scheme are similar to those in force under the expiring scheme, the rate being 20 shillings (\$4.87 par) per week.

As recorded in the MONTHLY LABOR REVIEW for September (pp. 165 to 169), the unemployment insurance act will extend compulsory insurance to substantially all workers except outworkers and persons employed in agriculture and private domestic service, so that nearly

¹ Compiled from the Ministry of Labor's weekly report on demobilization and resettlement for Aug. 25, 1920.

² See MONTHLY LABOR REVIEW for May (pp. 85-100) and September (pp. 135-161), 1919, and April (pp. 155-174), 1920.

all ex-service men who perchance have not found employment when this further extension expires will still be entitled to the 15 shillings (\$3.65 par) per week unemployment insurance.

Since the armistice approximately 4,100,000 men other than commissioned officers have been demobilized from His Majesty's forces. There are, however, roughly speaking, at present (end of August, 1920), only 150,000 unemployed ex-service men all told, and a stirring appeal to the country has been made by Field Marshal Lord Haig to find employment for them.

A determined effort is being made to "pay the nation's debt of honor" by placing every one of these men in a remunerative position during the early autumn. Those having this matter in hand have taken the stand that even the class considered "unemployable," which naturally makes up a large portion of these last ex-service men, should be given an opportunity to help themselves.

Volume of Employment in the United Kingdom in August, 1920.

THE following figures as to the condition of employment in Great Britain and Ireland in July, 1920, as compared with June, 1920, and July, 1919, have been compiled from figures appearing in the British Labor Gazette for August, 1920. Similar information for April was published in the July MONTHLY LABOR REVIEW.

In July, 1920, as compared with June, 1920, the largest increases in the number of persons employed are 2 per cent in quarrying, 1.8 per cent in the brick trade, and 1.6 per cent in the corset trade. A decrease of 7 per cent is shown in dressmaking and millinery; while a decrease of 3.9 per cent appears in wholesale mantle, costume, blouses, etc., manufacturing in London, and a decrease of 3.1 per cent in the same trade in Glasgow.

Comparing July, 1920, with June, 1920, the earnings of employees show respective increases of 10 per cent, 4.4 per cent, and 3.7 per cent in the cement, carpet, and worsted trades. Decreases of 6.8 per cent, 6.6 per cent, and 5.4 per cent appear in the bookbinding, lace, and boot and shoe trades.

The number of persons employed during July, 1920, in the cement trade shows an increase of 33.4 per cent over the July, 1919, number; and the number employed in the paper trade shows a similar increase of 29 per cent. The tailoring trades show a decrease of 5.1 per cent and the leather trades a decrease of 4.3 per cent.

The aggregate earnings of employees in July, 1920, as compared with July, 1919, show an increase in all trades. The largest increases, 90.6, 86.2, 71.2, and 69.3 per cent, are shown in cement, hosiery, paper, and brick trades; while the smallest increase, 0.7 per cent, appears in the tailoring trades.

VOLUME OF EMPLOYMENT IN THE UNITED KINGDOM (GREAT BRITAIN AND IRELAND) IN JULY, 1920, AS COMPARED WITH JUNE, 1920, AND JULY, 1919.

{Compiled from figures in the Labor Gazette, London, August, 1920.]

Industry, and basis of comparison.	Per cent of increase (+) or decrease (-) in July, 1920, as compared with—		Industry, and basis of comparison.	Per cent of increase (+) or decrease (-) in July, 1920, as compared with—	
	June, 1920.	July, 1919.		June, 1920.	July, 1919.
Coal mining:			Shirt and collar trade:		
Average number of days worked.....	-1.4	+20.8	Number of employees.....	- 1.2	+ 7.9
Number of employees.....	+ .3	(¹)	Earnings of employees.....	- 1.4	+27.0
Iron mining:			Other clothing trades:		
Average number of days worked.....	-7.6	+17.9	Dressmaking and millinery—		
Number of employees.....	- .1	+ 3.8	Number of employees.....	- 7.0	+ 4.6
Quarrying:			Wholesale mantle, costume, blouses, etc.—Number of employees—		
Average number of days worked.....	-4.9	+ .9	London.....	- 3.9	- 3.4
Number of employees.....	+2.0	+11.5	Manchester.....	- .5	+ 8.1
Pig iron: Number of furnaces in blast.....	(²)	+17.3	Glasgow.....	- 3.1	- 3.7
Iron and steel works:			Corset trade—Number of employees.....	+ 1.6	+19.8
Number of employees.....	+ .2	+24.4	Woodworking and furnishing: ³		
Number of shifts worked.....	+ .4	+28.6	Number of employees.....	- .5	- .5
Tin plate, steel, and galvanized sheet trades: Number of mills in operation.....	(²)	+14.5	Brick trade:		
Cotton trade:			Number of employees.....	+ 1.8	+23.6
Number of employees.....	- .5	+11.7	Earnings of employees.....	+ 1.9	+69.3
Earnings of employees.....	- .3	+53.7	Cement trade:		
Woolen trade:			Number of employees.....	+ .9	+33.4
Number of employees.....	+ 1.1	+ 4.2	Earnings of employees.....	+10.0	+90.6
Earnings of employees.....	+1.7	+34.9	Paper, printing, and bookbinding trades:		
Worsted trade:			Paper trades—		
Number of employees.....	(²)	+ 6.0	Number of employees reported by trade-unions.....	(⁴)	(¹)
Earnings of employees.....	+3.7	+35.0	Number of employees reported by employers.....	+ 1.2	+29.0
Hosiery trade:			Earnings of employees reported by employers..	+ 1.2	+71.2
Number of employees.....	+ .2	+21.3	Printing trades—		
Earnings of employees.....	-1.2	+86.2	Number of employees reported by trade-unions ³	- .3	(²)
Jute trade:			Number of employees reported by employers.....	- .8	+ 9.2
Number of employees.....	- .7	+ .6	Earnings of employees reported by employers.....	- 3.7	+33.8
Earnings of employees.....	+1.0	+21.4	Bookbinding trades—		
Linen trade:			Number of employees reported by trade-unions ³	(²)	+ 2.5
Number of employees.....	- .9	+ 4.8	Number of employees reported by employers.....	- 1.8	+16.3
Earnings of employees.....	-2.6	+45.3	Earnings of employees reported by employers.....	- 6.8	+47.5
Silk trade:			Pottery trade:		
Number of employees.....	-1.2	+ 6.6	Number of employees.....	+ .5	+13.8
Earnings of employees.....	-1.5	+45.3	Earnings of employees.....	+ 1.3	+51.0
Carpet trade:			Glass trades:		
Number of employees.....	+ .1	+24.9	Number of employees.....	+ .1	+21.4
Earnings of employees.....	+4.4	+46.7	Earnings of employees.....	+ 1.8	+59.0
Lace trade:			Food preparation trades:		
Number of employees.....	-1.9	+15.7	Number of employees.....	- 1.3	- .6
Earnings of employees.....	-6.6	+39.6	Earnings of employees.....	- .6	+22.5
Bleaching, printing, dyeing, and finishing:			Dock and riverside labor: Number of employees.....	- 2.1	- 4.6
Number of employees.....	- .5	+15.0	Seamen: Number of employees.....	+ .3	+24.2
Earnings of employees.....	-1.5	+44.1			
Boot and shoe trade:					
Number of employees.....	-1.8	+ 1.6			
Earnings of employees.....	-5.4	+17.7			
Leather trades: Number of employees ³	-1.5	- 4.3			
Tailoring trades:					
Number of employees.....	-1.7	- 5.1			
Earnings of employees.....	-4.4	+ .7			

¹ Owing to incomplete returns, comparative figures can not be given.² No change.³ Based on unemployment.⁴ No report.

Large Increase in Number of British Government Employees in 1920 Compared With 1914.

ACCORDING to a report from the United States commercial attaché at London, published in Commerce Reports (Washington) for August 14, 1920 (p. 794), the number of British Government employees on June 1, 1920, had increased by 90,965 as compared with the prewar total for the year 1914. The War Office staff rose from 1,600 to 6,764; the Admiralty now has a staff of 12,825 as compared with the prewar total of 4,400; the Labor Ministry now has 17,324 as compared with 4,400; and the Ministry of Munitions shows an increase from 1,200 to the present total of 9,873. While the present number of Government employees is approximately 368,910, this is a decrease of 49,115 since the signing of the armistice in November, 1918.

Unemployment and Unemployment Relief in Germany.¹

ACCORDING to the German Minister of Labor, Dr. Brauns, the number of unemployed, which had been steadily diminishing since the summer of 1919, and on June 1 had fallen to 270,000, has shown an upward tendency since that date. The principal effect of the present industrial crisis in Germany is an extensive curtailment of working hours, but should it continue the number of industrial establishments actually closed down is likely to increase. With a view of utilizing fully the available opportunities for work, the central labor exchange has been created and a bill relating to the labor-exchange system is to be submitted to the Reichstag as soon as possible. Special efforts are being directed to the transfer of workers to such industries as are able to absorb them. Thus, the number employed in the coal-mining industry in 1919 was 666,855, as against 541,070 in 1917 and 590,214 in 1914; the number employed in lignite mining is more than double that of 1914. Concurrently, efforts are being made to provide new work. In 1919 not fewer than 830,000 were, on an average, employed in emergency work, for which subsidies totaling 470,000,000 marks (\$111,860,000 par) were paid by the State. The total cost of this emergency work was 3,000,000,000 marks (\$714,000,000 par); i. e., about treble the amount paid in unemployment relief for the same period.

Emergency work has recently been placed on a new basis, the fundamental idea being to relieve unemployment by providing productive work of economic value. The scheme has just started and its application to private industries is under consideration. Grants of 17,000,000 marks (\$4,046,000 par) have been made up to the present for 271 operations, on which more than 16,000 unemployed will be engaged for about four months.

Unemployment relief in its present form is, however, only a temporary expedient and is to be replaced as soon as possible by a system of insurance against unemployment, a bill for which has already been drafted. Since November, 1918, the Central Government has

¹ Frankfurter Zeitung. Frankfort-on-the-Main, July 10 and 14, 1920, and Deutsche Allgemeine Zeitung, Berlin, July 21, 1920.

paid out more than 700,000,000 marks (\$166,600,000 par) in unemployment relief, while a further 700,000,000 marks has been raised by the provincial and State governments and by the communes. The distress among the unemployed is, however, still very great, owing to the ever increasing cost of living. The payment of unemployment benefits is to be discontinued beginning with August 1, but the communes may, with the sanction of the Government, extend the period in exceptional cases.

In conclusion, Dr. Brauns points out that every system of unemployment relief is a very inadequate instrument for the adjustment of the effects of unemployment, and the working classes are very justly demanding not relief, but work. No factory or works must be closed down without urgent economic reasons. Overtime must not be resorted to unless the same results can not be attained by employing more labor. In cases, however, in which overtime is intended to provide work for a larger number, it becomes a moral duty.

Many of the works, especially in the metal industry, are running short time, so as to obviate the necessity of dismissing more men. The furniture industry is at a complete standstill. In order to encourage buyers efforts are being made to start the production of cheap standard furniture on a cooperative basis, the profits in the undertaking being restricted to a minimum. Unskilled workers have found employment in the chemical industry, whose capacity for absorbing more labor depends upon the coal supply. In the commercial and technical branches the supply of labor is considerably in excess of the demand.

The Unemployment Insurance Bill.

THE next issue of Schmoller's *Jahrbuch* will contain an article by Prof. Dr. Kumpmann (Düsseldorf) on unemployment insurance in which the author will also discuss the German unemployment insurance bill which failed of enactment by the last National Assembly. The bill, which is still before the Reichsrat, will perhaps undergo thorough amendments before it is submitted to the present Reichstag. Prof. Kumpmann points out what he considers defects in the bill which seem to make it questionable whether the proposed unemployment insurance will have beneficial results. The present bill, in his opinion, has been drafted with too much consideration for legal form, while the rich material available from practical experience with unemployment insurance systems in force in other countries, which material moreover has been thoroughly collected and compiled by social scientists, has not been used. In Prof. Kumpmann's opinion the German bill should above all have followed closely the British model. The chief characteristic of the German bill is the close coordination of the proposed unemployment insurance with the sick funds. To be sure, the German sickness insurance possesses a well developed and tried organization, but whether this organization is suited for administering unemployment insurance seems more than doubtful. As in the case of sick workers drawing sick benefits so also in that of the insured unemployed there will be necessary a control which will make impossible any exploitation of

the insurance by persons unwilling to work. However, in the case of unemployed persons this control must be exercised in a different manner than in that of sick persons. It is a basic principle of unemployment insurance that the period during which the insured person draws unemployment benefit shall be shortened as much as possible by his resumption of normal employment. It is therefore obvious that an unemployment insurance system can not operate successfully for any length of time without the closest coordination with the organization of employment exchanges. The objection may be raised that the German employment exchanges are not sufficiently organized to risk this experiment. Germany is, however, taking steps at present for the unification and improvement of its system of labor exchanges and the pending bill on labor exchanges is a further step in that direction. The coordination of unemployment insurance with the system of labor exchanges would, moreover, be apt to exercise a beneficent influence upon the development of the latter. In addition, it should be kept in mind that only through such coordination will a proper distribution of the risk be made possible upon which must be based the determination of the insurance contributions and benefits.

INDUSTRIAL MEDICINE.

Ideals in the Organization of an Industrial Medical Service.

THE following interesting article on the above subject, written by Dr. Emery R. Hayhurst, professor of hygiene in the Ohio State University, Columbus, Ohio, is here reproduced from the American Journal of Public Health (Chicago) for September, 1920, page 715:

A common observation in regard to industrial medical services as installed in various establishments is the fact that so many of them are one-sided, that is, are promoted and managed almost entirely by the employer. It is well known that organized labor has shown antipathy to welfare work in general, including even medical and health phases thereof. It is also plain to be seen that cooperation between employers and employees is essential for the success of this service.

One serious factor appears to be the fact that there is no established procedure for taking care of workers who, through physical examinations and other forms of inquiry, are found to be misplaced in their employment relations and who are very apt to suffer if any changes are made. It would appear that there are one or two solutions for this situation; for instance, the institution of compulsory health and disability insurance or the adoption of group insurance to cover the health and disability of the workers in a given establishment.

Industrial medical service can not achieve its ideals until an inventory is made of each worker's capabilities and until he is placed in accordance with the findings of the inventory. Refinements are not necessary; rough groupings ought to suffice. A great extension of possibilities in placing him intelligently can be had through an analysis of the jobs at hand, including the checking up of their health hazards. A reduction of these hazards naturally extends the field placements.

An industrial medical service is not complete which devotes itself almost exclusively to reconstruction and palliative measures. It must give much attention to such preventive measures as industrial hygiene and housing hygiene, as well as physical examinations.

Hence, it appears that the medical department of an establishment should be managed by a committee representative of both employer and employees and with at least one official representative of the local board of health. The make-up of this committee should be such that proportionate representation is had, with the further provision that in case of a divided opinion either the local health representative should have a deciding vote or, if of sufficient importance, a higher committee should have such jurisdiction, such, for instance, as one composed of a representative of each of the following: The local or State manufacturers' association, workmen's organization, the chamber of commerce, and the State department of health.

The cost of an industrial medical service should also be divided. It is not good moral practice to bestow service free of charge where those being served have some personal responsibilities. The industry may justly pay for the equipment necessary, considering it a part of the plant, but maintenance should be charged partly to employees and partly to the direct cost of production. It is obvious that an industrial medical service can not be all capitalistic in either management or maintenance and be certain of more than the passing interest or lukewarm cooperation of those being served, yet from the nature of industrial relations capital must be the natural leader in its management as in other features of business.

WORKMEN'S COMPENSATION.

Workmen's Compensation Legislation of 1920.

New Legislation.

Georgia.

COMPARATIVELY few legislatures met in regular session this year, while those which met in special session took little action on the subject of workmen's compensation. Some important legislation was enacted, however, the first place naturally falling to the Georgia statute which is the first enactment of that State in this field. The law is of fairly comprehensive coverage, including industries generally, with the exception of transportation in which steam power is used. Agriculture and domestic service are also excluded. A numerical standard requires the employment of at least ten persons to bring the establishment presumptively under the law, although small establishments may make positive election. The law applies generally in the absence of election to the contrary.

Employees of the State are excluded, but the law applies to employees of municipal corporations and political subdivisions of the State; in private employment all employees in the establishments covered are within the act except those whose employment is not in the usual course of the trade, business or occupation of the employer.

Where the law is rejected by the employer, there is the usual abrogation of the common-law defenses. If only the employee rejects the law which the employer has accepted, the defenses remain. A waiting time of 14 days is prescribed, but if the disability extends beyond 4 weeks, payments are from the date of the injury.

Benefits are paid on a basis of 50 per cent of the average weekly wages, with a maximum in case of death of \$10 per week and a minimum of \$5, the total not to exceed \$4,000. Payments are limited to 300 weeks from the date of the injury, and they cease on the remarriage of a widow or widower or on a child's reaching the age of 18, unless incapacitated for earning. Burial expenses not to exceed \$100 are made a separate allowance.

In cases of disability necessary medical attendance for not more than 30 days is to be furnished, the cost not to exceed \$100. If disability is total the minimum weekly benefit is \$6 and the maximum \$12 for not more than 350 weeks, the total not to exceed \$4,000. Benefits for partial disability are 50 per cent of the wage loss, not more than \$12 per week for not more than 300 weeks. Specified injuries are compensated for according to a schedule of fixed periods, these payments to be in lieu of all other compensation. Any weekly payment may be commuted to a lump sum after 26 weeks if both parties agree and the industrial commission approves. The usual provisions for review of awards are made.

All employers under the act must carry insurance unless satisfactory proof is given of capacity to carry their own risk as self-insurers. Policies must inure directly to beneficiaries, and payments are preferred the same as wage debts, and are exempt from assignment, attachment, etc. The law provides for the creation of an industrial commission consisting of the commissioner of commerce and labor, ex officio chairman, the attorney general, and two members to be appointed by the governor, one representing employees and one employers. The appointed members receive salaries of \$4,000 per year each, and are to give their entire time to the duties of their position. The findings of the commission are subject to review on application, and to appeals to the courts on questions of law. For the support of the commission insurance companies may be assessed one per cent on all compensation premiums written by them. Premium rates are to be "fair, reasonable, and adequate," and must be approved by the insurance commissioner.

The action of the Georgia Legislature marks a further step in the inclusion of all jurisdictions of the United States under compensation legislation, but five States now remaining without such a law, North Carolina, South Carolina, Florida, Mississippi and Arkansas. Though the compensation basis is rather low, and the numerical exclusion high, there are many features for which the act is to be commended, notably the requirement for insurance, the provision for an administrative commission, and the inclusion of all industries and the great bulk of public employment. The exclusion of steam railroads is in line with the method adopted in other States to avoid the confusion caused by applying divergent systems of relief to workmen engaged interchangeably in interstate and intrastate commerce.

Amending Acts.

Kentucky.

TAKING up in order the States in which amending acts were passed, it is to be noted that their general tendency was toward an increase in benefits of the different kinds provided under the act and toward an improved administration. Thus in Kentucky the liability of an employer for medical and surgical aid, etc., may be \$200 instead of \$100, if the board shall so order. Compensation for disability, either total or partial, may be as high as \$15 per week, instead of \$12 as formerly, while the maximum for total disability is increased from \$5,000 to \$6,000. Provision is also made for specific positions in the office of the workmen's compensation board.

Louisiana.

Amendments to the Louisiana law were made by acts Nos. 234, 244, and 247. The first act amended the rules governing procedure found in section 18 by adding provisions allowing complaint to be presented to a justice of the peace or any court having jurisdiction, at the option of the claimant. Act No. 247, approved the same day, purported to amend the same section, but retained verbatim the provisions of the original law as to the judge having jurisdiction. However, it also retained a slight change made by act No. 234, at the end of para-

graph 1, extending the list of items to be reported to include all facts made by the act or its amendments conditions under which compensation may be granted.

Act No. 234 amended slightly other paragraphs of this section, which act No. 247 omits entirely, reducing section 18 to a single paragraph. It can hardly be considered as altogether clear what the status of the paragraphs numbered 2, 3, and 4 is, or whether paragraph 1 is to be construed as set forth in act No. 247 rather than 234, since the date of their approval is the same.

Act No. 244 amends section 30 of the original act so as to make it applicable to those employees of railroads whose injury or death occurred while both employer and employee were engaged at the time in intrastate operation, not controlled or governed by the Federal law.

Act No. 247, besides the points already noted, amends section 7 of the act relating to the liability of third persons so as to authorize the injured person or his dependent to claim compensation under the act and also to bring suit against the third person for damages, and the amount of compensation awarded shall not be regarded as a measure of such damages. An employer having paid compensation or been made liable therefor may himself sue the third person to recover the amount of his payment or liability. The party first bringing suit shall notify the other, who may then enter as party plaintiff. In event of a recovery, damages shall be apportioned and the claim of the employer for compensation actually paid shall take precedence over that of the employee or his dependent; only the excess after the employer's recovery and court costs and attorneys' fees have been met shall go to the injured employee or his dependent. Compromises by either party without the consent of the other are forbidden.

Amendments to section 8, fixing the amount of compensation, increase the percentage basis of awards from 55 to 60 throughout in disability cases; while death benefits are increased 5 per cent in each instance. It is further provided that if there be but one dependent widow, widower, child, or parent, then dependent brothers or sisters, or other members of the family, may receive support at a rate of 10 per cent each, the total not to exceed 60 per cent. The limitation found in paragraph 4 of this section, excluding claims where the employer is not notified within the six months' period fixed by section 11, is stricken out. Another amendment to this section makes employers, who have made lump-sum settlements without the approval of the court or at a discount greater than 6 per cent per annum, liable in an amount equal to three times the compensation due under the act, such liability to continue for 10 years after the date of the payment of the lump sum.

The provision as to notice found in section 11 is amended by providing that no notice shall be held invalid or insufficient by reason of inaccuracy not actually misleading; also want of notice or delay of giving notice shall not be a bar to proceedings if the employer had knowledge otherwise, or was not prejudiced by such delay or want of notice.

Section 21 is recast, giving claims or payments under the act the same preference rights as unpaid wages, and also taking over the provisions as to exemptions found in section 22. The provision of

section 22 as to fees is made paragraph 2 of section 21. A new section 22 is then added, which imposes upon every employer under the act the obligation of insuring his liability or giving bond with good and solvent surety to guarantee all liability which may arise under the act, unless the employer is excused by the court or furnishes bond upon proof of financial solvency. The penalty for failure is double liability. The provision of section 21 as to security of payments where the financial responsibility of the employer is uncertain is made paragraph 2 of the new section 22.

Maryland.

The basis of compensation in Maryland is increased from 50 per cent to 66 $\frac{2}{3}$ per cent of the average weekly wages, the maximum payment being \$18 per week instead of \$12, and the minimum being \$8 instead of \$5. The loss of use of members is recognized as producing the same effect as the loss of members. The waiting time is changed from two weeks after the injury to three days after the beginning of the disability. The total amount payable for partial disability is advanced from \$3,000 to \$3,500. Compensation is made payable for the loss of hearing and for mutilation and disfigurements. The award for permanent partial disability is made a vested right, passing to the employee's personal representatives in case of his death during the term of its receipt. The maximum amount allowed for death is advanced from \$4,250 to \$5,000, and the allowance for funeral expenses from \$75 to \$125.

The share of a beneficiary who dies during its receipt is made to vest in the surviving dependents, if any. Payments to a widow continue for a year after remarriage, subject to the limitations of time by the law, instead of terminating at once as formerly. A broader definition is given to the term "children" so as to include stepchildren, illegitimate and other children who were dependent members of the household of the deceased workman at the time of the accident or death.

Massachusetts.

But two changes were made in the law of Massachusetts, one relating to the effect of failure to give notice or to make claim, the amendment providing that such failure shall not be a bar to proceedings if the insurer was not prejudiced by the want of notice or delay of claim. The second amendment authorizes the board to order that an employee shall be provided at the insurer's expense with an artificial eye, limb, or with other mechanical appliances if in the opinion of the board such device would promote the employee's restoration to industry.

New York.

Several amending acts were passed in this State, an important one being the inclusion of designated occupational diseases as injuries within the act. The compensation for total disability is increased from \$15 to \$20 as a weekly maximum and from \$5 to \$8 as a minimum, or full wages if less than \$8. Employees incapacitated for earning may receive special aid, for maintenance during rehabilitation, up to \$10 per week, out of a fund created for this purpose. The same

provisions for expenses during rehabilitation were made for persons partially disabled as for those suffering from total disability. For the maintenance of the rehabilitation fund, insurance carriers must pay \$900 to the State treasurer where employees die of a compensable injury and leave no dependents.

Permanent disability awards are made to survive to the spouse or children of a workman dying during the term of the receipt of such benefits. Another amendment provides for the apportionment of the liability for compensation among different employers where the injury or disease causing the disability was incurred under different employers. The basis of death benefits is changed by allowing \$125 monthly wage to be used in computing such compensation, instead of \$100 as formerly.

Other provisions relate to the division of the State into districts for purposes of medical examination of workmen claiming to suffer from occupational diseases, authorizing the commission to regulate the fees of physicians examining claimants, providing penalties for a person receiving a fee for service rendered in behalf of a claimant except in an amount determined by the commission, or soliciting the business of representing claimants before the commission. A deputy commissioner is provided for to assist the second deputy commissioner in hearing claims for compensation in death cases.

Ohio.

The amendments to the Ohio statute relate to the State fund. Section 1465-69, requiring employers to pay their premiums into the State fund semiannually, is supplemented by a section 1465-69a, which makes it "the duty of each member of the firm, and of the president, secretary, general manager or managing agent of each private corporation," including public service corporations covered by the act, to see that the provisions of section 1465-69 are complied with. In other words, the liability is made individual upon the members of firms and the managing officials of corporations. The failure of these individuals to cause the premiums to be paid renders them liable to a fine of not more than \$500, each day's refusal constituting a separate offense.

Section 1465-75 is repealed and a much more elaborate provision put in its place. The industrial commission is authorized to determine the date when any person, firm, or corporation became an employer within the meaning of the act, and to notify such employer to furnish the commission with a pay roll. Failure to furnish such pay roll entails an immediate liability for payment to the commission of the full premium determined by it to be due from the employer from the date found by the commission as the beginning of operations, covering also the next succeeding six months from the date of the action. If the employer does not within five days after receiving the notice of the amount thus determined to be due make payment of such sum, the commission shall certify the fact to the attorney general, the amount to be collected by him in a civil action. If the employer within the five days fixed fails to execute a bond with sureties conditioned on the payment of any judgment and costs returned against him for the premium, the court shall immediately

appoint a receiver to take over the business and property of the employer and administer the same under the orders of the court. Judgment shall include costs and interest, and shall have the same preference as is allowed by law on a judgment for taxes. A similar proceeding is available where an employer who has complied with the act shall default in premium payments for a period of 10 days after notice that such payment is due.

Oregon.

The Oregon laws to be noted are rather supplemental than amendatory. One provides for a 30 per cent increase in the amounts of compensation in the course of payment to injured workmen or to the beneficiaries of deceased workmen or awarded during the period between December 1, 1919, and June 30, 1921. Lump-sum settlements are to be affected only to the extent that they would relate to payments falling due within this period.

The second measure provides for a rehabilitation fund to be taken from the industrial accident fund, first in the amount of \$100,000 and afterwards by monthly transfers of 2½ per cent of the total monthly receipts of the commission. This fund is to be used by the commission for the conduct of courses in training in vocational rehabilitation for men and women injured while working under the protection of the workmen's compensation law. This work is to be carried on through existing agencies, including schools maintaining vocational training courses and State schools for the blind and deaf.

Porto Rico.

The principal change in the Porto Rico law relates to the formation and duties of the administrative commission. The new law provides that the governor shall appoint a president at a salary of \$3,500, and three commissioners, who shall give service on occasion at the rate of \$10 per day. The chief of the bureau of labor forms a fifth member, replacing the commissioner of agriculture and labor who formerly acted as chairman. The provision for successors to the three appointed members remains unchanged, being subject to popular election. The president acts alone, in cases of temporary disability, but the commission at subsequent meetings may review his award on its own motion or on request of the injured man or his employer. Cases of death, of total disability, or of permanent partial disability are to be acted upon by the commission.

If the employer of any injured workman is found not to be insured under the act, the commission may levy an attachment as for the collection of taxes on the property of the employer to secure compensation.

Other changes relate to procedure in the investigation of claims.

Rhode Island.

The single change made in the law of Rhode Island extends the benefits of the law to workmen whose annual remuneration does not exceed \$3,000 instead of limiting it to those receiving not more than \$1,800 per year.

Virginia.

The waiting period in this State was reduced from 14 to 10 days, benefits dating from the receipt of the injury where the disability continues for more than 6 weeks. Maximum weekly benefits are advanced from \$10 to \$12 and the maximum amount payable in cases of total disability is increased from \$4,000 to \$4,500. Death benefits are payable for 500 weeks instead of only 300, as before. The period for medical aid is also extended from 30 to 60 days. Loss of vision, or loss of use of members, is compensable as for the loss of the member.

Such self-insurers as are required to deposit securities must pay to the State treasurer as custodian one-twentieth of 1 per cent per annum as a charge for services rendered. Another amendment relates to experience rating, authorizing the commissioner of insurance to make rules therefor.

The salary of the members of the commission is increased from \$3,600 to \$4,000 per year, the secretary's salary being also advanced from \$2,000 to \$3,000. The commission, or any member or the deputy commissioner, may now enforce the attendance of witnesses instead of calling on the circuit court to render such service in their behalf.

Statement of Ohio State Insurance Fund as of December 31, 1919.

A BRIEF statement dated July 1, 1920, has been issued by the Industrial Commission of Ohio, setting forth the condition of the State insurance fund as of December 31, 1919. The figures relate to the employers' fund only, and show premium receipts of \$41,703,768.54; self-insurers contributed also \$1,157,297.88, or a total of \$42,861,066.42. Interest earnings in excess of \$2,000,000 and collected warrants of \$6,079.97 brings the total insurance for the year up to \$44,899,664.67.

Warrants issued amounted to \$23,266,409.72, other expenditures increasing the aggregate to \$23,870,993.05. There was thus an excess of income over disbursements of \$21,028,671.62. The assets amounted to \$23,685,509.45 and liabilities to \$19,836,593.57. There is a catastrophe surplus of \$1,135,158.11 and a general surplus of \$2,713,757.77.

This statement shows the large extent of the business transacted by the Ohio fund, and also discloses the greatest surplus ever possessed by the fund. Since the object of the State system is to provide insurance at cost, with only a reasonable contingent reserve, the actuary making the report recommended that a dividend on the last year's business be declared to the amount of 12 per cent. This would approximate \$1,350,000, which it is recommended should be distributed to the subscribers to the fund in the form of credit premiums on their first adjustment of premium following June 30, 1920. This recommendation was approved by the commission, as was also a recommendation that the maximum penalties and maximum reward credits for bad and good accident experience be enlarged. The maximum penalty now assessable is 33 per cent instead of 30 per cent, and the maximum reward is 15 per cent instead of 10 per cent.

The commission further reports a revision in its claims procedure, with the result that compensation awards reach the claimant in less than one-half the time required under the former method. A checking up of the first 3,340 claims handled under the new plan showed that it required on an average only a fraction over 15 days from the receipt of notice of injury to the compensation award. The previous plan had demonstrated an average delay of 34 days.

The expense of administration for 10 months, from March 1, 1919, to December 31, 1919 (excluding executives' salaries), was \$278,160, or less than 3 per cent of the earned premium for the period. The executives' salaries are only partially chargeable to the administration of the fund, there being six other departments in the hands of the commission. The addition of the proportionate salary charge to the expense ratio brings it up to approximately 3 per cent. This relates to the period previous to the adoption of the new method of claims procedure, but there is nothing to indicate that this will add to any appreciable extent to this remarkably low administrative cost.

Economic Situation of the German Workmen's Insurance Institutes.¹

THE financial statement of the State Insurance Institute, Berlin, one of the carriers of the German workmen's invalidity and old-age insurance, for the year 1918 gives a clear insight into the desperate economic situation of the carriers of the German workmen's insurance system. During 1919 their situation became even worse owing to the continued depreciation of German money which tends to undermine the value of even the most solid assets. The financial statement of the above institute for the years 1914 and 1918 is given below:

FINANCIAL STATEMENT OF THE STATE INSURANCE INSTITUTE, BERLIN, FOR THE YEARS 1914 AND 1918.

[1 mark, at par=23.8 cents.]

Item.	1914	1918
	<i>Marks.</i>	<i>Marks.</i>
Cash.....	2,241,758	1,838,243
Securities (purchase price).....	50,677,511	113,551,198
Loans outstanding.....	43,064,826	40,455,713
Real estate, purchase price less deductions for depreciation.....	19,948,182	20,331,875
Fixtures, etc. (book value).....	1,291,140	1,373,971
Materials, supplies (book value).....	256,788	778,207
Total gross assets.....	117,480,205	178,329,207
Less loans on collateral.....	4,605,000	57,890,868
Net assets.....	112,875,205	120,438,339
Net assets invested in war bonds.....	4,855,000	69,739,000

From this statement it may be seen that in 1918 the institute had to borrow about 58,000,000 marks (\$13,804,000, par) on collateral which are only partly offset by loans in the amount of 40,455,713 marks (\$9,628,459.69, par) made by the institute. It should also

¹ Soziale Praxis und Archiv für Volkswohlfahrt. Berlin, May 19, 1920, p. 778.

be noted that of the 120,438,339 marks (\$28,664,324.68, par) net assets of the institute, 69,739,000 marks (\$16,597,882, par) were invested in war bonds and that the 113,551,198 marks (\$27,025,185.12, par) in securities were credited at their purchase price, while if sold to-day these securities would hardly bring 75 per cent of their purchase price.

In 1918 the institute had a deficit of approximately 4,000,000 marks. The preliminary budget for 1920 estimates the deficit for this year at 20,000,000 marks (\$5,760,000, par). The costs of the sanatoria at Beelitz have mounted to 10,000,000 marks (\$2,380,000, par) and devour the greater part of the contributions of the insured persons. In addition it should be kept in mind that under the present unfavorable living conditions claims on the institute with respect to preventive measures are increasing from day to day. In spite of its unfavorable financial condition the institute can not limit its activities in this field, but is forced by circumstances even to extend them. All these facts show clearly that an increase of the contributions of the insured persons, which has been delayed too long, has now become an urgent necessity.

Seamen's Insurance Against Accidents on the Sea, Spain.¹

THE Spanish Ministry of the Interior, through the insurance committee, issued, under date of October 28, 1919, the following regulations to be observed by masters of ports in relation to seamen's insurance made obligatory by royal decree, October 14, 1919.

Masters of ports, as representatives of the official committee on insurance, before the clearance of a ship shall require the captain or owner thereof to make a declaration that the law concerning insurance of the crew against accidents at sea has been complied with, and shall demand the exhibition of the policy of insurance.

Vessels sailing with crews whose remuneration consists in participating with the owner in the profits of the voyage, may clear only after the owner has exhibited a contract with the members of the crew in which they have renounced this insurance against accidents.

Insurance must be effected with recognized insurance companies.

The committee on insurance shall examine the policy for the purpose of determining if it covers all members of the crew and all items required by the decree.

Any company operating several ships may effect this insurance by a collective policy which covers all the crews of all the ships operated by it.

Purchase or sale of a ship by a company must be reported to the insurance committee.

Every accident occurring in a port must be reported by the captain, within 24 hours, to the master of the port. The report must show the name of the person injured and the cause of the accident. If an accident occurs while at sea the report is required within 24 hours after arriving at a port. If this be a foreign port the accident is to be reported to the Spanish consul.

¹ Boletín del Instituto de Reformas Sociales. Madrid, April, 1920.

LABOR LAWS AND DECISIONS.

Deportation of Aliens for Membership in Unlawful Organizations.

TWO opinions have recently been rendered by Federal judges on the subject of the rights of aliens charged with offenses against the United States Government, and the powers and duties of the Department of Labor in regard to the same. The decisions are almost contemporaneous, one by Judge Westenhaver, district judge for the northern district of Ohio, bearing date of June 12, 1920, while the other, rendered by Judge George W. Anderson, circuit judge for the first circuit, was delivered at Boston, Mass., on the 23d of the same month. While the cases represent in part the results of the same movement to secure the deportation of considerable numbers of aliens under the act of October 16, 1918, the facts in the two cases are quite differently treated in the opinions. Certain points of agreement, however, appear.

In both cases cooperation was had with the Department of Justice, warrants being issued as of the date of December 29, 1919. Telegraphic notice of the issuance of these warrants was given to special agents of the Department of Justice, and arrests were made January 2 and 3, 1920. The offense charged in the warrants in both cases was, in brief, that of membership in or affiliation with an organization which advocated the overthrow of government, both generally and that of the United States in particular, by force and violence, advocating also opposition to all organized government, meaning thereby the Communist and Communist Labor Parties. In the Ohio case (*In re Lem Kosopud et al., ex parte No. 10419*) there was a petition for a writ of habeas corpus alleging detention by the local immigration inspector without authority of law; also that the petitioners were not charged with the commission of any crime, and were lawfully within the United States; that they were committed to jail without form of legal process or authority, and have been denied their constitutional right to a speedy and fair trial.

Judge Westenhaver reviewed the proceedings and found that the warrants were regularly issued and were in due form, that the orders of deportation were likewise regular and in due form and had followed regular and orderly proceedings before the immigration inspector, being issued by the Secretary of Labor under the evidence thus procured as provided by law; also that the charges made were sufficiently sustained by the evidence. It was set forth that the right of aliens to be admitted to the United States or to remain here is entirely within the power of Congress to regulate, and that it may commit the enforcement of its laws and regulations to executive officers. Bail had not been denied to any of the petitioners, but they complained that having been ordered deported as early as March 18, this order had not been executed up to date of the hearing because of the inability of the Department of Labor to carry out its deportation order; and that they had been restrained of their liberty because

unable to give bail while awaiting deportation. Admitting the hardship involved, Judge Westenhaver says: "I am not able to discover any basis, and none has been suggested in argument, upon which a finding can be made that these persons were by reason thereof illegally restrained of their liberty."

Other claims made were of arrests without warrants, questioning before counsel was obtained, the use in evidence of answers then made, and the use of membership cards in the Communist Party and of literature in their possession as evidence. It appears that warrants had been issued prior to the arrest and names sent to the agents, the arrests being made before the warrants were actually in the hands of the arresting officer. This was held to be a common practice, and affording no ground for complaint of illegal procedure. "Nor do I perceive any good reason why the arresting officer may not lawfully interrogate or examine the person arrested with respect to the charge brought against him, even though the alien is not then represented by counsel and is under arrest. This is the usual course in criminal proceedings. Whether his statements thus made may be given in evidence against him depends upon whether or not they were voluntary." It was stated that no objection was made at any time nor on any ground to the use of this testimony; "likewise, as to the membership cards and incriminating literature used at the time of their arrest the petitioners on hearings freely admitted the authenticity of the cards, their membership in the Communist Party, familiarity with the contents of incriminating literature, and in many, if not all, cases a belief in the views therein contained."

As to the absence of counsel the only legal question involved was said to be whether or not they were denied counsel in such a way as to deprive them of a fair hearing. The law provides that aliens shall have the privilege of the aid and assistance of counsel in case of hearings and before the order of deportation is made, and Judge Westenhaver said: "Nor does it make a hearing before an immigration inspector unfair and subject to review because the alien may not have had the benefit of counsel at the beginning of those proceedings. It is sufficient if, during the hearing, he is advised of his rights or is accorded counsel, and no part of the evidence previously taken or used against him is withheld from his counsel, and he is not thereby deprived of the privilege of bringing forward any explanation or rebutting evidence." As to the petitioners it was found that they were informed by the inspector of their right to counsel, and that this right had been waived. Therefore, on the face of the whole record, and in accordance with the evidence presented, the conclusion was reached "that the petitioners were not now unlawfully restrained of their liberty," and their petition was accordingly dismissed.

It may be noted that Judge Westenhaver evidently regarded deportation proceedings as criminal proceedings, or at least analogous thereto; and that he did not review the position of the Secretary of Labor as to the nature of the Communist and Communist Labor Parties.

Judge Anderson's Decision.

IN THE second case (*Colyer v. Skeffington*, 265 Fed. 17), there were likewise habeas corpus proceedings to procure the release of aliens held for trial or deportation. Judge Anderson went quite fully into

the movement that led to the arrests, and into the methods by which they were made. The opinion is a lengthy one, occupying some 60 pages of the Federal Reporter, and presents various documents, including instructions issued by the Department of Justice, and opinions by Secretary Wilson in deportation cases, in which are included portions of the platform and program of the Communist Party. The length and fullness of the opinion are explained by the statement that the cases under consideration were agreed by both parties to be, "in many important aspects, test cases of the legality of an undertaking of the Government to deport several thousand aliens." The persons actually involved in this proceeding were 20 in number, of whom 13 had been ordered to be deported, while 7 were held under warrants of arrest, the amount of bail being fixed at \$10,000 for one and \$5,000 each for 6 others. As to these latter, when the trial had disclosed no acts of violence threatened or performed, and no evidence of any purpose to commit acts of force and violence against person or property, the court ordered their release on bail in the sum of \$500 each, it being evident that several months must elapse before a final disposition of the cases. "The sole charge against these aliens is membership in the Communist Party or Communist Labor Party," the assumption being that both parties are committed to a scheme to overthrow the Government by force or violence.

Consideration of Legal Principles.

The controlling legal principles are first considered. The absolute power of Congress to exclude or expel aliens, or to withdraw a right once extended to them, is recognized. "It is also a familiar and a perfectly well settled law that the courts have no jurisdiction on habeas corpus proceedings to interfere with the proceedings in the Department of Labor concerning the exclusion or expulsion of aliens, unless or until there is some error of law in that department." If, however, the proceedings "are shown to be unfair, or otherwise lacking in the essential element of due process of law, or if the Secretary of Labor is proceeding on an erroneous view of the law, then the courts must review." The rights guaranteed by the 4th, 5th, 6th, and 14th amendments extend to all persons within the jurisdiction of the United States, without regard to citizenship. "While deportation proceedings are not criminal proceedings, aliens who are thereby deprived of their liberty may have their legal right to liberty tested on habeas corpus proceedings." Inhabitants of the United States, without regard to citizenship, are entitled to protection from unreasonable search and seizure and from arrest without due process, these points being illustrated by citations from various cases in which unlawful means of procuring evidence were condemned by the courts of last resort.

The second principal point of discussion relates to the administration of immigration laws by the Department of Labor rather than by the Department of Justice. "The administration of the immigration laws has been intrusted by Congress to the Department of Labor—not to the Department of Justice. The latter department has no more legal right or power to deal with the exclusion or the expulsion of aliens than has the Department of the Interior." The Department of Justice prosecutes for crime, but deportation proceedings are

not criminal proceedings (*Pang Sho Yin v. U. S.*, 154 Fed. 660, 83 C. C. A. 484). The rules of the Department of Labor have the effect of law, and of them the court must take judicial notice. Some of these rules are quoted, setting forth the requirement for procedure in cases such as those under consideration.

From the foregoing it is apparent that the records upon which the decisions of the Secretary of Labor are based are under the provisions of these rules intended to be made in summary, but fair and adequate, fashion by real trials before immigration inspectors. * * * An unfair or otherwise misleading record is as much a fraud upon the law and upon the Secretary of Labor as upon the alien.

The petitioners in the case in hand urged that in the proceedings against them the functions of the Department of Labor were usurped by the Department of Justice through its bureau of investigation, and that the proceedings were void. In view of this charge the court found it necessary "to set forth in considerable detail the facts under which the petitioners, and hundreds of other aliens, were arrested and held for trial." First, there is shown a document, being confidential instructions by the assistant director and chief of the Bureau of Investigation of the Department of Justice, sent to the head of the local bureau of investigation in Boston. This set forth the steps that had been taken to secure the names of members of the political organizations involved, and directed efforts to be made to secure evidence of membership, including books and records of the organizations, the searching of halls and residences for literature, books, papers, and "anything hanging on the walls," while "ceiling and partitions should be sounded for hiding places." "Violence toward any aliens should be scrupulously avoided," though groups of persons found in meeting rooms "should be lined up against the wall and there searched." Caution must be preserved against "leaks," and local authorities called upon only when absolutely necessary and in such a manner as to avoid "leaks."

A day was set for the arrests, and "if possible you should arrange with your undercover informants to have meetings of the Communist Party and Communist Labor Party held on the night set. I have been informed by some of the bureau officers that such arrangements will be made."

Cooperation with Department of Justice.

The Commissioner General of Immigration also sent confidential instructions to the commissioner at Boston, inclosing 306 warrants of arrests based on prima facie evidence that the parties named were aliens, members of the Communist Labor Party, the evidence having been secured by agents of the Department of Justice. Cooperation with the agents of the Department of Justice was announced, and the success of the movement which was being inaugurated was said to hinge on the full cooperation of all officials of the immigration service with the Department of Justice agents. Of these documents Judge Anderson says: "They require deep study, analysis, and consideration in all their parts. They should not here be summarized." They are, however, too long for reproduction here, and the conclusion of Judge Anderson is introduced instead of further quotation: "They contemplate that the general conduct and control of this wholesale deportation undertaking shall be assumed by the Department of Justice, relegating the Department of Labor to the

function, almost purely formal, of making records of cases, in effect predetermined by the Department of Justice."

Copies of instructions to agents were made up by the local chief of the Bureau of Investigation of the Department of Justice, among them being instructions to hold persons taken into custody without being permitted to communicate with any outside person until after examination, and until permission given by the office. The eighth paragraph requires persons claiming American citizenship to produce documentary evidence of the same. There is also given a questionnaire which was submitted to all persons arrested, one of the questions being, "Are you a member of the Communist Party?" One of the instructions issued was: "Upon making arrests endeavor to secure admissions as to membership in Communist or Communist Labor Parties, together with any possible documentary proof."

"The officials both of the Department of Justice and of the Department of Labor described these proceedings, properly enough, as a 'raid' and as 'catching the Communist in the net.'" The methods of conducting this raid were then set forth in Judge Anderson's opinion, with the number of people probably arrested. This number is stated at from 800 to 1,200; halls, residences, and other places were searched through and through without warrants, and according to testimony held credible by the court, with a display of guns and other methods of terrorization. "It is of some significance that Congress has never armed the Department of Justice with broad powers for the use of search warrants. The only search warrant statute of present significance is found in the espionage act of June 15, 1917, Title II. This statute carefully and specifically limits, as our Constitution requires, the use of search warrants. On the doctrine of 'inclusio unius exclusio alterius,' it prohibits the use of search warrants in cases like the present."

Various incidents regarding the treatment of women held in restraint, the handcuffing of persons seized, the suffering and insanitary conditions which led to one instance of suicide and one of insanity, while in others persons "were driven nearly if not quite to the verge of insanity," and the endurance of "perhaps 10 days or 2 weeks of filth, confusion, and unnecessary suffering," are cited as material only as bearing upon the question of due process of law.

Fairness or Unfairness of the Hearing.

The next point taken up is whether or not the hearings were fair or unfair. Hearings under the law must be given before inspectors of the Labor Department, but the instructions for cooperation by agents of the Department of Justice led to their presence at the hearings, they "practically in many instances undertaking to participate or even give direction to those hearings." Attention is called to the fact that rule 22 subdivision 5(b), of the Department of Labor, which read: "At the beginning of the hearing under the warrant of arrest the alien shall be allowed to inspect the warrant of arrest and all the evidence on which it was issued, and shall be apprised that he may be represented by counsel," was changed on December 31, 1919. As changed it read: "Preferably at the beginning of the hearing under the warrant of arrest or at any rate as soon as hearing has proceeded sufficiently in the development of the facts to protect

the Government's interest, the alien shall be allowed to inspect the warrant of arrest and all the evidence on which it was issued and shall be apprised that thereafter he may be represented by counsel." Many of the aliens were uneducated and understood English poorly, if at all, while the interpreters were likewise incompetent, the aliens being therefore "entirely unprotected from the zealous attempts of the Department of Justice agents to get from them some sort of apparent admission of membership in the Communist or Communist Labor Party."

The rule quoted above was restored to the original form by the Secretary of Labor on January 28, 1920. "This arrangement shows the clear purpose of the Secretary of Labor to have these aliens properly treated, guarding their constitutional rights," and securing also reports based on "fair, dispassionate, and intelligent attempts to ascertain and report the facts of controlling importance." It is pointed out, however, that the parties in question were not benefited by the restoration, as they had already been tried. The importance of counsel is emphasized, the court saying that "deliberately to plan to cut these aliens off from the advice and assistance of counsel until they are involved in apparent admissions, * * * is utterly inconsistent with any notion involved in the conception of 'due process of law.'" Of the persons actually arrested from one-third to one-half were taken to Deer Island for detention; for a great majority of these no evidence was found warranting detention. They were therefore discharged in an informal manner, "which seems, on the basis of practical justice, to have been adopted and used in the Department of Labor," although not contemplated by law. With the necessity for discharging the great majority of those arrested "the pressure to make a record adequate to hold those against whom any evidence whatever could be found increased." Under the circumstances the court decided that it was not "conceivable that the immigration inspectors could do justice" to the bewildered, ignorant persons before them. "It is not necessary to attack the purposes or character of the immigration inspectors." The whole force and nature of the circumstances were against a fair and impartial trial, and the court concluded that such was not had by a large share of the aliens.

Methods of Communist or Communist Labor Party.

An account is then given of the origin and general relations of the Communist or Communist Labor Party to the old Socialist Party. It was concluded that "social, educational purposes, and race sympathy rather than political agitation constituted the controlling methods with a large share of them. They joined the local Russian or Polish or Lithuanian Socialist or Communist club, just as citizens join neighborhood clubs, social or religious, or civic, or fraternal."

Taking up the issues presented, the contention that the whole proceeding was void from the beginning was said not to be perfectly established. Even though the Department of Justice had not the authority to act in the case, "it does not follow that the Department of Labor could not, if it chose, avail itself of investigations made and evidence obtained by the agents of the Department of Justice or of any other Government department, or even by nonofficial volunteers."

The second contention was that the Secretary of Labor was wrong in holding the Communist Party a force and violence party within the meaning of the act of October 16, 1918. This raised the question as to whether the Secretary's holding is wrong in point of law or because there was no evidence before him on which to base his conclusion. "Of course no contention can be or is made that the court may reverse the immigration authorities on pure questions of fact." The questions involved are said not to be free from doubt, and while some of the cases might be disposed of without considering it, others directly rest upon it. What is involved in the last analysis is the meaning of Congress in its use of the words "force," "violence," "overthrow"; and whether there was before the Secretary of Labor any real evidence for reaching the conclusion that the Communist Party advocated "the overthrow of the Government of the United States by force or violence." Reviewing the facts in connection with the organizations, there were considered the amount of dues, the absence of weapons or explosives of any kind, the nature of their meetings, etc., and the court viewed the organization as more for discussion than for the development of force and violence, its principal method of achieving its end being a general strike. Of all the methods suggested by the literature found, there was nothing that the court regarded as coming within the meaning of the terms "force and violence" as used by Congress. If the Communist Party was actually organized to overthrow the Government by force and violence, not only its alien members but citizen members as well should be arrested and tried for a statutory offense as engaging in a criminal conspiracy. How far the "undercover informants," who were to arrange for meetings to facilitate arrests, were influential in formulating the manifesto or platform of the party was a question raised but not decided for lack of sufficient facts, though "in this trial every possible opportunity was given the Department of Justice to explain the nature and extent of the activities of its so-called 'undercover informants.'"

Decision as to Fair Hearing and Aliens' Bail.

The third contention was based on the claim that lack of due process of law vitiates the records on which the Secretary based his decisions. In discussing this question it was found necessary to separate the petitioners into two groups. In one were placed certain intelligent and competent aliens, well informed as to their rights, who were avowed, convinced, and enthusiastic Communists. Their cases were not "substantially prejudiced by any unreasonable searches and seizures." The conclusion is reached, however, as to four of them that the order of deportation might well stand, so far as due process is concerned, though not guilty of advocating force and violence. As to the remainder ordered deported "the contention of lack of due process (fair hearing) must be sustained." It was found that the records either misrepresented or omitted facts of controlling importance so that the Secretary had not before him the proper data for a conclusion. Details are given at considerable length showing for individual cases the actual attitude of the petitioners and their purpose in becoming members of the organization, their personal opinions and convictions, and the methods by which

the determination to deport was arrived at. De novo proceedings were recommended, under circumstances entirely different from those developed by the "overzealous agents of any other department." "The finding should be and is limited to a finding that they did not have, before the inspectors, a fair trial of their status."

The remaining point involved is as to aliens' bail at the end of the proceedings in the Department of Labor. It was pointed out that no interference by the court is possible unless there was apparent abuse of the power vested in the immigration authorities by the statute. "I think such abuse was here shown." The long detention of large numbers of persons against only a small percentage of whom there was any evidence, the holding in confinement for days without any warrant, and without permitting the giving of reasonable bail, was held to be illegal, "under all the unprecedented and extraordinary circumstances of this case," so that writs of habeas corpus might issue. However, the present proceedings could not be regarded as making a final disposition of the case, that being reserved to the court above.

Summarizing his own findings, Judge Anderson decided that there is no evidence that the Communist Party had advocated the overthrow of the Government by force or violence, so that all the petitioners ordered deported were entitled to discharge. However, if this conclusion be not affirmed by the court above, the admitted Communists may be deported unless the documents used in securing the order against them are found to be colored by "undercover informants" who were professed members of the party. Again, if the decision should be made final against Communists duly proved or admitted to be such, then in all but the four excepted cases the records are found to be vitiated by lack of due process of law, so that the parties are entitled to discharge subject to further proceedings by the Department of Labor.

Right of Labor Organizations to Erect Houses for Discharged Members.

THE United Mine Workers of America undertook to organize the employees of the Diamond Block Coal Co., which does a mining business in Perry County, Ky. Employees joining the union were discharged and ordered to vacate the company's houses which they had occupied during their employment. The union thereupon undertook to provide housing for them on land some 300 or 400 yards from the company's houses, so as to enable them to carry on more effectively their work of soliciting membership among employees of the company. The court found no evidence of threats of violence, or of attempts to intimidate or coerce by any of the defendants in this case (*Diamond Block Coal Co. v. United Mine Workers*, 222 S. W. 1079). The operation of the mines had not been interrupted, neither had any employee been induced to leave the employment of the company by the persuasion of the union. "It follows that the plaintiff has wholly failed to make out its case, unless it be that the peaceable solicitation of miners to become members of the organization in that district was a violation of

the rights of the plaintiff, or that the leasing of the ground by defendants and the erection or attempted erection of the shacks or tenant houses was an invasion of the rights of plaintiff." The evidence showed only that the ground had been leased and that it was proposed to erect shacks thereon and that there was a solicitation of the employees to become members. The court found that neither of these acts infringed any right of the company, and a temporary injunction previously granted was dissolved. "Capital may lawfully organize for its advancement and protection. It does so every day. Labor may rightfully do the same thing. This is the American way—the best known way. What capital may lawfully do, labor may do with equal right."

Constitutionality of the Minimum Wage Law of Washington.

ON August 7 the superior court of the State of Washington for Thurston County rendered a decision sustaining the minimum wage law of that State as not being in conflict with the clauses of the State and Federal Constitutions that require the observance of due process of law (*Spokane Hotel Company v. Industrial Welfare Commission*). Judge Wilson, who delivered the opinion, referred to the fact that the law had already been sustained by the supreme court of the State in *Larson v. Rice* (100 Wash. 642, 171 Pac. 1037), so that the discussion need not be prolonged. The Washington court in its decision had rested mainly upon the decision of the Oregon Supreme Court in the case of *Stettler v. O'Hara* (69 Oreg. 519, 139 Pac. 743); and the plaintiffs in this case claimed that the question here raised was not considered in the Oregon case. As to this Judge Wilson said that "a careful reading of that case leads to the conclusion that the due process clause was considered therein." This point was therefore overruled.

The same view was taken as to the second contention that the statute is void because it provides that questions of fact should be determined by the commission without appeal to the courts, the court ruling that this had been considered in the Oregon case, and it must be presumed that the Washington Supreme Court had knowingly adopted the view there taken. Other complaints as to the mode of administration were determined not to be well founded. "This is distinctly a police-power statute. Without commenting upon the various other objections urged in the petition, I conclude that the act is constitutional, that there has been no error in the manner of its administration, and that the order of the welfare commission made on April 3, 1920 [relating to the employment of minors in public housekeeping occupations] must be sustained."

It is stated that an appeal by the plaintiffs to the supreme court is in prospect.

Right of Workmen to Sue for Interference With Employment.

THE Supreme Court of New Jersey recently rendered a decision on the question of the right of an employee to sue for damages where a labor organization had procured his discharge and

prevented reemployment (*Malone v. Brotherhood of Locomotive Firemen and Enginemen*, 110 Atl. 696). The complaint charged that for two or three years past the union had unlawfully and without justifiable cause coerced, threatened, persuaded, enticed, and induced employers or would-be employers either to discharge him or to refuse employment, such acts being the result of a conspiracy which has resulted in his damage to the amount of \$20,000.

The brotherhood raised various objections, but the court found that so far as the form was concerned the complaint was good and properly drawn. Another objection raised was that in so much as the dismissal was made during Government control of the railroads, Malone might carry his appeal under the regulations in force with the probability of ultimate restoration to the place from which he had been discharged.

The argument is that because plaintiff has this appeal it is his duty, even as respects these defendants, to prosecute that appeal and let them, in the meantime at least, go free of liability for the malicious conspiracy against him. We are unable to see that the existence of this right in the plaintiff is to bar him from asserting what we deem to be a clear common-law right of action for damages. We are not told by counsel what is to become of the plaintiff's wages that he may have lost in the meantime, nor are we advised why the defendants are to be exempt from suit while plaintiff strives for reinstatement. If they are exempt now, it would seem that they would be exempt in resisting the plaintiff's reinstatement at every step. Such a proposition shocks the most elementary sense of justice.

The case was before the court on a motion to strike out the complaint, which was denied in accordance with the above principles, thus leaving the matter open for further action by the plaintiff, Malone.

Wage Agreements of Railroad Employees Contravening the Adamson Law.

THE Adamson law (act of Sept. 3, 5, 1916, 39 Stat. 721) fixed a standard eight-hour day for railroad employees, and also directed that wages should not be "reduced below the present standard day's wage." An insolvent railroad had been placed in the hands of a receiver in proceedings to foreclose a mortgage on the same. The road had never paid dividends, and interest was also in arrears, there being a yearly deficit in the earnings of the road, though it owned property of a value in excess of \$7,000,000. The road had operated under an agreement with its men by which they accepted a lower wage rate than the standard for the purpose of preserving the company from utter dissolution and the impairment of its property. The United States district attorney threatened the receiver with prosecution unless he would conform to the provisions of the Adamson law in respect to hours of service and wages, which would largely increase the cost of operation of the road and tend to its further depreciation.

Suit was brought in the District Court for the Western District of Arkansas to prevent the receiver from setting aside the terms of the agreement under which the men were working, and with which they were satisfied, and substituting the terms of the law. The district court dismissed the bill, whereupon an appeal was taken to the Supreme Court of the United States, which reversed the judgment of

the court below and authorized the continuance of the old contract (Ft. Smith & W. R. Co. v. Mills, 40 Sup. Ct. 526).

Justice Holmes delivered the opinion of the court, stating that "the act in question known as the Adamson law was passed to meet the emergency created by the threat of a general strike," fixing a period during which wages should be maintained. "The time has expired long since, but the rights of the parties require a decision of the case." A discussion then follows of the case, *Wilson v. New* (243 U. S. 332, 37 Sup. Ct. 298), in which the court had sustained the law as constitutional on the ground that it was within the power of Congress to meet the emergency in view of the public interest involved; but it "need not be taken to go further than the emergency required or to have been intended to make trouble rather than to allay it." The act could not be supposed to forbid work at lower rates agreed upon under exceptional circumstances and not affecting the labor markets on other roads. "To break up such a bargain would be at least unjust and impolitic and not at all within the ends that the Adamson law had in view. We think it reasonable to assume that the circumstances in which and the purposes for which the law was passed impart an exception in a case like this."

Four justices dissented from the views sustaining the constitutionality of the Adamson law in the case of *Wilson v. New*; and while they agreed in the foregoing opinion limiting the effect of the law, they adhered to their views as to its unconstitutionality.

Effect of Collective Agreements on Individual Labor Contracts.

THE effect of an agreement between labor unions and a number of employers, regulating wages and terms of employment, was considered in a recent case decided in the United States District Court for the Eastern District of Louisiana (*Nederlandsch Amerikaansche Stoomvaart Maatschappij v. Stevedores' & Longshoremen's Benev. Soc. et al.*, 265 Fed. 397). The complaint was brought in the form of a libel in admiralty by the steamship company against two unions of longshoremen, one white and the other colored, with whom the ship agents and employing stevedores at the port of New Orleans had a contract fixing the wages per hour, overtime, and extra pay, together with rules governing working conditions and distribution of work between the two associations. There were not enough members of the unions to do all the work at the docks, so that nonunion laborers were usually also employed. If, however, a union man appears and demands employment it must be given him immediately, according to the contract, even though the nonunion man must be discharged after having done but part of an hour's work.

The libel was brought to secure damages for delay in the unloading of a cargo due to a demand on the part of the longshoremen for an increase in pay above the contract rate. The ship declined to pay this advance, and its representatives notified the presidents of the unions to furnish men at the contract rate. They made some effort to do so, but without success, and then notified the agent that he might employ nonunion men. It was testified, however, that where union men refused to work, the nonunion men would not accept

employment. After seven days' delay, and following general meetings of the unions at which resolutions were adopted ordering the men to resume work, the unloading was completed by union members. The suit was to recover demurrage charges for seven days' delay.

The contention was made that the collective agreement was unilateral and void for want of mutuality, since the company was under no obligation to send its ships to New Orleans and thus furnish work for members of the unions, that the unions were not bound to furnish labor at all, and that the action of the members in quitting was their action as individuals for which the unions are not responsible, as the officers did not order or approve of their quitting. It was further claimed that nonunion labor could have been hired to do the work, and that by failing to do so the company had failed to minimize its damages.

The court found that though the contract was inartificially drawn, and did not impose obligations on the union to furnish labor, it must nevertheless be given a reasonable construction, so as to maintain its validity if possible. All ship agents and employing stevedores were absolutely bound by it to employ only union men if available, and it established generally the principle of collective bargaining, closed shop, etc. "I think the contract is valid, and imposes the reciprocal obligation on respondents to work according to the contract in good faith. There is no doubt the action of the men was arbitrary and amounted to a breach of the contract." The by-laws made no provision for suspension, expulsion, or other discipline for failure of the members to abide by the contract, nor do the officers of the union appear to have any control whatever over them. The foreman of the gang, a member of the union, did not seek to employ nonunion men because he knew that they would not work under the circumstances. Taking all the facts into consideration, the respondent unions were declared to be responsible for the action of their members, and damages therefore should be allowed. However, the measure of these damages was said to be confined to what it would have cost if the agent had made concessions and paid the additional wages demanded at the time. All costs were charged against the unions in equal sums.

Injunctions as Affected by the Clayton Act.

A RECENT decision by Judge Faris, district judge of the United States Court for the Eastern District of Missouri, is of interest as applying the restrictive features of the Clayton act (act of Oct. 15, 1914, 38 Stat. 730) to the issue of injunctions in labor disputes (*Kinloch Telephone Co. v. Local Union No. 2*, 265 Fed. 312). In the case before the court, officers of the defendant union were made defendants in a bill seeking to restrain them from attempting to compel, advise, or persuade by threats, intimidation, force, or persuasion the employees of the company to leave the service or to fail or refuse to perform their duty or by similar means to keep persons desiring to seek employment from accepting the same, or from inducing striking employees to remain on strike in violation of their contract.

Communicating with the plaintiff's employees for the purpose of inducing them to break their contract and other objectives of the union were also sought to be restricted.

It appears that the company was under a contract to operate on an open-shop basis, permitting its employees to join unions as they might desire, and providing for a shop committee to settle any disputes that might arise. None of the defendants named were employees of the company, but many of its employees were members of the union of which the defendants were officers, and all the striking employees were members of the same.

Summing up the evidence, Judge Faris found no sufficient proof of unlawful picketing or of intimidation or of the use of abuse or physical force to attain the objects of the strike; but, on the other hand, the strike was being maintained and supported "upon wholly feigned and insufficient grievances, with the aim and intent to compel plaintiffs to unionize their business." The result had been that the existing contract with the workmen had been breached by them without sufficient reason or excuse in law or in fact, and defendants threatened to continue such action on the basis of labor unionization and union obligations. The striking employees were said to have gone out because they were union members, and because of inducements to strike and personal persuasion by the defendant officers, the strike having been authorized at a meeting of a local union at which an international officer of the union presided. "Upon the record there is no manner of doubt that irreparable injury has been done to the property of the plaintiffs, and that further irreparable injury is threatened, and that the law applicable to the facts in this case provides no adequate remedy." The court ruled, however, that the specific provisions of the Clayton act, which forbid the issue of a restraining order or injunction against striking or recommending or advising others to strike or against picketing and peaceful persuasion, were so directly applicable to the situation in hand that no injunction could be issued. "That this law worked a radical change in some aspects of the law theretofore existing in forging restrictions upon the power of courts of equity to issue injunctions, I can not bring myself to doubt."

A supplemental bill filed during the proceedings urged in substance that the Clayton act is unconstitutional in so far as it restricts the existing powers of courts of equity to issue injunctions in labor disputes. Reference is made to the fact that the law had been held constitutional in a district court case (*Duplex v. Deering*, 247 Fed. 192); also that this case had been affirmed on appeal to the circuit court of appeals, though no reference was there made to the question of constitutionality (252 Fed. 722, 164 C. C. A. 562). Judge Faris was therefore constrained to consider the law constitutional.

The plaintiffs urged the decision in the *Hitchman* case (245 U. S. 229, 38 Sup. Ct. 65), in which an injunction was granted against unionization of mine workers in violation of their contract. Judge Faris took the position that, though the decision in the *Hitchman* case was not rendered until three years after the Clayton act took effect, the case was begun seven years before the passage of the act; so that he could not take the view that the Supreme Court had the Clayton act in view when it ruled upon the case.

Being constrained to follow the fairly plain provisions of the Clayton act, I am of opinion that this case is ruled by it, and, however strongly I may heretofore have entertained the view that, when there is committed an irreparable injury to property and when similar injury is clearly threatened and no adequate remedy at law exists, equity may grant relief by injunction, even as against employees, I am yet bound by this statute, which I deem it my plain duty to follow, even to the exclusion of these views.

Certain questions will doubtless arise in connection with this decision, one being the propriety of dividing section 20 of the Clayton act so as to consider the prohibitions against injunctions found in the second paragraph as absolute, when the first paragraph provides that no restraining order or injunction shall be issued in labor disputes "unless necessary to prevent irreparable injury to property, or to a property right, of the party making the application, for which injury there is no adequate remedy at law."

A second question would be whether or not, if the Clayton act restricts the issue of injunctions in labor disputes in the manner indicated by Judge Faris, such an injunction could be issued by the Supreme Court "three years after the Clayton act took effect," even though the case had been in litigation for 10 years. The decision of such questions rests, of course, with the higher courts.

New Works Council Act of Norway.¹

A PROVISIONAL works council act (*Midlertidig lov om arbeiderutvalg*) was passed on July 22, 1920. The following paragraphs give a summary of this measure. The functions of the councils are advisory only, it will be observed, and no penalty is laid down for failure to comply with the terms of the law.

The law applies to private and public concerns which employ regularly throughout the year not less than 50 workers, provided that such concerns (1) come under the law of September 18, 1915, as to the protection of industrial workpeople, or (2) have for their object the working of railway, tramway, telegraph or telephone services. The king may extend the application of the law to concerns other than those above indicated.

In every establishment included under the law a works council is to be formed, if demanded by one-fourth of the workpeople. The term "workpeople" applies to all persons over 18 years of age who are employed in the concern, except works' managers, managers, or other superior officials, apprentices, messengers, office employees, or foremen whose chief duties are of a supervisory character, or who receive a fixed monthly or yearly salary.

The members of the council (who must not number less than 2 nor more than 10) are to be elected for a year from among such workers in the establishment as are over 21 years of age, and so far as possible, from those who have been in the service of the concern for two years or more. All workers over 18 years of age are entitled to vote.

The works council is to consider and express opinions upon the affairs of the concern, so far as they relate to the following points: (1) Important changes in the management, so far as they affect

¹ From The Labor Gazette, London, August, 1920 (p. 423). Source: Arbeidsgiveren, July 23, 1920 (the organ of the Norwegian Employers' Association).

working conditions; (2) questions concerning ordinary scales of pay, piecework rates, hours of labor, overtime, arrangement of work during short time, holidays, and other working conditions, unless agreement on these matters is reached by direct negotiations between the employer and the workpeople concerned; (3) workshop regulations and additions to or changes therein; and (4) questions as to the setting up or the management of welfare institutions (sickness and funeral funds, savings banks, workmen's dwellings, etc.).

Before coming to any decision on the subjects above referred to, the employer must consult the works council. When pressing circumstances make it impossible for him to do this, he may inform the council at the earliest opportunity of his decision, giving his reasons for it.

Further, the council is entitled (and if requested by one of the parties is bound) to act as conciliator in disputes in which any worker is concerned if they relate to working conditions or to the dismissal of workpeople.

Any dispute which may arise between the employer and the works council regarding the competency of the latter to deal with a question shall be decided by the king or his nominee.

It is provided that the time for negotiations between the works council and the employer is to be fixed by the latter. Otherwise the meetings of the works councils are to be appointed by the chairman so as not to interfere with the usual course of work in the establishment. If a meeting is held by decision of the employer during working hours this is not to involve a reduction in the wages of the members of the council. It is further provided that the members of the works council must not be discharged or given notice of dismissal unless real reasons exist.

The law enters into operation immediately.

LABOR ORGANIZATIONS.

Second International Labor Conference, Genoa.¹

THE second meeting of the general conference of the International Labor Organization opened at Genoa on June 15 and concluded its sessions on July 10, 1920. The agenda were drawn up by the governing body of the International Labor Office at a meeting held in Paris on January 27, 1920, and comprised the following items relating to seamen:

1. The application to seamen of the draft convention adopted by the first session of the General Conference at Washington, in November, 1919, limiting the hours of work in all industrial undertakings. Consequential effects as regards manning and the regulations relating to accommodation and health on board ship.
2. Supervision of articles of agreement, provision of facilities for finding employment for seamen. Application to seamen of the draft convention and recommendations adopted at Washington as above, in regard to unemployment and unemployment insurance.
3. Application to seamen of the draft convention adopted at Washington prohibiting the employment of children under 14 years of age.
4. Consideration of the possibility of drawing up an international seamen's code.

The International Labor Office sent to the members of the International Labor Organization a questionnaire covering the items of the agenda, and translated, summarized, and arranged the information contained in the replies. From this information, from the opinion expressed by the various Governments, and from the experience gained at the Washington conference, the International Labor Office prepared for the conference a report for each item of the agenda, so presented that it furnished the conference with a basis and order of discussion.

The conference was made up of three general groups: The official delegates, who were supposed to be fully conversant with maritime questions, and the nonofficial delegates, who were representatives of shipowners and of seamen's organizations.

Baron Mayor des Planches, Italian member of the governing body, was elected president, and M. Arthur Fontaine (France), M. Nijgh (Netherlands), and Mr. Havelock Wilson (Great Britain) were elected vice presidents, representing the Governments', shipowners', and seamen's delegates, respectively.

The conference set up four commissions, one for each item of the agenda, consisting of 30, 21, 12, and 30 members, respectively, each of the three groups of delegates being equally represented. A fifth commission, to deal separately with inland navigation, was made up of 18 members.

The commission on the first and most important item of the agenda—that relating to hours of labor—reported on July 5, and

¹ This article is based on information obtained from the Daily Bulletins of the conference, and from the Labor Gazette (London) for July, 1920, p. 357, and August, 1920, pp. 419, 420. The questionnaire in connection with the agenda sent to the various governments, and the reply by the Government of the United States, will be found in the MONTHLY LABOR REVIEW for May, 1920, pp. 1-21.

precipitated the greatest controversy of the conference. The contention turned mainly upon the question whether the convention of the 8-hour day and 48-hour week adopted at the Washington conference applied also to the case of seamen and thus bound the Genoa conference.

The seamen as a body held that the Washington convention did bind the Genoa conference, but the majority of the shipowners and many of the Government delegates contended that as the Washington agenda referred only to land transport the Washington convention could only be regarded as a draft for consideration by the Genoa conference. The commission had discussed and voted upon many alternative limitations of the effective working hours on board ship and upon compensation for work beyond 48 hours per week by allowing an equivalent number of hours off when in port, and other arrangements, but all proposals failed to receive the requisite support, so that when the convention eventually was submitted to the full conference it remained in effect the seamen's proposal for an 8-hour day and a 48-hour week.

When this convention came up for a final vote it failed by a fraction of a vote to secure the requisite two-thirds majority as required by article 405 of the Treaty of Versailles.

The commission on the second item of the agenda reported two draft conventions, a recommendation, and a resolution, leaving to the commission on the fourth item the question of the supervision of articles of agreement. The first of the draft conventions relates to the finding of employment for seamen and provides for the establishment and maintenance of a system of free public employment offices either jointly by representative associations of shipowners and seamen or by the State, open to seamen of all countries which ratify the convention. The second draft convention, the recommendation, and the resolution deal with unemployment insurance. They provide that seamen shall have the right to an indemnity against unemployment resulting from the loss or foundering of a vessel, and suggest that each member of the International Labor Organization should establish an effective system of insurance against unemployment from any cause among seamen. These proposals were all adopted by the conference after considerable discussion.

The commission on the third item of the agenda—that regarding the employment of children—presented a unanimous report the main provision of which was adopted by the conference with far less discussion than that provoked by the reports of the commissions on the first and second items. The main provision of the report is that after July 1, 1922, no child under 14 years of age, shall be employed to work on vessels of any kind. Two other articles providing that no seaman under 18 years of age shall be employed as a trimmer or stoker, and that no person under 17 years of age be employed on night watches between 8 p. m. and 6 a. m., were excluded on the ground that they fell outside the terms of the agenda, but a proposal was adopted that the first of them be on the agenda of the next general conference.

The commission on the fourth item of the agenda—that relating to an international seamen's code—offered a recommendation, which was adopted, advising each member of the International

Labor Organization to undertake the formulation of a "seamen's code" comprising all its laws and regulations relating to seamen as such, in order to facilitate the task of establishing an international seamen's code.

The commission set up to deal with inland waterways suggested that each member of the International Labor Organization should undertake to introduce legislation regarding hours of work, etc., in accordance with the declaration in the labor clauses of the treaties of peace, having regard to the needs and conditions peculiar to each country. A similar recommendation was made regarding the fishing industry.

At the final sessions of the conference on the 9th and 10th of July all the draft conventions and recommendations proposed were put to the final vote and all received the requisite two-thirds majority vote with the exception, as noted above, of the draft convention on hours of labor.

International Conference of Seafarers at Genoa.¹

ON THE four days preceding the opening at Genoa, Italy, June 15, 1920, of the Second International Labor Conference under the auspices of the League of Nations, an open International Conference of Seafarers was held in that city. The particular purpose of the conference, called by the International Federation of Seafarers, was "to make it possible for the world's merchant seamen to present a solid front to the League of Nations meeting."

Seventy-five delegates were seated, representing seamen's organizations from America, Belgium, France, Germany, Gibraltar, Great Britain, Greece, Netherlands, Italy, Japan, Norway, Spain, and Sweden. Mr. J. Havelock Wilson, president of the International Seafarers' Federation, was elected chairman.

Early in the conference it was evident that many of the delegates differed fundamentally as to the aims and ideals of union seamen.

The following resolutions, bearing the signatures of the American delegates, were the storm center of discussion:

Whereas the seamen of all countries, except one, are subject to criminal penalties for refusing to continue to labor when there is no danger to either life or property; and

Whereas seamen of such countries who desert from the vessels upon which they are serving, may be, and often are, arrested, detained and forcibly returned to their respective vessels; and

Whereas seamen of all ratings, from deck officer to deck boy and from engineer to coal passer are subject to such treatment, action being taken under treaties entered into between the different countries; and

Whereas there is no equality between the contracting parties under these ancient laws and treaties, one party to the contract being subject to imprisonment for refusal to carry out the contract while the other party, the shipowner, may at any time abrogate the entire contract upon payment of an insignificant sum of money, and even without a prison alternative if such money is not paid; and

Whereas this status of the world's seafarers yet remains from the era of slavery and serfdom, and under these conditions young men of average modern education hesitate to become seamen, and refuse to remain at sea when they become fully acquainted with their legal status as seamen: Therefore be it

¹ Seamen's Journal, San Francisco, July 21, 1920, pp. 1 and 2.

Resolved, By the International Seafarers' Conference, in meeting assembled, at Genoa, Italy, June 12, 1920, that we hereby call upon the maritime nations of the world to repeal such laws and abrogate such treaties; Further

Resolved, That we request the forthcoming meeting to be held under the auspices of the League of Nations to so recommend to the respective Governments.

Among the objectors to this resolution was Mr. T. W. Moore, of the Imperial Merchant Service Guild (Great Britain) who stated that the matter of the resolution was not included in the agenda for the League of Nations' meeting but was an "imported" subject.

When the votes of the ships' officers (who were not authorized to express the seamen's views) were excluded, the final result of the ballot on the above resolution was—

For—Germany, Netherlands, Italy, Japan, Norway, and Sweden.
Against—Belgium, Great Britain, and France.

Not properly recorded—Denmark, Greece, and Spain.

The conference declared for a shorter working day by adopting the resolution given below, which represents a compromise with the British and French delegates:

The conference insists upon the principle of the 8-hour day and the 48-hour week, and refers the working out of the details to each country, in a manner best suited for its own trade, and apply them in the shortest possible time, with the understanding that work in port shall be on the 44-hour week basis, i. e., of 8 hours' work for the first five days of the week, and of 4 hours' work on Saturday in order to respect the English system regarding the Saturday afternoon.

The proposal to establish an international control board was carried by 27 ayes against 26 noes.

On the closing day of the conference the Italian delegates introduced a resolution expressing sympathy with the Russian people, protesting against the blockade and demanding its removal. After considerable controversy the resolution was adopted. Following such adoption another resolution, introduced by Mr. A. Rivelli, the secretary of the French Seamen's Union, and passed by a small majority, pledged the conference to uphold the decision of the "International Syndical Association" which recently decided to boycott Hungary until the persecution of workers in that country had ceased."



International Miners' Congress at Geneva.

A REPORT from the United States consul at Bern, Switzerland, to the Department of State furnishes an account of the twenty-fifth congress of the International Association of Miners held in Geneva August 2-6, 1920. The two principal subjects of discussion were the nationalization and socialization of mines and preparation for concerted action in the future for the purpose of preventing war. Other subjects discussed were the shorter workday, the creation of a permanent secretariat, and the institution of an international office for the distribution of coal, the last two questions being the only items on the agenda of the conference.

[836]

Twelve countries, with a total of 148 delegates, were represented at the conference, the distribution by countries and the number of miners represented being as follows:

Country.	Number of delegates.	Number of miners represented.
America.....	1	500,000
Austria.....	1	22,000
Belgium.....	10	123,000
Czecho-Slovakia.....	6	123,000
France.....	23	130,000
Germany.....	37	768,000
Great Britain.....	65	900,000
Netherlands.....	1	4,000
Hungary.....	1	25,000
Jugo-Slavia.....	1	6,000
Poland.....	11	5,000
Luxemburg.....	1	

After considerable debate, chiefly in favor of the principle of nationalization, the following resolution was passed:

The congress considers that each nation should engage itself definitely to fight for the nationalization or socialization of mines in all countries. The suppression of capitalist ownership and the enforcement of the control and administration of industry by representatives of the State and of the interested workers, the consumers also being represented, is adopted. Every three months the secretary of each section will make known to the International Bureau the progress made in this respect by his country.

On the last day of the convention another resolution on the question was passed by the congress as follows:

The congress declares that the Miners' International Committee shall meet within two months after the end of the congress, in order to examine once more the question of nationalization and see how it stands in each country. It authorizes the International Committee to proceed from this moment, with full powers, by all the means at its disposal (including an international general strike if this should be necessary), to the speedy realization of this claim in all countries. By means of national reports it will be kept fully informed of the general situation, and these will serve as indications of the course to be followed. If the resort to extreme measures is deemed indispensable, the committee should first obtain the assurance by definite engagements that it will have the cooperation of the various federate nationalities, which will then have to execute integrally the decisions made. The nationalities should from now on prepare their citizens or subjects for all emergencies in such a manner that they will be prepared at any moment to execute the decisions of the International Committee.

It was also agreed that in the event of any monarch or Government pursuing an aggressive military policy either a general world strike or boycotting the country concerned would be carried on.

The International Committee reporting on the questions submitted to it recommended the creation of a permanent secretariat with its headquarters in London. The congress voted to adopt the principle of a permanent secretariat but left its organization to the International Labor Bureau. Other proposals of the committee for statutes providing for a maximum working day of eight hours, including descent and ascent, a minimum wage corresponding to the cost of living, the institution of pensions, and the nomination of workmen inspectors were adopted.

A resolution was adopted to the effect that a thorough investigation of the present method of distribution of coal with a view to preventing excessive prices caused by transport and retransport should be made by the International Labor Bureau of the League

of Nations, since this bureau seemed to be peculiarly fitted for the work.

The congress also passed a resolution inviting the Governments of all countries to act immediately in order to establish food centers to combat the famine now prevailing in certain countries.

International Association of Printing House Craftsmen.

THE International Association of Printing House Craftsmen, an organization of approximately 2,000 executives in the printing industry, was organized at Philadelphia in September, 1919.

With the development of the printing trade, the superintendents, foremen, and other executives immediately interested in production became a distinct group in the industry, and found that neither the employers' organization nor that of the journeymen met their needs.

To meet the need for a distinct "in-between" organization among men handling production problems, a group of printing-house executives met in New York in September, 1909, and organized a local "club of printing-house craftsmen." Monthly meetings were held at which efficient methods of work and the newest mechanical devices and labor saving methods were discussed. The success of this organization led to the formation of similar clubs in other cities. In the fall of 1919 representatives of about 15 local associations met in Philadelphia and organized the International Association of Printing House Craftsmen. Two of these local associations are located in Canada—at Montreal and Toronto. The others were organized in the larger cities of the United States, including, in addition to New York and Philadelphia, Chicago, Boston, Baltimore, Washington, Newark, and Buffalo.

A similar organization has existed in England since 1893, when the Printers' Managers and Overseers Association was organized.

The association held its first annual convention in Washington August 21-23, 1920, at which about 350 delegates were present.

Committees are appointed by the association to investigate important matters concerning the industry. At present there is a committee working in cooperation with a similar committee of the American Institute of Graphic Arts on the standardization of colors for process color work and the best practice to be pursued in the execution of such work.

At the recent convention a committee was appointed to standardize apprenticeship conditions and to devise a uniform system of education for apprentices in order that the time spent in learning the trade may be utilized to better advantage. In speaking on this subject, the president of the association, Mr. Perry R. Long, said:

The local clubs are beginning to take a serious look at the apprentice question, with a view of finding some practical method of attracting a desirable class of boys with a good elementary education to learn the various trades of our industry. The local clubs will shortly make their influence felt to the extent that definite apprenticeship plans will be arranged between the employers, journeymen, and the local union. As department and supervising executives, our members are constantly in close touch with the apprentices and must, therefore, assume the responsibility of seeing that the proper number of apprentices is employed and that they are making satisfactory progress in proportion to the time they have served.

The officers of the association are:

Perry R. Long, Philadelphia, president.
 John Kyle, New York City, first vice president.
 William R. Goodheart, Chicago, second vice president.
 L. M. Augustine, Baltimore, secretary.
 John J. Deviny, Washington, treasurer.

Growth of International Seamen's Union of America.¹

THE Secretary-Treasurer of the International Seamen's Union of America reports an average increase of 22,000 annually for the last four years in the membership of that organization, the total membership being 106,000, divided among the different districts as follows: Atlantic, 77,000; Pacific, 20,000; Great Lakes, 9,000. The numbers in the separate groups are: Firemen, 41,000; sailors, 37,000; cooks, 16,700; fishermen, 9,800; ferryboat men, harbor boat men, etc., 1,500.

Sheet-Metal Workers' School at Shawnee, Okla.²

THE State Council of Oklahoma Amalgamated Sheet-Metal Workers' International Alliance has recently started a school at Shawnee, Okla., for the teaching of the metal trades to apprentices and journeymen. Classes of from 40 to 50 students are now held twice each week in mechanical drawing, sheet-metal drafting, and the various details of that trade. Improved ways of performing work are also discussed. It is planned to enlarge the school's curriculum.

Philippine Labor Congress.³

THE Labor Congress of the Philippine Islands recently held its eighth annual meeting at which resolutions were adopted favoring an eight-hour day and woman suffrage. The congress also voiced its opposition to the doctrines of Bolshevism.

Czecho-Slovak Trade-Union Movement, 1919.⁴

THE annual report for 1919, just issued by the General Federation of Czecho-Slovak Trade-Unions, shows a great increase in the strength of the trade-union movement in that country. The membership increased from 161,247 at the end of 1918 to 657,203 in December, 1919. The total revenue of the unions in 1919 was 401,388 crowns (\$81,481.76, par), as against 116,499 crowns (\$23,649.30,

¹ Seamen's Journal, San Francisco, Aug. 18, 1920, p. 7.

² Oklahoma Federationist, Oklahoma City, Aug. 28, 1920, p. 1.

³ Seamen's Journal, San Francisco, Aug. 25, 1920, p. 4.

⁴ Deutsche Wirtschafts-Zeitung. Berlin, July 15, 1920. Quoted in Review of the Foreign Press (The Economic Review), London, Aug. 6, 1920

par) in 1918. The increased membership was only attained with the help of the army, the number of contributing members amounting to 232,108 only. An attempt to make the German and Magyar unions of the country affiliate with the Federation of Czecho-Slovak unions failed, the German unions retaining their own organization in Reichenberg and the Magyar unions theirs in Pressburg. The International Trade-Union Federation at Amsterdam has decided to make a further attempt to reconcile these unions.

Formation of National Union of Commercial Workers in South Africa.¹

THE National Union of Commercial Workers, an amalgamation of associations of shop assistants and commercial workers in South Africa, came into existence on May 1, 1920. The headquarters of the union will be at Durban and membership is open to all European commercial workers and all Europeans engaged in the manufacture, preparation, and distribution of goods. The first conference of the union was held at Bloemfontein recently, at which one of the important questions discussed was that of the formation of joint boards throughout South Africa. The constitution, as adopted by the conference, provides that only the national executive can call a strike and then only after two-thirds of the members by ballot have so determined.

¹ Data taken from *Christian Science Monitor* (Boston) for Aug. 28, 1920, p. 7.

STRIKES AND LOCKOUTS.

Strikes and Lockouts in the United States, April, May, and June, 1920.

ACCORDING to information received by the United States Bureau of Labor Statistics, 1,166 strikes and lockouts occurred in this country during the second quarter of the year 1920. Inasmuch as many reports do not reach the Bureau until several months after the strikes occur, the number of strikes occurring during the quarter was probably somewhat larger than the above figure would indicate. Complete data relative to these strikes have not been received by the Bureau and it has not been possible as yet to verify what have been received. The figures in the following tables should therefore be understood to be only an advance statement and are not to be accepted as final.

NUMBER OF STRIKES AND LOCKOUTS BEGINNING IN EACH MONTH, JANUARY TO JUNE, INCLUSIVE, 1919 AND 1920.

Kind of dispute.	Jan.	Feb.	Mar.	Apr.	May.	June.	Month not stated.	Total.
Strikes:								
1919.....	184	183	175	248	388	303	63	1,544
1920.....	197	190	290	370	351	311	104	1,813
Lockouts:								
1919.....	5	7	6	14	25	12	2	71
1920.....	6	4	6	3	11	11	5	46
Total:								
1919.....	189	190	181	262	413	315	65	1,615
1920.....	203	194	296	373	362	322	109	1,859

A few important strikes occurred during the quarter under review. Probably the one that caused the most inconvenience to the public generally was the strike of switchmen and yardmen which started in Chicago in April and spread throughout the country, ending in one city to begin in another and returning later to the former city in some cases three times. The strikes involving the largest numbers of persons were probably those of the timber workers in northern Michigan, Wisconsin, Minnesota, and Washington, in which some 60,000 were reported to have been engaged. Forty thousand miners in Kansas were reported to have struck against the industrial court law recently passed. Twenty thousand mill hands struck in New Bedford and vicinity. In New York City strikes were especially numerous: In April 7,000 elevator employees, 7,000 marine employees, 4,000 longshoremen, and 3,000 ship painters; in May 13,000 barbers, 10,000 fur workers, 5,000 city employees, 2,500 store-fixture workers, and 2,000 milk drivers; and in June 1,500 waiters in restaurants were reported to have struck. Other strikes worthy of mention were those of 11,000 copper miners in Montana in April; of 12,000 coal miners in southern Illinois, eastern Ohio, and West Virginia in April; of 13,000 building-trades workers in Troy, Rochester, and Syracuse, N. Y.; 10,000 carpenters in Philadelphia in May; 10,000 machinists in Cincinnati and 2,500 in Buffalo; 6,000 city employees, 1,000 molders' helpers, 1,100 cooks and waiters, and 4,000 carpenters in Chicago; 8,000 brass workers in Waterbury, Conn.; textile workers

in Troy, N. Y., and Wilmington, Del.; and the trolley-car strikes in Cleveland, Toledo, and central New York.

The data in the following tables relate to the 1,136 strikes and 30 lockouts reported to have occurred in the three months under consideration. A few strikes that occurred during the quarter but in which the exact month was not stated appear in a group by themselves.

STATES IN WHICH 10 OR MORE STRIKES AND LOCKOUTS WERE REPORTED AS OCCURRING DURING THE SECOND QUARTER OF 1920.

State.	April.		May.		June.		Month not stated.		Total.		Grand total.
	Strikes.	Lock-outs.	Strikes.	Lock-outs.	Strikes.	Lock-outs.	Strikes.	Lock-outs.	Strikes.	Lock-outs.	
Massachusetts.....	53	.....	63	2	38	2	22	1	176	5	181
New York.....	60	.....	55	1	45	2	16	.....	176	3	179
Illinois.....	28	.....	25	.....	24	1	4	.....	81	1	82
Ohio.....	26	.....	19	1	18	1	9	.....	72	3	75
Connecticut.....	30	.....	22	.....	16	1	3	1	71	1	72
Pennsylvania.....	22	.....	22	1	21	.....	5	.....	70	1	71
Rhode Island.....	17	.....	16	.....	11	1	8	.....	52	1	53
New Jersey.....	12	1	8	.....	17	.....	4	.....	41	1	42
California.....	8	.....	5	.....	17	1	7	2	37	3	40
Indiana.....	9	.....	8	.....	5	.....	2	1	24	1	25
Minnesota.....	7	.....	7	2	6	.....	2	.....	22	2	24
Wisconsin.....	6	.....	9	.....	6	.....	3	.....	24	.....	24
Michigan.....	7	1	9	1	3	1	1	.....	20	3	23
Texas.....	5	.....	8	.....	9	.....	1	.....	23	.....	23
West Virginia.....	7	.....	7	.....	7	.....	2	.....	23	.....	23
Missouri.....	9	.....	3	.....	5	.....	1	.....	18	.....	18
Washington.....	1	.....	9	.....	6	.....	2	.....	18	.....	18
Maine.....	2	.....	5	.....	5	.....	2	.....	14	.....	14
Maryland.....	5	.....	.....	.....	5	.....	3	.....	13	.....	13
Montana.....	4	.....	5	2	2	.....	.....	.....	11	2	13
Tennessee.....	1	.....	7	.....	4	1	.....	.....	12	1	13
New Hampshire.....	5	.....	1	.....	2	.....	2	.....	19	.....	19
Virginia.....	5	.....	3	.....	2	.....	.....	.....	10	.....	10
23 other States and Territories.....	41	1	35	1	37	.....	5	.....	118	2	120
Total.....	370	3	351	11	311	11	104	5	1,136	30	1,166

Of these disputes, 857 strikes and 20 lockouts occurred east of the Mississippi and north of the Ohio and Potomac Rivers; 190 strikes and 8 lockouts occurred west of the Mississippi; and the remaining 77 strikes and 2 lockouts south of the Ohio and Potomac Rivers and east of the Mississippi. Twelve of the strikes extended over more than one district. In 114 strikes union officials repudiated the action of the men in striking.

As to cities, New York City had the largest number of disturbances, 76, followed by Chicago with 43, Boston with 19, New Bedford, Mass., with 18, Buffalo, N. Y., with 16, Philadelphia with 15, Providence, R. I., and Rochester, N. Y., with 14 each, Lawrence, Mass., New Haven, Conn., St. Louis, Mo., and Trenton, N. J., with 13 each, Cleveland and Springfield with 12 each, Milwaukee with 11, and Cincinnati, Ohio, Detroit, Mich., and Pawtucket, R. I., with 10 each.

As to sex, the distribution was as follows: Males, 835 strikes and 20 lockouts; females, 42 strikes and 1 lockout; both sexes, 136 strikes and 5 lockouts; sex not reported, 123 strikes and 4 lockouts.

The industries in which 9 or more strikes and lockouts were reported are shown in the table which follows:

NUMBER OF STRIKES AND LOCKOUTS IN SPECIFIED INDUSTRIES REPORTED AS OCCURRING DURING THE SECOND QUARTER OF 1920.

Industry or occupation.	April.		May.		June.		Month not stated.		Total.		Grand total.
	Strikes.	Lock-outs.	Strikes.	Lock-outs.	Strikes.	Lock-outs.	Strikes.	Lock-outs.	Strikes.	Lock-outs.	
Building trades.....	75	2	69	2	56	1	23	.....	223	5	228
Metal trades.....	25	1	30	1	53	3	11	1	119	6	125
Railroad employees.....	56	.....	21	.....	30	.....	5	.....	112	.....	112
Textiles.....	47	.....	19	1	18	.....	11	.....	95	1	96
Freight handling and teaming.....	19	.....	22	.....	22	1	4	1	67	2	69
Clothing.....	23	.....	9	.....	14	1	6	1	52	2	54
Bakers.....	4	.....	26	.....	2	.....	.....	.....	30	.....	30
Miners.....	16	.....	5	.....	3	.....	1	.....	25	.....	25
Street railways.....	4	.....	6	1	9	.....	4	.....	23	1	24
Lumber and timber.....	4	.....	10	1	6	.....	2	1	22	2	24
Waiters and cooks.....	10	.....	5	2	7	.....	.....	.....	22	2	24
Stone workers.....	3	.....	10	.....	3	.....	2	.....	18	.....	18
Light, heat, and power (gas and electric).....	1	.....	8	.....	7	.....	.....	.....	16	.....	16
Street and sewer employees.....	4	.....	7	.....	3	.....	1	.....	15	.....	15
Printing and publishing.....	3	.....	6	.....	4	.....	1	.....	14	.....	14
Barbers.....	1	.....	7	.....	4	.....	1	.....	13	.....	13
Shipbuilding.....	3	.....	7	.....	3	.....	.....	.....	13	.....	13
Clerks (retail).....	3	.....	4	.....	4	.....	1	.....	12	.....	12
Leather.....	2	.....	1	1	5	2	1	.....	9	3	12
Furniture industry.....	5	.....	3	.....	3	.....	.....	.....	11	.....	11
Electrical and gas supply.....	4	.....	2	.....	4	.....	1	.....	11	.....	11
Iron, steel, and tin.....	2	.....	5	.....	2	1	1	.....	10	1	11
Paper and paper goods.....	2	.....	4	.....	3	.....	1	.....	10	.....	10
Brewery and soft-drink workers.....	1	.....	2	.....	2	.....	5	.....	10	.....	10
Tobacco workers.....	4	.....	2	.....	3	.....	1	.....	10	.....	10
Telegraph and telephone.....	1	.....	3	.....	3	.....	2	.....	9	.....	9
Jewelry workers.....	6	.....	1	.....	1	.....	1	.....	9	.....	9
Chemical workers.....	3	.....	2	.....	3	.....	1	.....	9	.....	9
Miscellaneous.....	39	.....	42	2	33	2	9	1	123	5	128
Not reported.....	3	.....	13	.....	1	.....	7	.....	24	.....	24
Total.....	370	3	351	11	311	11	104	5	1,136	30	1,166

Included in the above table are 61 strikes of building laborers, 38 strikes of carpenters, 19 strikes of painters and paper hangers, 18 strikes of plumbers and steam fitters, 17 strikes of electrical workers, 47 strikes of teamsters, 46 strikes of molders, 34 strikes of machinists, 19 strikes of coal miners, 11 strikes of boot and shoe workers, 25 strikes of cotton and woolen workers, and 11 strikes of silk workers.

In 651 strikes and 19 lockouts the employees were reported as connected with unions; in 28 strikes they were not so connected; in 2 strikes they were not connected with unions at the time of striking, but joined immediately after; in 455 strikes and 13 lockouts the number was not reported.

In 603 strikes and 13 lockouts only 1 employer was concerned in each disturbance; in 22 strikes, 2 employers; in 13 strikes, 3 employers; in 8 strikes, 4 employers; in 8 strikes, 5 employers; in 38 strikes and 4 lockouts, more than 5; and in 444 strikes and 11 lockouts the number was not reported.

In the 587 strikes for which the number of persons on strikes was reported there were 578,420 strikers, an average of 985 per strike. In 102 strikes, in which the number involved was 1,000 or more, the strikers numbered 495,926, thus leaving 82,494 involved in the remaining 485 strikes, or an average of 170 each. By months the figures

are as follows: April, 217,573 strikers in 205 strikes, average 1,061, of whom 26,472 were in 164 strikes of less than 1,000 persons each, average 161; May, 178,152 strikers in 174 strikes, average 1,024, of whom 26,006 were in 141 strikes of less than 1,000 persons each, average 184; June, 126,292 strikers in 166 strikes, average 761, of whom 26,392 were in 144 strikes of less than 1,000 persons each, average 183.

The following table shows the causes of the strikes and lockouts in so far as reported. In over three-fourths of the disturbances the question of wages or hours was prominent and in nearly one-fifth the question of union recognition or existence was involved:

PRINCIPAL CAUSES OF STRIKES AND LOCKOUTS REPORTED AS OCCURRING DURING THE SECOND QUARTER OF 1920.

Matter in dispute.	April.		May.		June.		Month not stated.		Total.		Grand total.
	Strikes.	Lock-outs.	Strikes.	Lock-outs.	Strikes.	Lock-outs.	Strikes.	Lock-outs.	Strikes.	Lock-outs.	
Increase in wages.....	187	2	173	3	157	6	63	2	580	13	593
Decrease in wages.....	3	2	1	.....	4	.....	.....	.....	9	.....	9
Nonpayment of wages.....	3	1	.....	.....	4	.....	.....	.....	8	.....	8
Increase of hours.....	2	.....	.....	.....	.....	.....	.....	.....	2	.....	2
Decrease of hours.....	5	.....	9	.....	11	.....	2	1	27	1	28
Increase of wages and decrease of hours.....	34	.....	28	.....	29	1	5	.....	96	1	97
Recognition of union.....	22	1	22	3	16	3	3	.....	63	7	70
Recognition and wages.....	15	.....	13	1	7	.....	1	.....	36	1	37
Recognition and hours.....	1	.....	1	.....	.....	.....	.....	.....	2	.....	2
Recognition, wages, and hours.....	5	.....	3	1	5	1	2	.....	15	2	17
Recognition and conditions.....	1	.....	1	.....	.....	.....	.....	.....	2	.....	2
Conditions.....	10	.....	8	.....	5	.....	3	.....	26	.....	26
Conditions and wages.....	5	.....	3	.....	6	.....	2	.....	16	.....	16
Conditions and hours.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	1
Conditions, wages and hours.....	.....	.....	3	.....	1	.....	.....	.....	4	.....	4
Employees discharged.....	14	.....	8	.....	9	.....	3	.....	34	.....	34
Discharge of objectionable persons wanted.....	8	.....	9	1	2	.....	2	.....	21	1	22
Nonunion men.....	6	.....	6	.....	4	.....	1	.....	12	.....	12
Interpretation of agreement.....	1	.....	2	.....	3	.....	3	.....	9	.....	9
New agreement.....	1	.....	4	.....	2	.....	.....	.....	7	.....	7
Synpathy.....	17	.....	12	1	10	.....	2	.....	41	1	42
Jurisdiction.....	.....	.....	1	.....	1	.....	1	.....	3	.....	3
Miscellaneous.....	11	.....	7	.....	12	.....	2	.....	32	.....	32
Not reported.....	18	.....	40	1	23	.....	9	2	90	3	93
Total.....	370	3	351	11	311	11	104	5	1,136	30	1,166

It is frequently difficult to state exactly when a strike terminates, since many strikes end without any formal vote taken on the part of the strikers. The Bureau has information of the actual ending of 322 strikes and 10 lockouts during the quarter, besides 10 strikes in which the positions of the employees were filled with practically no interruption in the work.

RESULTS OF STRIKES AND LOCKOUTS ENDING DURING THE SECOND QUARTER OF 1920.

Result.	April.		May.		June.		Total.		Grand total.
	Strikes.	Lock-outs.	Strikes.	Lock-outs.	Strikes.	Lock-outs.	Strikes.	Lock-outs.	
In favor of employers.....	41	1	15	.....	21	3	77	4	81
In favor of employees.....	20	.....	22	.....	24	1	66	1	67
Compromised.....	33	1	40	1	25	2	101	4	105
Employees returned pending arbitration.....	6	.....	8	.....	.....	.....	14	.....	14
Not reported.....	15	1	19	.....	30	.....	64	1	65
Total.....	118	3	104	1	100	6	322	10	332

In the table which follows the duration of 201 strikes and 6 lockouts is given. Besides these there were 11 strikes for which the statement was made that the duration was short, and 110 strikes and 4 lockouts for which the duration was not reported.

DURATION OF STRIKES AND LOCKOUTS DURING THE SECOND QUARTER OF 1920.

Duration.	April.		May.		June.		Total.		Grand total.
	Strikes.	Lock-outs.	Strikes.	Lock-outs.	Strikes.	Lock-outs.	Strikes.	Lock-outs.	
2 day or less.....	11		6		3		20		20
3 days.....	5		4		2		11		11
4 days.....	5		4		2		11		11
5 days.....	5		3		2		10		10
1 to 7 days.....	12		6	1	1	1	19	2	21
2 to 2 weeks.....	19		14		9	1	42	1	43
3 to 3 weeks.....	5	1	6		3	1	14	2	16
to 4 weeks.....	1		6		7		14		14
1 to 3 months.....	10		14		27	1	51	1	52
Over 3 months.....	2		1		6		9		9
Total.....	75	1	64	1	62	4	201	6	207

The number of days lost in strikes ending during the quarter was 5,297. The average duration of these strikes was about 26 days. The average duration of strikes lasting less than 90 days was 21 days. By months the record is as follows: April, days lost 1,388, average 19 days; May, days lost 1,267, average 20 days; June, days lost 2,642, average 43 days. In the case of strikes lasting less than 90 days the average duration was 15 days in April, 19 days in May, and 33 days in June. In the 6 lockouts 107 days were lost, average 18 days.

Australian Civil Service Strike.¹

ALTHOUGH the Public Service Commissioner of Western Australia was working on the classification of salaries and the ministry had already planned to assist Government employees receiving up to £324 (\$1,576.75, par) the civil service employees of that State were not satisfied with the Government's response to their demand for wage increases. They accordingly went on strike, tying up the public offices and stopping to a considerable extent the governmental machinery. The Premier's suggestion for an appeal board was objected to on the ground that such a board would be too slow in its operation. Attempts to break the deadlock were a failure. The civil service employees' agitation for higher wages and better working conditions in other Australian States has been quite successful, and the Western Australian civil service strikers are being backed by their fellow public servants in Queensland, New South Wales, and elsewhere.

¹ Christian Science Monitor, Boston, Aug. 31, 1920, p. 4.

WHAT STATE LABOR BUREAUS ARE DOING.

[This section will contain each month information regarding current activities of State labor bureaus and offices. It is believed that this information will be not only interesting but mutually suggestive and helpful. Every State labor bureau is urged to report promptly to the United States Bureau of Labor Statistics any item of interest regarding its work.]

State Commissions for the Study and Revision of Child-Welfare Laws.¹

NINE years ago Ohio appointed the first commission to study conditions surrounding children in that State and to codify and revise the laws relating to children. Since then the District of Columbia and the following 16 States have appointed similar committees or commissions: Connecticut, Delaware, Indiana, Kentucky, Michigan, Minnesota, Missouri, Montana, Nebraska, New Hampshire, New York, Oklahoma, Oregon, South Carolina, Texas, and Wisconsin. In at least 10 States (Arkansas, Colorado, Kansas, Maine, New Hampshire,² New Jersey, Tennessee, Vermont, Virginia, and Washington) movements are now under way for the creation of official commissions. Altogether almost two-thirds of the States have taken some definite action toward studying legislation affecting children, in order to suggest new laws or revisions of old ones. At the same time educational campaigns have been carried on to explain the child-welfare needs of the States. The subjects studied by the commissions include: The safeguarding of health, school attendance, regulations of employment, protection against exploitation or corruption of morals, special provision and training of dependent and neglected children, methods of dealing with delinquent children, and State supervision of agencies and institutions.

Labor Camps in California.

ACCORDING to a report³ from the Department of Labor Camp Sanitation of the State Commission of Immigration and Housing of California, that State has more outdoor labor camps than any other of the Union, such camps existing in all the basic industries and prior to 1913 being entirely unregulated by law.

On August 3, 1913, there was a mutiny of 2,800 workers on a hop ranch near Wheatland, Calif., on account of intolerable conditions, including sleeping and toilet inadequacies, the sale of drinking water, and wage abuses. A riot resulted and several people were killed. This called Nation-wide attention to conditions in thousands of camps, and one week after this riot the first act regulating California labor camps went into effect. Since then the law has been immensely widened in scope by redraft and amendment.

The report of the California Department of Camp Sanitation declares that "the result of six years of enforcement of this law has been nothing short of revolutionary." Five years ago it would not have

¹ Children's Bureau, U. S. Department of Labor. Bureau Publication, No. 71. Children's Year Follow-Up Series No. 6.

² The old commission reported in 1915.

³ Typewritten manuscript forwarded by the Director of Publicity of the Commission of Immigration and Housing of California, San Francisco, Calif.

been easy to find in any part of California a labor camp with sufficient bunks and bathing facilities. Such provisions are now the rule. "There has been absolutely no repetition of rebellion in the labor camps, and the I. W. W. movement has been greatly weakened by the lack of insanitary conditions upon which the agitators could base their propaganda." The law's enforcement has been through persuasion and education rather than by "browbeating or criminal prosecution." The Camp Sanitation Department has been the friendly counselor of the camp operators.

The statistics of reduced labor turnover and the lessening of labor discontent have been major arguments. The migratory workers themselves, acting both consciously and instinctively, have emphasized and borne out this argument. The workers have repeatedly notified the commission of the existence of bad camps; in the 18 months from July 1, 1918, to January 1, 1920, 420 such complaints were sent in by immigrant workers. The workers have also helped by avoiding those camps which were poor and flocking to the better ones. This has been very effective during the recent years of labor shortage.

Of course, all camps in the State can not be visited each year. The number of original camp inspections made from April 1, 1914, to August 31, 1920, was 7,176. Usually the inspector interviews the owner or manager and talks over camp conditions with him. Sometimes three or four revisits are made. The operator in charge is told whether his camp is rated "Good," "Fair," or "Bad," and constructive suggestions are given for his guidance in doing away with objectionable conditions. There have been only 27 arrests resulting from the 7,176 original inspections and numerous reinspections. Six of these arrests were followed by court trials and convictions; the remaining 21 arrests by prompt acknowledgments of guilt and settlement without trial.

The table given below shows the work of the Department of Camp Sanitation of California from January 1 to September 1, 1920, and the grading of camps:

CAMP INSPECTIONS, JANUARY 1 TO SEPTEMBER 1, 1920.

Month.	Good.	Fair.	Bad.	Total.	Reinspection.	Grand total.
January.....	186	247	82	515	78	593
February.....						
March.....						
April.....						
May.....	67	98	24	189	21	210
June.....	93	91	33	217	12	229
July.....	88	128	33	249	6	255
August.....	49	116	20	185	13	198
Total.....	483	680	192	1,355	130	1,485

The report states that on reinspection of "Bad" camps 12 were brought to "Fair" and 5 were brought to "Good." On reinspection of "Fair" camps 35 were brought to "Good."

Preventive work does not alone satisfy the Camp Sanitation Department. It continually aims at improvement—even striving for the installation of permanent camps. Scores of model camps of permanent construction have been established, employers realizing that such establishment results in a stabilized and efficient labor force, increased production, and safety of product.

Hop growers early in August requested the advice of the Commission of Immigration and Housing regarding their camps and asked for weekly inspections during the hop season. As a consequence a huge crop was successfully handled.

Certain large packing associations of Los Angeles have recently established three and four roomed tile and concrete houses, and "seven of the largest lumber operators are installing permanent camps with electric lights, motion pictures, reading rooms, etc., and are furnishing bedding in addition to the legally required bunks." Even Japanese operators, who set a low standard of housing, are quick to make required changes. This year the conditions of the Mexican camps in the Imperial Valley near the southern border of California are greatly improved, and the operators have generally acknowledged the beneficial results from a business point of view.

An "Advisory Pamphlet on Camp Sanitation and Housing," published by the Commission of Immigration and Housing of California, contains detailed rules for the location, layout, and operation of labor camps. Plans for model structures of wood, tile, and concrete have recently been drawn up by the commission, and many operators are evincing a practical interest in these plans.

Work of the Employment Service in North Carolina.

THE following tabular statement from a typewritten report sent to the Bureau by the Commissioner of Labor and Printing of North Carolina shows the work done in that State by the Employment Service from April, 1919, to the end of March, 1920.

WORK OF EMPLOYMENT SERVICE IN NORTH CAROLINA, APRIL, 1919, TO END OF MARCH, 1920.

Month.	Applicants registered.	Help wanted.	Referred.	Placed.
April.....	1,455	1,072	1,184	921
May.....	1,835	1,459	1,223	1,320
June.....	1,181	1,039	753	700
July.....	688	200	523	429
August.....	1,145	606	1,067	686
September.....	1,252	537	1,168	623
October.....	587	555	564	469
November.....	789	820	723	672
December.....	374	752	352	337
January.....	652	314	593	564
February.....	500	299	473	440
March.....	449	266	429	394
Total.....	10,907	7,919	9,052	7,555

Number of Employees in South Carolina Cotton Mills in 1919 and 1920.

IN A supplementary report (Bulletin No. 75, Aug. 30, 1920) of the South Carolina State Department of Agriculture, Commerce and Industries there are some interesting figures on the recent growth of the cotton-mill industry in that State which ranks second in the Union in the extent and importance of textile manufacturing. The number of employees in the South Carolina cotton mills in 1919 and 1920 is indicated by the following statistics:

COMPARISON OF NUMBER OF EMPLOYEES IN SOUTH CAROLINA COTTON MILLS IN 1919 AND 1920.

Item.	1919	1920	Increase.
White males.....	29,328	32,534	3,206
White females.....	15,511	16,470	959
Negro males.....	3,875	4,166	291
Negro females.....	1,357	1,459	102
Total.....	50,071	54,629	4,558
Total population, mill communities (estimated).....	129,616	134,866	5,250
Male children 14 to 16 years of age.....	2,083	1,985	1 98
Female children 14 to 16 years of age.....	1,673	1,736	63

¹ Decrease.

Wage figures are not compiled until December and are therefore not included in this report.

The number of white males employed in 1914 was 31,116. During the war the number was reduced as low as 27,757 (August, 1918). In August, 1920, 32,534 were employed, which number is quite close to the prewar figure which seems to indicate that there is no great exodus of men from the farms to the mills.

The increase in the number of white female employees in 1920 as compared with 1919 is 959; of negro female employees, 102. Negro males number 291 more than they did last year.

It will be noted that there are no children under 14 years of age working in the mills, the State law prohibiting such employment. It is reported, however, that in 1914, before the passage of the act, there were nearly 3,500 children under 14 in the South Carolina mills.

Survey of the Manufacturing Industry in the State of Washington.

A SURVEY of the manufacturing industry throughout the State has been recently made by the Industrial Welfare Commission of Washington, the results of which are published in Bulletin No. 2, dated April 10, 1920. Eighty-seven manufacturing establishments (including canneries) were covered by the investigation which was representative but not complete. Through personal interviews reports were secured from 991 women. The following table gives the weekly wage received by them:

NUMBER OF WOMEN AND MINORS IN WASHINGTON RECEIVING EACH CLASSIFIED WEEKLY WAGE.

Age group.	Under \$13.20.	\$13.20.	\$13.20 to \$15.	\$15 to \$18.	\$18 to \$20.	\$20 to \$25.	Over \$25.	Total.
Over 18 years of age.....		147	235	233	83	95	30	823
Apprentices over 18 years of age.....	32							32
Minors under 18 years of age.....	23	42	35	30	5	1		136
Total.....	55	189	270	263	88	96	30	991

Seventy-seven of the 147 adults who were receiving \$13.20 per week had less than 6 months' experience; 40 had between 6 months and 1 year; 17 between 1 year and 3 years; 10 between 3 years and 6 years; 1, 6½ years; 1, 9 years; and 1, 10 years.

[849]

The report of the survey also includes the following data:

One hundred and ninety-nine of the women were required to wear a uniform, an apron, cap, overalls or leather apron, the cost varying from 35 cents to \$3.90. One hundred and fifty-three were required to pay for their uniforms and 107 were required to launder them, the laundering costing from 10 cents to \$1.50 per week.

There were 586 single women, 271 married women, 131 widows, and 3 who did not report. Of the 131 widows 45 were supporting 1 child; 19, 2 children; 9, 3 children; 1, 4 children; and 1, 5 children. Sixty-six of the single women were aiding in the support of their parents, 7 were assisting younger brothers, and 6 assisting sisters. Two married women were the entire support of invalid husbands and the other married women were contributing to the family budget. One grandmother was supporting 2 grandchildren, and 1 widow was supporting a nephew.

The ages of the women were as follows: One hundred and thirty-six under 18 years, 400 between 18 and 25 years, 364 between 25 and 45 years, 52 over 45 years, and 39 did not report their age.

The reports showed that cannery workers are employed 8 to 16 hours per day, since the 8-hour law does not cover the work with perishable foods. During the busy season the hours are usually from 10 to 12 per day.

There were 274 working less than a 48-hour week; 157 reported a 44-hour week; 85, a 45-hour week; 27, a 46-hour week; and the rest varied from 39 to 44 hours per week.

Only a few establishments were reported as sending work out to be done in the homes.

Among the recommendations made by the manufacturing conference to the Industrial Welfare Commission, May 20, 1920, were the following:

That no person, firm, association, or corporation shall employ any female over the age of 18 years in any occupation in the manufacturing industry throughout the State at a weekly wage rate of less than \$18 or \$3 per day or 37½ cents per hour, such wage being the estimate of said conference of the minimum wage adequate to supply the necessary cost of living and to maintain them in health and comfort.

That no person, firm, association, or corporation shall employ any female over the age of 18 years in any occupation in the manufacturing industry throughout the State more than six days in any one week except in case of perishable foods.

That women shall not be permitted to lift or carry any burden over 25 pounds.

CURRENT NOTES OF INTEREST TO LABOR.

Labor Cost of Making Brooms.

TO REFUTE the statement made by some that from 60 to 80 per cent of the price of commodities represents the labor cost, The Broom Maker, official journal of the Broom and Whisk Makers' International Union, for August, 1920 (p. 5), publishes an article intended to show that in the broom trade the cost of labor is from approximately 12 to 14 per cent of the retail cost of various kinds of brooms.

Suppose we reduce every man's salary in the factory \$1 per day—

Winder makes 10 dozen per day; \$1 divided by 10 equals 10 cents per dozen, or $\frac{5}{6}$ cent each.

Sorter sorts for 20 dozen per day; \$1 divided by 20 equals 5 cents per dozen, or $\frac{5}{12}$ cent each.

Sewer sews 30 dozen per day; \$1 divided by 30 equals $3\frac{1}{3}$ cents per dozen, or $\frac{5}{18}$ cent each.

Bunching, labeling, etc., 30 dozen per day; \$1 divided by 30 equals $3\frac{1}{3}$ cents per dozen, or $\frac{5}{18}$ cent each.

Total savings, $12\frac{2}{3}$ cents.

This cut would ruin the workmen, but the saving (less than 2 cents per broom) would be so small that the merchant would probably ignore it and continue to sell at the same old price.

Now let us see what the laborer does actually get for making a broom. The Mid-West Broom Manufacturers' Association at a recent meeting in Kansas City, compiled an average estimate of the cost of making brooms in this locality, which was as follows:

TOTAL COST, WHOLESALE AND RETAIL PRICES, AND LABOR COST PER BROOM, OF VARIOUS KINDS OF BROOMS.^a

Item.	24-pound parlor.	24-pound medium.	24-pound common.
Material.....per dozen..	\$6.66	\$4.41	\$3.24
Labor.....do.....	1.75	1.76	1.46
Overhead.....do.....	2.94	2.90	2.86
Total cost.....do.....	11.35	9.07	7.56
Wholesale price to make 10 per cent profit.....do.....	12.49	9.98	8.32
Retailer's price to make 20 per cent profit.....do.....	14.99	11.98	9.98
Retail price per broom.....each.....	1.25	1.00	.83
Labor price per broom.....do.....	$1\frac{1}{4}$	$1\frac{1}{4}$	$1\frac{1}{2}$
Per cent cost of labor.....do.....	11.68	14.67	14.66

^a In the original table computations based on the total cost are not correctly made; these have been corrected on the assumption that the total costs are correct.

Cooperative Research Plans of the American Sociological Society.¹

FOR some time the American Sociological Society has had under discussion a plan for cooperative research through the sociological departments of the universities and colleges. At the last annual meeting of the society the first cooperative investigation was authorized. The subject chosen is Methods by which self-supporting

¹ Based on an open letter to the members of the American Sociological Society, American Journal of Sociology, Chicago, March, 1920, pp. 568-571.

women may provide for their old age. It is stated by the director of the survey, who was authorized to select the above subject, that "in case we succeed in enlisting a number of cooperating directors of investigations, some more democratic methods of selecting future topics for study should be developed. Leaders of different research groups could come together at the annual meeting of the Sociological Society for the consideration of suggestions and the selection of one or more topics suitable for joint investigation."

By means of cooperative research comparable data may be collected in various parts of the country at once without having to pay subsistence and traveling expenses of field investigators. It is proposed, of course, to have a director or a group of directors to plan and supervise the cooperative surveys and prepare the final reports, while the college and university students who are taking the sociological courses are to act as special agents to collect the desired information. These students could easily be taught the elements of sound scientific investigation and would have the advantage of being in closer touch with their environments than visiting field workers who might be assigned to these localities.

The director or directors will be expected to prepare tentative questionnaires and instructions to be submitted for criticism and suggestions to the leaders of the cooperating groups. It is emphasized that filled-in schedules on which tables are to be based should be sent in to the central directors for verification or correction. To facilitate final summarization of the more important tables, it is advised that uniform tabulation blanks be used.

Graduate students on the lookout for suitable matter for theses might digest the data secured by local groups. If the material related to public activities, the local reports might be issued as public documents.

Labor Questions as Topics of Theses of University Students.

THAT the problems of labor are more and more commanding the attention of students in our universities and colleges would appear to be shown by the fact that many are making special studies along these lines and are giving to the world the results of their investigations in the form of theses for doctorate and masters degrees.

Recently the American Journal of Sociology (University of Chicago Press, Chicago) attempted to ascertain the extent to which labor questions are being studied and written upon by students in university sociological departments and the following statement, compiled from the Journal of July, 1920, is a result of its inquiry:

Bryn Mawr.—Industrial home work in Pennsylvania; Mothers in industry; A study in causation; The juvenile labor exchange in the United States and England; A study in effect.

University of Chicago.—The social evolution of democracy; Social forces affecting the life of the industrial community; A social survey of an industrial area, Chicago; Problems of socialization, democratization, and Americanization in an urban community; A study of Czecho-Slovak community organization in Chicago; The social study of the neighborhood; A study of the personality of the workman in machine industry; The social significance of housing; An analysis

of trade-unionism from the standpoint of social control; Survey of free placement in Chicago.

Clark University.—Social evolution and social control in China.

Columbia University.—International labor legislation; Racial assimilation in a community in the anthracite coal region; Russians in the United States; The principle of participation—a critique of "Les fonctions mentales dans les sociétés inférieures"; A study of the application of statistical methods to sociological problems; The rôle of sympathy in labor organizations; Rural organization and Negro migration; The use of leisure time by the Italians of New York City; Industrial missions; Some primary social effects of the organization of women in industry; The labor problem of Ulster County of New York State; Canadian industrial disputes act; Recent tendencies in the labor movement in England and America; Social organization in a club of young working women; A study of the increased wages and of the increased leisure of the working class in a Catholic parish in Upper Manhattan; Causes of migration.

Harvard University.—The risk of unemployment; Guild socialism; Development of trade-unionism in Imperial Germany.

University of Illinois.—Causes and control of radicalism.

Loyola University.—Democracy in merchant guilds of the Middle Ages.

University of Michigan.—The farm in democracy.

University of Minnesota.—The social life of the rural community in its relation to types of agriculture.

University of Missouri.—The standard of living of the coal miners of Columbia, Missouri; The guild socialist movement.

Ohio State University.—Labor turnover in department stores in Columbus; Housing conditions among colored people in Columbus.

University of Southern California.—The Japanese problem in rural Los Angeles County; The Negro in Watts, California.

University of Texas.—A survey of organized labor in Austin; The awards of the National War Labor Board.

University of Wisconsin.—The Russian Slav in America; Social survey of Albemarle County, Virginia. Social Utopias and Utopianism.

Yale University.—An interpretation of Negro migration.

Publication of "Month's Work" Discontinued by British Ministry of Labor.

WITH the August, 1920 number, the publication of the Month's Work, issued monthly since July 1, 1918, by the British Ministry of Labor, ceases. There is probably no department of government into whose work the personal element enters so largely, so constantly, and at such various angles as in a labor department. During its brief existence the Month's Work has recognized this fact and has succeeded in giving the human touch to all its considerations of the complicated industrial problems with which the ministry has been called upon to deal.

Settlement of Soldiers on the Land in Australia.

ACCORDING to the report on commerce and industries for Australia for 1919, prepared by the United States Department of Commerce, the Australian Commonwealth has already spent a very

considerable amount upon settling returned soldiers, and it is estimated that by the end of June, 1920, \$292,500,000 will have been expended. This includes the payment of a gratuity, which, it is expected, will total £28,000,000 (\$136,262,000, par), as well as amounts for war pensions £15,000,000 (\$72,997,500, par), land settlement, housing, grants to State Governments to provide employment, etc. It is also estimated that the annual liability will exceed £6,000,000 (\$29,199,000, par) for war pensions alone. Every inducement is being given to men to settle upon the land, and huge irrigation schemes are on foot to open up thousands of acres of dry arid land, which only require irrigating to become profitable farming and fruit-growing areas.

National Vocational Schools in France.¹

FRANCE has four national vocational schools, located, respectively, at Vierzon, Armentières, Voiron, and Nantes, which were formerly administered jointly by the Ministry of Commerce and the Ministry of Public Instruction. These schools have been placed under the jurisdiction of the Ministry of Commerce and Industry.

The purposes of these institutions are:

1. To furnish the industries, particularly the mechanical industries, with persons trained in trade practice and capable of becoming foremen, heads of workshops, and possibly factory superintendents.
2. To prepare students for higher technical schools.

It usually takes four years to complete the trade course. In addition to trade apprenticeship, which has the foremost place, the program includes mathematics, industrial electricity, theoretical and applied mechanics, technology, industrial economics, labor legislation, industrial drawing, geography, and modern languages. After finishing the course the student is given a diploma of "Élève Breveté des Écoles Nationales Professionales" (Licensed Student of the National Vocational Schools).

These schools have been so successful that the number of young men applying for admission has always exceeded the available vacancies. In 1916 there were 490 candidates for one school where there were only 65 vacant places.

Trade-Union Boycott of Hungary Discontinued.²

THE boycott carried on by international organized labor since June 20 of this year (see MONTHLY LABOR REVIEW, September, 1920, pp. 184-188), was lifted on August 8 and traffic between foreign countries and Hungary has been resumed. The Hungarian Premier has been negotiating with the Socialists for the establishment of a *modus vivendi* between the Social-Democratic Party and the Government. The latter has promised repeal of the internment orders, restoration of the confiscated property of the trade-unions, and a free hand for labor organizations in social matters. On the other hand, the activities of the unions will, in so far as they tend toward Bolshevism, be restricted. It is believed that these negotiations will be successful.

¹ Data taken from leaflet supplied by "Information Universelle" and reprinted in the Manual Training Magazine, Peoria, Ill., May, 1920, p. 322.

² The Economic Review (Review of the Foreign Press), London, Aug. 20, 1920, p. 343.

Government Aid to Industrial Reconstruction in Roumania.

TWO decree laws have recently been passed in Roumania authorizing the establishment of limited companies to organize and finance the work of industrial reconstruction in that country. A summary of these decrees is contained in the British Board of Trade Journal (London) for July 22, 1920, and is here reproduced:

Under the first decree law (No. 2503) a limited company with the name of Reconstitution Industrielle is constituted for the object of (a) providing industry with machinery, industrial installations, transport material, etc., as well as technical and raw materials; (b) distributing machines and raw materials to State or private workshops and factories throughout the country; (c) participating in the organization of industrial enterprises already in existence or to be created in the future by providing them with capital or the necessary materials; (d) giving advances on short terms to industries to enable them to obtain machinery and raw materials; (e) giving advances against the rights of industrialists to war indemnities on terms to be established in agreement with the State.

Article 2 provides that the company will be obliged to take over on its own account and to maintain and distribute according to the rules laid down by the Ministry of Trade and Industry the depots of machinery or materials belonging to the State. Article 3 fixes the initial capital of the company at 100,000,000 lei [\$19,300,000, par], which may be increased under conditions laid down by the statutes. Article 4 indicates the sources of capital, of which industrialists in the country may subscribe up to 50 per cent and financial and industrial organizations up to 30 per cent, the balance to be taken up by public subscription.

The State grants to companies the following advantages: (a) Reductions in customs duties for machines, instruments, and material necessary for their purposes; (b) a reduction of 50 per cent on the railways and the river navigation for the transport of machinery, tools, and materials; (c) it will provide capital necessary for the purchase of machinery, tools, and material or will guarantee their cost.

The company is to be managed by an administrative council composed of 20 members, of whom 4 will be nominated by the council of ministers upon the recommendation of the Ministry of Trade and Industry. A Government commissioner will be nominated by the council of ministers.

Provisions of the Second Decree Law.

Under the other decree law (No. 2530) a limited-share company, under the name of Reconstruction, is established for the object of (a) financing the supply of constructional materials, and also, where it may be found necessary, rebuilding properties destroyed by military operations or in consequence of the war; (b) the repair of rural installations and the organization of the villages, having in view better sanitary conditions and increased production; (c) the construction of comfortable and cheap dwellings for the poorer and middle classes of the towns, and especially for those having large families; (d) the execution of all construction work in the towns and villages having for its object the realization of a work of general interest; (e) the erection of buildings for State purposes against immediate payment or against long-term amortizations, the company receiving preference to others at equal offers; (f) credit for carrying on of all private construction work; (g) establishment of all kinds of industrial undertakings or participation in those which already exist, with a view to intensified production; (h) the purchase and exploiting of inventions connected with the building industry.

For these purposes the State will grant to this company the following advantages:

(a) Transfer of materials, vehicles, tools, and contracts in course of execution at present appertaining to the directorate general for the reconstruction of the war-devastated regions, as well as of those in similar depots of the freed regions.

(b) Exemption from customs duties of machinery and equipment imported for use in yards and factories working for the company. The prices of these materials will be fixed by a special commission nominated by the Ministry of Trade and Industry.

(c) Fifty per cent reduction in Roumanian rail and river transport rates in respect of the carriage of workmen's supplies and of the personnel.

(d) Transfer at an agreed price of forests for constructional timber and of constructional material belonging to the State.

(c) Obtaining of the requisite funds or guaranty of the necessary credit for materials, tools, and machinery which it will be necessary for the company to purchase abroad.

The initial capital of the company will be 300,000,000 lei [\$57,000,000, par], and the company will be able to issue bonds.

The State will furnish 40 per cent of the capital, and the remaining 60 per cent will be acquired by public subscription.

This company will be administered by a council of 25 members, of which 6 will be nominated by the council of ministers, on recommendation of the Ministry of Trade and Industry.

Central Board of Mobilization of Civil Industries in Spain.¹

BY ROYAL decree of June 21, 1920, there has been created in Spain a central board of mobilization of civil industries "to direct the many labors that have to be carried to a head both for the purpose of investigating, classifying, distributing, and preparing the civil industry for its adequate mobilization when the circumstances require, and in order to propose what may be necessary and advantageous for the required nationalization of those industries which are exclusively foreign at the present time, and which may be indispensable for the manufacture of our war material or of advantageous use for its better manufacture."

This board is composed of a president named by the Government; a representative of the metal and mechanical industries; one of the chemical industry; and one of the mining industry; chiefs of section (generals) of the central general staff of the Army and of the Navy; the general chief of the section of mobilization of civil industries; and a secretary. The headquarters of the board are in Madrid, and it is directly subordinate to the office of the president of the council of ministers.

The decree defines its duties in time of peace and in time of war. In the latter emergency there will be regional committees of mobilization directly responsible to the central board. These committees, among other things, will prepare statistics or a census of the personnel of workmen which will show all those subject or not subject to the military law, having completed their three years' service in the ranks to which they were subject, and who belong to industrial establishments, military or civil, of manufactures or primary materials utilizable for the manufacture of war material or sanitary material, clothing or equipment. Continuing, the decree says in this connection:

The classification of the workmen will be made according to their ability, in the following groups: First, those that unite to a manifest professional ability a grade of education that permits utilizing them in the direction of a group of workmen of their class; second, those that have practice and ability in their specialty but do not have the theoretical knowledge of those before mentioned; third, those that, although having none of the qualities mentioned in sufficient grade, could be conveniently utilized in case of industrial mobilization until women or others with sufficient practice could be substituted. * * *

In the cases in which the regional board or the committee of mobilization esteems it advantageous for them to examine the ability of any workman, they may do so in the same shop in which he works, taking care, to avoid useless expense, that the pieces made in the examination may be some of those made in the industry in which the workmen are situated. The certificates in these cases will be drawn up and signed by the junior captain of the committee, with the O. K. of the chief thereof and the approval of the president of the regional board in the event he shall have intervened in the examination.

¹ Data furnished through Department of State by the United States ambassador at Madrid, under date of July 5, 1920.

For the examinations there will be attached to the board or committee a factory or shop expert of the military establishment.

Every workman who is not placed in some shop must make known his trade and ability by presenting himself to the regional committee of mobilization, which will solicit from the military or civil establishment that may be convenient, in this last case through the regional board, the necessary elements for the examination, drawing up the required certificate in the form provided for in the preceding article. * * *

Upon the industrial mobilization being decreed, in case of war, all the personnel that by reason of age is not subject to military service and belongs to factories, shops and military laboratories, or in the position of director, technical man, expert or workman serving in factories, mineral deposits or industries that, in accord with the decree of mobilization, may have to contribute to it, will continue discharging the same services as in time of peace, without being able to voluntarily separate themselves from it while the causes originating the mobilization exist, being subject to employment where the circumstances require it and to military jurisdiction.

The personnel of said factories or industries subject to military service will continue attached to their establishments or will lend service in the ranks, according to the provisions of the decree of mobilization.

PUBLICATIONS RELATING TO LABOR.

Official—United States.

GEORGIA.—*Department of Commerce and Labor. Eighth annual report, 1919. Atlanta, 1920. 89 pp.*

Comments on the scarcity of labor in Georgia in 1919 and recommends the enactment of a boiler inspection law, a workman's compensation law, and a law for more general and rigid inspection of elevators. The three free public employment offices actually placed a total of 26,169 applicants for work, but no statement is given as to the number of applications for work or of requests by employers for help. The placements by the 12 private employment offices in the State numbered 3,000. A table shows a total of 38,906 operatives in the textile mills of the State, of which number 4,044, or 10.4 per cent, were children under 16 years of age. A classified list of industrial plants is appended.

INDIANA.—*Legislative Reference Bureau. Yearbook of the State of Indiana for the year 1919. [Indianapolis] 1920. 1190 pp.*

The report of the Industrial board covers 108 pages of this volume. It includes reports of the compensation department, the department of women and children, the boiler department, the department of factory inspection, and the department of mines and mining. The report of the department of women and children and of the compensation department were noted in the MONTHLY LABOR REVIEW for August (pp. 100-102 and 131).

MARYLAND.—*Board of Labor and Statistics. Twenty-eighth annual report, 1919. Baltimore [1920]. 352 pp.*

Contains a special article on "Juvenile labor, its biological factors and social features," being a study of unusual children. Quite complete statistics of employment permits issued to children during 1919 are given. A tabular record of inspections under the 10-hour law shows 944 manufacturing establishments inspected, involving 30,576 women, the largest percentage (40.6 per cent) of whom were employed in the manufacture of men's clothing. Of the 30,031 women employed in factories inspected in Baltimore 8,298, or 27.6 per cent, worked 8 hours or less a day. A brief statement of the work of the State Industrial Accident Commission for the year ended October 31, 1919, is presented (noted in the MONTHLY LABOR REVIEW for May, 1920, pp. 166, 167).

NEW YORK.—*Industrial Commission. Bureau of Industrial Code. Rules as amended relating to the construction, installation, inspection, and maintenance of steam boilers. New York, 124 East 28th St. [1920]. 148 pp. Chart. Bulletin No. 14.*

OREGON.—*Bureau of Labor. Code. Industrial lighting in places of employment, including factories, mills, offices, and other work places. Salem, 1920. 70 pp. Illustrations.*

Includes a detailed explanation of the provisions of the industrial lighting code and points out the importance of adequate lighting to the employee, the employer, and the State.

PENNSYLVANIA.—*Department of Labor and Industry. Third industrial directory of Pennsylvania, 1919. Harrisburg, 1920. 1,212 pp.*

Gives a list of industrial establishments in the State, classified by product and by county and city or town. Includes a list of boards of trade, chambers of commerce, business men's, manufacturers' and miscellaneous associations, and a directory of labor organizations, officers, and unions.

UNITED STATES.—*Department of Commerce. Bureau of the Census. Census of electrical industries, 1917. Central electric light and power stations with summary of the electrical industries. Washington, 1920. 184 pp.*

One section is devoted to employees, salaries and wages. The data show that in every case salaries and wages have increased much more rapidly in both commercial and municipal stations than has the number of employees.

— *Bureau of Foreign and Domestic Commerce. Statistical abstract of the United States, 1919. Washington, 1920. 864 pp.*

— *Department of Labor. Division of Publications and Supplies. Publications of the Department of Labor. Washington, August, 1920. 28 pp.*

— *Office of the Secretary. Proceedings of the First Industrial Conference (called by the President), October 6 to 23, 1919. Washington, 1920. 285 pp.*

An account of this conference appeared in the MONTHLY LABOR REVIEW for November, 1919, pages 40 to 49.

— *Federal Board for Vocational Education. Bibliography of employment management. Washington, June, 1920. 119 pp. Bulletin No. 51. Employment management series No. 9.*

This bibliography is arranged under the general headings of The labor problem and employment management, Selection of personnel, Turnover of labor, Training, The work schedule, Remuneration and stimulation, Maintenance of the working force, and Government of the shop.

— *Railroad Labor Board. Decisions Nos. 1, 2, 3, 4, and 5. Chicago [1920]. 1, 2, 3, 4, 8 pp.*

Official—Foreign Countries.

CANADA.—*Bureau of Statistics. The Canada year book, 1919. Ottawa, 1920. 697 pp.*

Contains a section devoted to labor, including statistics of prices and cost of living, industrial disputes, and employment. Most of the figures are for 1918 and preceding years. The employment figures are brought down to January 3, 1920.

FRANCE.—*Ministère de Travaux Publics. Direction des mines. Statistique de l'industrie minière et des appareils à vapeur en France et en Algérie pour les années 1914 à 1918. Avec un appendice concernant la statistique minière internationale. Paris, Imprimerie Nationale, 1919. 238 pp.*

This report, covering five years, 1914 to 1918, gives statistics relating to output, wages, accidents, pensions, and other matters relating to the mineral industry and to the use of steam apparatus in France and Algeria. International statistics as to output in the mineral, metallurgical, and precious metals industries are given in the appendix.

GERMANY (FRANKFORT-ON-THE-MAIN).—*Statistisches Amt. Statistische Jahresübersichten der Stadt Frankfurt am Main. Ausgabe für die Jahre 1917/18 und 1918/19. Zwölftes Ergänzungsheft zum Statistischen Handbuch der Stadt Frankfurt-on-the-Main, 1920. 166 pp.*

The twelfth supplement to the statistical yearbook of the city of Frankfort-on-the-Main. The yearbook covers the year 1905–06 while the present supplement covers the two fiscal years 1917–18 and 1918–19.

— (SAXONY).—*Sächsische Landesstelle für Gemeinwirtschaft. Veröffentlichungen Heft 1 bis 8. Dresden, 1919 and 1920.*

A series of bulletins published by the Saxon State Office for Socialization. Bulletin No. 1 contains a German translation of the report of the British Coal Industry Commission of June 20, 1919. No. 2 is a monograph by Dr. Johannes Riedel, a prominent efficiency expert, on the rationalization of labor. He outlines a humane application of the Taylor system. No. 3 deals with the socialization of the production and distribution of milk. No. 4 has as subject the reform of moving pictures by the communes. No. 5 deals with the socialization of pharmacies. No. 6 is entitled Socialization movements in the building trades. No. 7 discusses the socialization of the waterways,

water supply, and water power in Saxony. No. 8 is a monograph by Dr. Adolf Thiele, chief industrial physician of Saxony, on the hygiene of labor. The series is to be continued.

GREAT BRITAIN.—*Committee on the hours, pay, and conditions of service of firemen in professional fire brigades in Great Britain. Report. London, 1920. 16 pp. Cmd. 710.*

— *India Office. Statistical abstract relating to British India from 1908-09 to 1917-18. London, 1920. 260 pp. Cmd. 725.*

Contains data relating to cooperative societies, showing that in 1917-18 there were 24,393 societies with a membership of 1,048,290; shows wages of postal runners and of postmen from 1875 to 1917, and of employees in a woolen mill in northern India from 1895 to 1918; also shows average wholesale prices of staple commodities in India from 1898 to 1918, inclusive.

— *Interdepartmental Committee on Insurance Medical Records. Report * * * upon the form of medical record to be prescribed under the terms of service of insurance practitioners contained in the medical benefit regulations, 1920. London, 1920. 29 pp. Appendixes. Cmd. 836.*

— *Medical Research Council and Department of Scientific and Industrial Research. Reports of the Industrial Fatigue Research Board. No. 6: The speed of adaptation of output to altered hours of work. London, 1920. 33 pp.*

— — — *No. 7: Individual differences in output in the cotton industry. London, 1920. 13 pp. Textile Series No. 1.*

These reports of the Industrial Fatigue Research Board form the basis of an article on pages 127 to 131 of this issue of the REVIEW.

— *Ministry of Labor. Industrial Court. Decisions (12th Dec., 1919, to 31st Mar., 1920). Volume I. Nos. 1 to 227. Interpretations Nos. 1 to 3. London, 1920. 432 pp.*

— *Ministry of Transport. Statement showing the results of railway working in the financial year 1919-20, together with an estimate of the receipts and expenditures for the financial year 1920-21. London, 1920. 12 pp. Appendixes. Cmd. 815.*

— *Registrar of Friendly Societies. Friendly societies, industrial and provident societies, building societies, trade unions, workmen's compensation schemes, loan societies, scientific and literary societies, post office, trustee, and railway savings banks. Reports * * * for the year ending December 31, 1919. Part A, general report. London, 1920. 64 pp. Appendixes. 128.*

— (SCOTLAND).—*Board of Health. First annual report, 1919. London, 1920. 83 pp. Cmd. 825.*

In the section devoted to Housing and town planning, satisfactory progress with housing schemes is noted, the local authorities, upon whom the Housing, Town Planning, etc. (Scotland) Act, 1919, places the obligation to provide adequate housing facilities for the working classes, having accomplished much of the preparatory work which is a necessary preliminary to the actual building operations.

Other subjects of interest to labor are Old-age pensions and National health insurance.

— — *Local Government Board. Twenty-fifth and final annual report, 1919. Edinburgh, 1920. 26 pp. Cmd. 824.*

Among the subjects included in this report are Housing and town planning, Old-age pensions, and Work of distress committees established under the Unemployed Workmen Act, 1905.

ITALY.—*Ministero per l'Industria, il Commercio ed il Lavoro. Direzione Generale del Lavoro e della Previdenza Sociale. Divisione Previdenza Sociale. L'assicurazione obbligatoria contro la invalidità e la vecchiaia. Studio matematico del Prof. Tullio Bagù. Rome, 1919. 271 pp. (Pubblicazioni della Divisione Previdenza Sociale, No. 1.)*

This is the first of a series of bulletins published by the Division for Social Insurance of the Italian Direction General of Labor and Social Insurance. The present bulletin discusses the actuarial problems of the bill on compulsory invalidity and old-age insurance submitted to the Chamber of Deputies on November 28, 1918, by Minister Ciuffelli.

ITALY.—*Ministero per l'Industria, il Commercio ed il Lavoro. Direzione Generale del Lavoro e della Previdenza Sociale. Divisione Previdenza Sociale. L'assicurazione obbligatoria contro le malattie. Atti della commissione incaricata della preparazione di uno schema di disegno di legge. Parte I: Studi preparatori, relazioni, schemi di progetti di legge ecc. Rome, 1920. 291 pp. (Pubblicazioni della Divisione Previdenza Sociale, No. 3.)*

Bulletin No. 3 of the Division for Social Insurance of the Italian Direction General of Labor and Social Insurance containing the preparatory studies, reports, and drafts of bills of the commission appointed by the decree of August 23, 1917, to study compulsory sickness insurance. The bill approved by the commission proposes to create insurance carriers on the mutual system, which are to be given a certain autonomy and full freedom in underwriting but are to be limited by general circumscription of their activities. The bill provides for State supervision and partial interference in matters relating to technical administrative provisions so that the law shall be strictly observed, all possibility of insolvency of a carrier be eliminated, and sanitary medical and hospital aid be better developed. It also provides for the close connection of sickness insurance with accident and maternity insurance, and with insurance against industrial diseases, with special consideration of existing carriers.

The bulletin also contains statistics on the Italian mutual aid societies and maternity funds, morbidity tables, and outlines of sickness insurance laws in foreign countries.

— — *Ufficio Nazionale per il Collocamento e la Disoccupazione. Relazione sui servizi per il collocamento e per la disoccupazione in Italia dal 10 Gennaio 1919 al 15 Gennaio 1920. Rome, 1920. 168 pp.*

The report of the Italian National Office for Employment and Unemployment Relief on its activities during the period January 10, 1919, to January 15, 1920. According to this report there were functioning on December 31, 1919, the following 4,283 local organs of the public employment service: 323 municipal employment offices, 3,970 municipal labor commissions, 26 provisional employment offices, 47 provisional labor commissions, and 17 zone employment offices. During the first 10 months of 1919, i. e., from the time of the reorganization of the Italian employment service up to October 31, 1919, a total of 524,875 persons were registered in the public employment offices as applicants for employment; 397,098 of this number were men and 127,777 were women. Altogether 150,238 applicants were placed in employment, of whom 116,684 were men and 33,554 were women. On October 31, 1919, 302,947 persons were still registered as unemployed. In this number are not included persons who obtained employment by their own efforts without intervention of the public employment offices. The disbursements of the Government for unemployment grants during the period February 1, 1919, to January 15, 1920, amounted to 137,081,600 lire (\$26,456,748.80, par).

— (MILAN). *Annuario Storico-Statistico 1918. Milan, 1919. cccliii, 576 pp.*

The historical-statistical yearbook of the city of Milan for the year 1918. Tables dealing with labor show that in 1918 employment certificates were issued to 6,616 children of both sexes and to 1,699 women 16 to 21 years of age. Unemployment continued to decrease during 1918. A total of 69 strikes with about 110,000 striking workers were reported during 1918. The number of industrial accidents reported during 1918 was 26,469, or more than 5,000 less than in the preceding year, 17,217 of the accidents reported, or 65 per cent, occurring in the metal, machinery, and electrical industries.

NETHERLANDS (AMSTERDAM).—*Veiligheidsmuseum. Jaarverslag. 1919. Amsterdam [1920]. 44 pp. Illus.*

Annual report of the safety museum of Amsterdam.

NEW ZEALAND.—*Government statistician. Statistics, 1918. Vol. IV. Education, local governing bodies, miscellaneous. Wellington, 1919. 224 pp.*

School statistics show expenditures, number and salaries of teachers, and number, age, and sex of scholars in various grades and classes of schools. A wide range of subjects is covered by statistics of local governing bodies, including number and wages of employees in public employments of various kinds.

NORWAY.—*Statistiske centralbyrå. Statistisk aarbok. Vol. 39, 1919. Kristiania, 1920. 206 pp.*

The annual statistical yearbook of Norway. The section of interest to labor presents statistics on social insurance operations, unemployment, employment agencies, trade-unions, wages, strikes and lockouts, cooperative societies, cost of living, and prices.

— *Riksforsikringsanstalten. Ulykkesforsikringen for industrianbeidere. 1917. (D'assurance contre les accidents pour les travailleurs de l'industrie, etc.). Kristiania, 1920. 22*, 96 pp. Norges officielle statistikk. VI, 179.*

Statistical report of the operations of the Norwegian State industrial insurance system.

POLAND.—*Ministère du Travail et de L'Assistance Sociale. Les lois ouvrières et leur application depuis le 11 Novembre 1918. Rapport de la délégation polonaise a la conférence internationale du travail a Washington, 1919. Warsaw, 1920. 118 pp.*

SWITZERLAND.—*Eidgenössisches statistisches Bureau. Statistisches Jahrbuch der Schweiz, 1918. Bern, July, 1919. viii, 368 pp.*

The 27th volume of the official statistical yearbook of Switzerland covering the year 1918 and containing essentially the same kind of data as preceding volumes. Of interest to labor are the data on population by occupation, the labor market, factories and factory workers, housing, trade-unions, wage movements, social insurance, consumers' societies, wholesale and retail prices, cost of living, etc.

— (ZÜRICH).—*Statistisches Amt. Die Mietpreise in der Stadt Zürich im Jahre 1919. (Statistik der Stadt Zürich Heft 25.) Zurich, 1920. 35 pp.*

Bulletin 25 of the Municipal Statistical Office of Zurich giving statistical data on the movement of rents in Zurich in 1919 based on the rents demanded for vacant dwellings. The statistical office comes to the conclusion that during the decade 1910-1919 there were three distinct periods in the movement of rents: Up to the first half of 1914 rents showed a slight tendency to decrease; after the outbreak of the war and up to the first half of 1916 this tendency became much more marked; beginning with the middle of 1916 rents increased first slowly and then more rapidly. If 100 is taken as index number for the average renting value of dwellings in 1910, the index number for the first half of 1916 would be 88. By January, 1917, the index number rose again to 100 and by January, 1918, to 116. During 1919 the index number reached 140. Thus the increase in rents since the outbreak of the war amounts to 40 per cent. The increase varies greatly, however, with the size of the dwelling. In the case of 2-room dwellings the increase is equivalent to 30 per cent; it rises progressively with the size of the dwelling and in the case of 5-room and attic dwellings is equivalent to 60 per cent. The frequently heard assertion that people of small means suffer most from the increased cost of living is therefore not applicable in the case of rents.

Unofficial

AMALGAMATED CLOTHING WORKERS OF AMERICA. *Report of the general executive board to the fourth biennial convention, Boston, Mass., May 10-15, 1920. New York City, 31 Union Square [1920]. 233, lxiv pp.*

AMERICAN ASSOCIATION OF INDUSTRIAL PHYSICIANS AND SURGEONS. *Minutes of fourth annual meeting, Atlantic City, N. J., June 9, 1919. 128 pp.*

This report contains the addresses and discussions on various medical problems related to industrial conditions, and the prize thesis on "War methods in peace industry."

AMERICAN FEDERATION OF LABOR. *Building trades department. Report of proceedings of the Fourteenth Annual convention held at Montreal, Que., June 2-5, 1920. Washington, 1920. 164 pp.*

A table showing minimum rates of wages in the building trades on the 8-hour basis, given on pages 86 to 89 of this report, is reproduced on pages 120 to 125 of this issue of the REVIEW.

— *Tennessee Branch. Proceedings of the twenty-fourth annual convention, held at Jackson, May 3, 4, 5, 1920. Nashville, W. C. Birthright, Secretary-treasurer. 64 pp.*

ANDLER, CHARLES. *La décomposition politique du socialisme Allemand, 1914-1919.* Paris, Bossard, 1919. 283 pp.

This history of German socialism deals principally with the breaking up of the Social-Democratic Party which failed to adhere to the principles of the Internationale through the war by supporting the Government and by the efforts made to preserve the imperial régime. In these events and those following the close of the war the writer sees the failure of German socialism.

AYUSAWA, IWAO FREDERICK. *International Labor Legislation.* New York, 1920. 258 pp. *Columbia University Studies in History, Economics, and Public Law.* Vol. XCI, No. 2.

This monograph treats the subject of international labor legislation from its origin, for which the date 1818 is fixed, up to the Washington Conference of 1919. Part I presents the historical background. The first official action by the Swiss was followed by developments in France, Germany, England, and elsewhere, leading to international congresses and agreements during the last decade of the 19th century. Other chapters of this part bring the history on up and through the Great War.

Part II reviews the difficulties in international labor legislation, giving first a brief analysis, and secondly an account of the varied industrial conditions involved.

The third part describes in considerable detail the attempt to solve these difficulties in the Washington Conference of 1919, where activity "confined itself mainly to 'laying the ground work.' The real work is still ahead."

BAGGE, GÖSTA. *Arbetslörens reglering genom sammanslutningar.* Stockholm, A.-B. Nordiska bokhandeln [1917]. 483 pp. *Bibliography.*

A general treatise on wage regulation by collective bargaining.

BELHOUSE, GERALD. *Accident prevention and "safety first."* Manchester, University Press, 1920. 21 pp.

A lecture given in the department of industrial administration, College of Technology, Manchester, England.

BRISSENDEN, PAUL F. *The measurement of labor mobility.* Reprinted for private circulation from *The Journal of Political Economy*, June, 1920, pp. 441-476.

Regards labor turnover as a misleading term as used in reference to the phenomenon of replacement and suggests the use of the word "mobility," of which turnover is only one aspect. The standard definition and methods of computing labor mobility as adopted by the National Conference of Employment Managers held in Rochester in May, 1918, are modified by the author in accordance with a plan which he has worked out. He proposes that labor mobility shall be measured by the application of the following scheme:

1. As to the relatively more variable factor—the industrial ebb and flow of labor—it is suggested that it be measured by (a) counting the replacements (i. e., separations which are replaced) instead of either the gross separations or the gross accessions, and (b) adding accessions to separations, thus showing the flux.

2. As to the relatively constant factor, or base—the normal or standard working force—it is proposed to use, instead of the average number on the pay roll, the number of 3,000-hour (or 300-day) workers to which the total hours (or days) put in during the period are considered to be equivalent. This number may be derived from the labor-time records or, failing such records, the daily attendance records or wages and salary-account records, as explained in another section of this paper. This standard base will be called for convenience "the equivalent full-year worker" or, more briefly, "the full-year worker."

3. It is then proposed, in place of the rate of gross separations per 100 in attendance or the rate of gross accessions per 100 on the pay roll (both so-called "turnover percentages"), to use as an index of the shifting involved in labor maintenance the rate of replacement per equivalent full-year worker, and as an index to the general stability situation the total labor flux rate per full-year worker, the "full-year worker" being a standard unit, the number of which is obtained by dividing the total number of hours (or days) worked during the period considered by the 3,000 hours (or 300 days) of a standard working year. The rate is arrived at by dividing the number of replacements by the number of "full-year workers."

CARRÈRE, GASTON. *La protection légale de l'ouvrier agricole. Paris, 1919. 123 pp.*

This book is a discussion of the French law as affecting agricultural laborers, and makes a plea for social justice.

CLARKE, JOHN J., and PRATT, JAMES E. *Outlines of industrial and social economics. London, Sir Isaac Pitman & Sons (Ltd.), 1919. 112 pp.*

This book, designed to be used as a textbook in the citizenship courses in the evening continuation schools in Liverpool, contains sections on the relationship between the State and the home, the child, the adolescent, labor, and industry.

COMMISSION SYNDICALE DU PARTI OUVRIER ET DES SYNDICATS INDÉPENDANTS. *Rapport annuel pour 1919 présenté au XVIII^e congrès syndical des 4 et 5 Juin, 1920. Bruxelles, Imprimerie Coopérative Lucifer, 1920. 160 pp.*

This report gives a résumé of labor matters in Belgium for 1919, and also an account of the participation of Belgian labor leaders in international labor conferences, particularly the Washington Conference.

COMMITTEE ON THE WAR AND THE RELIGIOUS OUTLOOK. *The church and industrial reconstruction. New York Association Press, 1920. 296 pp.*

This is one of the series of reports being issued by the committee on the war and the religious outlook, an interdenominational group appointed by the joint action of the Federal Council of the Churches of Christ in America and the General war-time commission of the churches "to consider the state of religion as revealed or affected by the war, with special reference to the duty and opportunity of the churches." The report considers the Christian principles which bear upon industrial problems, what they would require if consistently applied, how far and for what reason our existing industrial order contains features which are unchristian, and what can be done by individual Christians and by the church in its corporate capacity to secure a better order. It does not claim to be a treatise on political economy or social reform but an analysis of Christian principles as they bear upon economic problems and the duty of Christians and of the church in the present emergency. One chapter outlines the Christian attitude toward private property, the wage system, and competition, and suggests that what is fundamentally wrong with the present industrial system is its emphasis on self-interest. A more Christian industrial order is regarded as essential and suggestions are offered as to how this may be brought about: By measures designed to develop and protect personality, including security against unemployment; provision of an income for all sufficient for self-realization; provision of leisure for all sufficient for self-realization and protection of the personalities of the future, such as safeguarding children from exploitation and safeguarding women in industry; by securing a democratic organization of industry more consistent with brotherhood; and by securing a distribution of profits more consistent with the principle of service.

COSTELLO, LEONARD W. J. and O'SULLIVAN, RICHARD. *The Profiteering Act, 1919. Re-issue with addenda, 1920. London, Stevens & Sons, 1920. 75 pp.*

DANTY-LAFRANCE, L. *Comment établir les salaires de demain? Paris, 1919. 65 pp.*

The author here discusses the various systems of wage calculation. He believes that the system based on daily wages, in so far as it relates to France, should be abolished as soon as possible, holding that it is not equitable either to employer or employee. The Taylor System and the Rowan method are discussed, the latter being recommended to the industrial establishments of France. He states that it has been entirely satisfactory to the personnel and resulted in increased production in the work over which he had supervision in one of the large State establishments (industrial).

DAY, JAMES ROSCOE. *My neighbor the workingman. New York, The Abingdon Press, 1920. 373 pp.*

The rights and duties of the individual, both workingman and capitalist, under the American system of government form the theme of this book which is written, as the author says, in no spirit of antagonism to the American workingman but in protest

against certain destructive tendencies which have been evidenced by the more radical elements among organized labor.

DENVER TYPOGRAPHICAL UNION NO. 49. *Newspaper scale committee. Wages as related to the cost of living, Denver, 1914-1920. March, 1920. 40 pp.*

Brings together data as to cost of living published by the United States Bureau of Labor Statistics and the National Industrial Conference Board to show that the wage scale of the Denver printers has not kept pace with the rising costs.

DICKSON, MARGUERITE STOCKMAN. *Vocational guidance for girls. Chicago, Rand, McNally & Co., 1919. 246 pp. Illustrated.*

Contains a list of suggested readings on the subject.

FEDERAL COUNCIL OF LANCASHIRE AND CHESHIRE TEACHERS' ASSOCIATIONS. *A national system of education. Some recommendations for establishing it in England during the decade ending ten years hence. Manchester, University Press, 1920. 78 pp.*

Recommendations include forms of education suited to various school ages, training, supply of teachers, teachers and the control of education.

FÉDÉRATION NATIONALE DES COOPÉRATIVES DE CONSOMMATION. *Annuaire de la Coopération (2e année), 1920. Paris, 13, Rue de l'Entrepôt, 1920. 247 pp. Illus.*

A digest of this report will appear in a future number of the REVIEW.

FELD, R. C. *Humanizing industry. New York, E. P. Dutton & Co., 1920. 390 pp.*

This book presents in story form the many questions affecting the relations between employers and employees, such as accident prevention, industrial pensions, housing, profit-sharing, industrial representation, etc. It pictures on the one hand an employer who is operating his plant with absolutely no regard for the rights of his workers, and on the other hand, a foreman who believes thoroughly that all that his employer does is prompted by ulterior motives. In this situation a friend of the employer seeks employment in the plant, studies the situation, and, from a thorough knowledge of all the questions which affect management and workers, talks with the owner of the plant along these lines and convinces him of the wisdom of inaugurating reforms which result in bringing about a better understanding between him and his men, and develops a mutual interest which is reflected in increased efficiency and an absence of misunderstanding and suspicion which formerly characterized the operation of the plant.

FISH, E. H. *How to manage men. The principles of employing labor. New York, Engineering Magazine Co., 1920. 337 pp.*

Treats of relations between workers and their employers. The material is presented in four parts. The first, entitled "Establishing the employment department," considers the general policy that the management should adopt in its labor relations and then takes up the standards for selection and training of employment managers, the machinery of employment, and the basic factors whereby the work of the department can be evaluated. The second part is devoted to the employment manager and his immediate and personal problems. In the third part the author deals with those efforts and conditions that go to satisfy and bring contentment to the worker, the title being "Promoting industrial relations." Part 4 is devoted to the subject of training and education in industry. The author attempts to evaluate the things which go to make up a satisfied working organization, and to show that the things which are needful for this purpose are not only inexpensive but are very profitable.

FRENCH YEARBOOK. *Published at the initiative of the Comité du Livre, a national association under the gracious patronage of the French Government. Statistical and historical annual of France for the year 1919. Paris, Comité du Livre [1920]. 1020 pp.*

Under the general head labor, gives a brief review of the union organization in France, statistics of activities of industrial and commercial firms, figures on cost of living including cost of living in Paris during the war, and wage statistics showing hourly wages paid in various trades in France, England, and the United States before the war and at the end of 1917. Several pages are devoted to statistics of women workers concluding with a summary of laws affecting the employment of women. There is also a brief summary of other labor laws passed during the war.

FROIS, MARCEL ET CAUBET, B. *Le rendement de la main-d'oeuvre et la fatigue professionnelle. Le travail féminin au bottelage des poudres.* Paris, Librairie Félix Alcan [1919]. 104 pp.

This report is a study of output and industrial fatigue among women employed in shell-filling in a powder factory made with a view of instituting scientific management.

GERMAN (AID) SOCIETY, CHICAGO, ILL. *Sixty-fifth annual report, 1919.* Chicago [1920]. 15 pp.

This report shows that in the 65th year of its existence the German (Aid) Society (Deutsche Gesellschaft) of Chicago has disbursed \$10,083.23 in cash and otherwise for aid to 716 families with 2,666 children, and to 544 single persons, and furnished 507 meals and 224 lodgings; 1,918 persons were supplied with work through the employment department of the society and 301 persons were furnished free legal advice.

GLEASON, ARTHUR. *What the workers want. A study of British labor.* New York, Harcourt, Brace and Howe, 1920. 518 pp.

An exposition of present day labor and industrial conditions in Great Britain, giving the ideals and aims of British workers. Contains articles by officials of the Miners' Federation, Railwaymen's Union, and by one of the leaders in the shop stewards' movement. The appendix contains reports and commentaries relating to the Coal Industry Commission, the Federation of British Industries, the National Industrial Conference, the Builders' Parliament, Joint industrial councils, the Nationalization of mines, etc.

Through organization the workers have obtained such control over industry as to render it unworkable at their will. They refuse to give high production except on their own terms. Their terms are a new industrial system—the Socialist State (as defined by the Labor Party), with workers' control. Or, again: "This means the installation of the Socialist State, with workers' control, not by armed insurrection or sudden syndicalist paralysis, but by votes and trade-union pressure, applied over a period of 'five, ten, fifteen years' (in Mr. Smillie's phrase) or 'ten, fifteen, twenty years' (in the phrase of Mr. Hodges)."

GOLDSTONE, F. W. *Labor and continued education.* Manchester, University Press, 1920. 16 pp.

A lecture given in the department of industrial administration, College of Technology, Manchester, England.

GOODYEAR TIRE AND RUBBER COMPANY. *A study of the labor movement.* Akron, Ohio, 1920. 131 pp.

A brief sketch of labor development and problems, including chapters on wages, hours of labor, labor and output, strikes and lockouts, representation of labor in industry, labor turnover, training of labor, organized and unorganized labor, and labor legislation.

GREEN, F. E. *A history of the English agricultural laborer, 1870-1920.* London, P. S. King & Son, Ltd., 1920. 356 pp.

This book gives an account of living conditions, wages and growth of union organization among farm laborers in England during the past fifty years, with a brief résumé of conditions prior to 1870.

GRUNER, E. *Die Arbeiter-Gewinnbeteiligung.* Berlin, 1919. 175 pp.

A monograph on profit sharing. In part 1 of this monograph the author first justifies the theory of profit sharing and then proceeds to refute a few of the theoretical contentions against it, such as that the worker should not share in the profits because he does not bear any of the possible losses, or that he should not share in the profits because in most instances he contributes nothing or little to their creation, or that profit sharing can not lead to a higher compensation of labor than is permitted by supply and demand. In part 2 he discusses profit sharing in its practical applications, the economic and social advantages to be expected from it, and the lessons to be learned from the experiences obtained from its application. In part 3 he raises

the question as to what development of profit sharing may be expected in the future and how far the State by the enactment of laws may promote it. He concludes with discussing the former, present, and future attitude toward profit sharing of employers and workers and of the organizations of both.

HAMP, PIERRE. *La peine des hommes. Les métiers blessés. (Cinquième édition)* Paris, 1919. 368 pp.

A history of labor in France during the years 1914 to 1919.

HAWAII LABORERS' ASSOCIATION. *Facts about the strike on sugar plantations in Hawaii. Honolulu, July, 1920. 27 pp.*

Contains the cost of living budgets prepared by the laborers' association as a basis for their demand for higher wages.

HODGES, FRANK. *Nationalization of the mines. London, Leonard Parsons, Ltd., 1920. 170 pp.*

The author, who is secretary of the Miners' Federation of Great Britain, advocates national ownership of the entire mining industry, with joint control by the full personnel of the industry and representatives of the whole community, unless some other remedy for the ills of the industry could be proved to be more effective. Mr. Hodges was one of the three miners' representatives on the Coal Industry Commission of 1919 and much of the present book is devoted to the findings of that commission. After defining and analyzing what he terms the principal cause of the decline in the coal-mining industry—"the present capitalist or shareholders' influence"—the author devotes his last chapter to an exposition of his ideals for the self-government of the industry.

INSTITUT INTERNATIONAL D'AGRICULTURE. *Service de la Statistique Générale. Annuaire international de statistique agricole, 1917 et 1918. Rome, 1920. xlix, 747 pp.*

The annual yearbook of the International Agricultural Institute at Rome. The present issue, covering the years 1917 and 1918, contains statistical data as to the area and population of the different countries, the division of the total area into productive and unproductive areas, the area and yield of various crops, live stock, international trade in agricultural products, consumption of grain, prices of agricultural products and live stock, rates of ocean freight on grain, rates of exchange, and production, international trade, and prices of fertilizers and chemical products useful in agriculture.

INSTITUTS SOLVAY. *Revue de l'Institut de Sociologie. No. 1. Brussels, July, 1920. 176 pp.*

This organ of the Solvay Institute of Sociology is presented, after an interruption of 6 years, under a new name and a modified organization. It is the aim of the institute not only to contribute to the progress of social science but to encourage and organize the application of methods of investigation and instruction in the science of modern economic and social problems. The present number contains discussions as follows: After-war reflections; What is the tendency of the economic world? Least effort and labor, and Society of nations and national society.

INTERCHURCH WORLD MOVEMENT. *The Commission of Inquiry. Report on the steel strike of 1919. New York, Harcourt, Brace & Howe, 1920. 277 pp.*

This book contains an account of the findings of the Commission of Inquiry of the Interchurch World Movement with regard to the conditions existing in the steel industry and of the underlying causes of the strike, and sets forth the conclusions of the Commission.

KAUTSKY, KARL. *Die Sozialisierung der Landwirtschaft. Mit einem Anhang: Der Bauer als Erzieher, by A. Hofer. Berlin, 1919. 133 pp.*

Karl Kautsky had foreseen as early as 1910 the coming of the social revolution, and many of the statements contained in the present volume, "The socialization of agriculture," are reprinted from two chapters of his book "Propagation and evolution in

nature and society," published in 1910. In the present volume he first points out that in recent decades transatlantic agriculture was considered a danger to European agriculturists, while to-day nearly all of Europe would be a prey to starvation without the foodstuffs obtained from the United States, Canada, Argentina, and Australia. The States of continental Europe, therefore, instead of attempting to prevent the importation of foodstuffs from abroad through high duties should do all in their power to obtain as much as possible of these foodstuffs at the lowest possible prices without, however, injuring their national agriculture. On the contrary, prosperity of the latter is just now indispensable. Such prosperity can, however, be achieved only by extensive technical improvements which will increase productivity. In the author's opinion, in agriculture even less than in industry can this be left to private initiative. He proposes that the State should take energetic steps in this respect through measures including far-going socialization.

In view of the predominance in Germany of small farms it is Kautsky's opinion that the measures to be taken by the State would at first have to consist rather in a better regulation of the process of supply between town and country than in the organization of production. A beginning in the organization of production could, however, be made through the interference of cooperative societies and communes in agricultural production through transfer of the very large estates to the ownership of the State or municipalities and through participation of agricultural workers in the management of the individual farms. He considers socialization as the surest means for keeping the agricultural worker on the job and for attracting more labor to the large estates, of which they are in great need if they shall develop their full productivity.

KEMMERER, E. W. *Deflation, why and how?* Lansdowne, Pa., *The Robert Morris Associates*, 1920. 32 pp.

An address delivered at the annual meeting of the Robert Morris Associates in June, 1920, at Atlantic City, N. J., dealing with the financial condition of the country, the necessity for deflation, the methods, and the effect upon business conditions and wages.

LUCAS, JAMES. *Cooperation in Scotland*. Published by the *Cooperative Union, Limited*. Manchester, England, *Holyoake House, Hanover Street*, 1920. 93 pp. *Illus. International series, No. 2.*

A review of this book will appear in a future number of MONTHLY LABOR REVIEW.

MANCHESTER. *College of technology, Department of industrial administration. Industrial administration. A series of lectures*. Manchester, England, *University Press*, 1920. 203 pp.

This series of lectures delivered by a group of authorities during the session 1918-19, covers the following subjects: Social obligations of industry to labor; The application of psychology to industry; Education as a function of management; Occupational diseases; Atmospheric conditions and efficiency; Industrial councils and their possibilities; Training for factory administration; and Industrial fatigue.

MANSBRIDGE, ALBERT. *An adventure in working-class education. Being the story of the Workers' Educational Association 1903-1915*. London, *Longmans, Green & Co.*, 1920. 73 pp. *Illus.*

The author traces the development of an educational movement which he and his wife were instrumental in founding. The movement is unique in that it has successfully established a most desirable point of contact between working men and women and the universities, which has resulted in an opportunity for adult working-class education along the most democratic lines. Mr. Mansbridge is now chairman of the committee in charge of the World Association for Adult Education.

MARSHALL, ALFRED. *Industry and trade*. London, *Macmillan & Co., Ltd.*, 1919. 874 pp.

This book is a study of industry and general economic tendencies in Great Britain, the United States, France, and Germany. It deals especially with the technical evolution of industry and its influence on working and living conditions.

MARTIN SAINT-LÉON, ET. *Syndicalisme ouvrier et syndicalisme agricole. Paris, Payot & Cie., 1920. 160 pp.*

The use and growth of labor and agricultural unions in France and their various activities in providing education and insurance for their members and in developing cooperation are traced rather briefly by the author.

NATIONAL COAL ASSOCIATION. *The fuel manual, containing orders, regulations and notices of the United States Fuel Administration from its inauguration to January 31, 1919. Compiled and issued by the National Coal Association. Washington, D. C., 1919. 2 v. 454 pp.*

"Virtually a complete record of the Fuel Administration's orders from its creation in August, 1917, to the suspension of price and zone restrictions on January 31, 1919."

NATIONAL INDUSTRIAL CONFERENCE BOARD. *Should trade-unions and employers' associations be made legally responsible? By Forrest R. Black. Boston, June, 1920. 35 pp. Special report number 10.*

This monograph received first prize in the contest instituted by the board for the best essays on any one of eight subjects relating to labor problems. The subject is treated mainly from the trade-union standpoint, and the conclusions reached are that both classes of organizations must be held responsible for their contracts and their agents' acts in order that the public of which they both form a part may be protected.

— *The closed union shop versus the open shop: Their social and economic value compared, by Ernest F. Lloyd. Boston, July, 1920. 27 pp. Special report number 11.*

This is the second prize essay submitted in the essay contest of the board. The subject is treated from the standpoint of principles, the two sides of the question being judged according to the forces which have operated to produce these phases of employer and employee relationships and according to what they may be expected to contribute toward better and more permanent conditions.

OMELTCHENKO, E. I., AND KORFF, O. A., EDITORS. *Russian-American register. New York, Russian-American Register Publishing Co., 1920. 362 pp.*

This book is of especial interest to the Russian speaking population of the United States. It gives particular attention to the immigration and naturalization laws, and discusses the union movement and conditions of membership. There is a digest of the compensation laws of Illinois, New York, Pennsylvania, and Canada. Contains a translation of the Constitution of the United States into the Russian language. It lists about 500 names of Russian-Greek Catholic churches and other religious institutions, and 600 names of Russian organizations, and gives a list of American firms interested in Russian trade—importers, banks, manufactures, etc.

OPPENHEIMER, HILDE AND RADOMSKI, HILDE. *Die Probleme der Frauenarbeit in der Uebergangswirtschaft. Mannheim-Berlin-Leipzig, 1918. vi, 236 pp.*

This volume, written under the auspices of the Federation of German Women's Societies and of the Permanent Committee for the Promotion of Working Women's Interests, deals with the problems of woman labor during the transition period from the war to a peace régime. The first part of the volume is devoted to working women in the manufacturing industry, domestic service, commerce, and transportation. On the basis of numerous statistical data it discusses the quantitative, qualitative, social, and hygienic development and the efficiency of woman labor during the war. Based on these experiences the author of the first part formulates a set of demands with respect to protective legislation for women workers, including social insurance, social welfare work, their organization, codification of the labor laws, vocational training, and employment offices. The author states, however, that these demands are of a provisional character, and that in order to formulate more concrete demands there would be required (1) more exact bases as to the quantitative and qualitative development of woman labor; (2) more exact reports as to the vocational efficiency of women, these reports not to be colored by prejudice or by consideration of aggravating war conditions; and (3) reliable medical investigations as to the influence of vocational work upon the organism of women.

The second part of the volume deals with the development of vocational work of women in the professions as physicians, dentists, teachers, theologians, lawyers, economists, pharmacists, chemists, librarians, nurses, scientific assistants, social workers, artists, etc., and with opinions as to the efficiency of women in these professions. This part also is concluded with demand in the interest of professional women, among which should be mentioned increased employment of women in all higher vocations, more thorough educational training, and opening of all educational institutions to women, equal pay for equal work, and the lifting of all existing barriers.

PICCARD, P. *Haftpflichtpraxis und Soziale Unfallversicherung*. Zurich, 1917. 150 pp.

In this volume the author, a clerk of the Federal Court in Lausanne, attempts to show to what extent, since the enactment of the sickness and accident insurance law in Switzerland (June 13, 1911), the courts may use the old procedure based on employers' liability in suits relating to accident compensation. The volume is divided into four chapters: (1) Definition of the term accident; (2) Causal connection of the accident with sickness, invalidity, or death; (3) Consideration of the causes of the accident; (4) Determination of the insurance benefits. In an appendix are shown the mortality tables for the Swiss male and female population, and tables indicating the present worth of life pensions and orphans' pensions.

RATHENAU, WALTHER. *Die neue Gesellschaft*. Berlin, 1919. 102 pp.

According to the view of the author of this volume, it is not the form of government that determines the spirit of a country, but the form of society. He characterizes the defects of the old society which he sees in the struggle of the classes and in the consequent weakness of the spontaneous will of the people and sketches the future in which the natural adjustment between manual and brain work would offset the economic disadvantages of socialization, when German culture will no longer be a culture of classes, but a culture of the entire nation.

READ, CONYERS. *The political progress of the English workingman*. In the *Journal of Political Economy*, July, 1920, Chicago. Pp. 601-618.

A historical review of the growth of the political power of the English workingman. The author says he has paid so much attention to the evolution of the Labor Party because it is the one political movement of present-day England, which has been beyond question a workingman movement. But he adds that the majority of the workmen never have supported the Labor Party at the polls, and that their influence in modern English politics has been much more potent in modifying the program of the old parties than it has been in promoting the program of their own.

SECRETARIAT DES PAYSANS SUISSES. *Vingt-deuxième rapport annuel du comité directeur de l'union suisse des paysans et du secrétariat des paysans suisses, 1919*. Brougg, 1920. 128 pp.

The twenty-second annual report of the executive committee of the union of Swiss farmers and of the secretariat of Swiss farmers for the year 1919.

SELIGMANN, HERBERT J. *The Negro faces America*. New York, Harper & Brothers, 1920. 319 pp.

A discussion of the Negro's position in the United States at the present time, of the causes which have led up to it, and the forces operating to change it. The writer emphasizes the political and economic aspects of the question and points out that much of the alleged "racial antipathy" is carefully worked up as a screen for widely different motives. Owing to the shortage of labor, which has helped forward the Negro migration from the South, the effect of his military experience, and the new attitude of questioning and experimentation brought about by the war, the writer considers it inevitable that the race should strive to change the conditions to which it formerly submitted almost passively. The new racial consciousness of the Negro is a factor to be reckoned with. The author makes an earnest plea for reason and fair play in dealing with the question.

SMITH-GORDON, I. and O'BRIEN, C. *Cooperation in Denmark. Published by the Cooperative Union, Limited. Manchester, England, Holyoake House, Hanover Street, 1919. 74 pp. International cooperative series, No. 4.*

A review of this study will appear in a future number of the MONTHLY LABOR REVIEW.

SNEDDEN, DAVID. *Vocational education. New York, Macmillan Co., 1920. 587 pp.*

A general exposition of the writer's views upon current problems of vocational education. An appendix gives statistics showing the number of American workers following specified vocations as determined by the 13th United States Census.

SNOWDEN, PHILIP. *Wages and prices. An inquiry into the wages system and the relation of wages and prices. London, The Faith Press, 1920. 124 pp.*

This is a discussion of the present economic system from the socialist point of view. The book is written, it is stated, not for the economist and financier but for the plain workman.

SOLVAY, ERNEST. *Énergétique sociale. La rémunération comparative du capital et du travail. Brussels, 1919. 26 pp.*

This brochure is a study on profit sharing.

STOKER, WILLIAM HENRY. *The industrial courts act, 1919, and conciliation and arbitration in industrial disputes. London, Stevens and Sons, Ltd., 1920. 56 pp.*

Presents the existing enactments relating to conciliation, arbitration, and inquiry in industrial disputes, as a convenient guide to employers, employees, and lawyers.

TALKS WITH WORKERS ON WEALTH, WAGES, AND PRODUCTION. *London, Sir Isaac Pitman & Sons, Ltd. [1920.] 124 pp.*

This is a collection of articles which appeared in the trade supplement of the London Times. The economic principles are outlined in a way that is easily understood, the aim of the book being to "make clear the interdependence of labor, capital, and brain."

TAYLOR SOCIETY. *Bulletin. Handbook of the Taylor Society. Purpose, origin, and activities. Constitution. Membership. New York, 29 W. Thirty-ninth St., July, 1920, 17 pp. Supplement No. 1. Vol. V, No. 3.*

The purpose of this society is to promote the science and the art of administration and of management.

TEAD, ORDWAY AND METCALF, HENRY C. *Personnel administration, its principles and practice. New York, McGraw-Hill Book Co., Inc., 1920. 538 pp.*

This book is addressed to employers, personnel executives, employment managers, and students of personnel administration, and aims to set forth the principles and best prevailing practice in the field of human relations in industry. It covers such subjects as employment, health and safety, training, personnel research, service features, and joint relations.

VERBAND DER GASTWIRTSGEHILFEN. *Protokoll des 2. Fachkongresses abgehalten zu Leipzig vom 27-30. April 1920. Berlin, 1920. 128 pp.*

The minutes of the second congress of hotel, restaurant, and café employees of Germany held at Leipzig April 27 to 30, 1920. The order of the day of the congress included: (1) Attitude toward the creation of a single organization to include all of the above employees; (2) demands of the hotel, restaurant, etc., employees with respect to wage, boarding, and lodging systems; (3) discussion of the works council law; (4) woman labor in the hotel and restaurant industry; (5) uniform working clothes; and (6) various matters of minor importance.

VERBAND DER GEMEINDE- UND STAATSARBEITER. *Ruhelohn und Hinterbliebenenfürsorge der Arbeiter und Angestellten in Gemeindebetrieben. Berlin, 1920. 58 pp.*

This brochure is a compilation of the regulations governing retirement and survivors' pensions of workmen and salaried employees in the service of German municipalities. The compilation is based on replies to a circular letter mailed by the Federation of Workers in Municipal and State Employment to 571 communes with a population in

excess of 10,000 inhabitants. The federation received 446 replies. According to the replies received, 198 communes do not grant pensions to their workmen, 13 grant pensions in individual instances on resolution of the communal administration, and in 46 communes discussions are pending with respect to the introduction of a pension system. Only 189 communes have enacted regulations for the pensioning of their workers, while 77 communes are bound by collective agreements to grant to their workmen retirement and survivors' pensions. The minimum amount of the retirement pension varies between 150 and 500 marks (\$35.70 and \$119, par) per year and the maximum amount between 25 and 80 per cent of the annual earnings or salary. According to the report of the federation most of the existing regulations for the pensioning of communal workers are still very defective and require improvement.

VERBAND SCHWEIZ. KONSUMVEREINE BASEL. *Rechenschaftsbericht über die Tätigkeit der Verbandsbehörden für das Jahr 1919.* Basel, 1920. 136 pp.

The annual report of the Federation of Swiss Consumers Cooperative Societies for the year 1919.

VERBAND SCHWEIZERISCHER ARBEITSÄMTER. *Protokoll der VI. Verbandsversammlung schweizer. Arbeitsämter, den 18. Oktober 1919, in Aarau.* Zurich, 1920. 26 pp.

The minutes of the sixth general meeting of the Federation of Swiss Employment Offices.

VINCENT, GEORGE E. *The Rockefeller Foundation. A review for 1919. Public health and medical education in many lands.* New York, 1920. 44 pp.

VOYSEY, E. B. *The human element in industry.* Manchester, The University Press, 1920. 17 pp.

A lecture given in the department of industrial administration, College of Technology, Manchester, England.

WHITLEY, J. H. *Works committees and industrial councils. Their beginnings and possibilities. A lecture given in the department of industrial administration, College of Technology, Manchester, 7th October, 1919.* Manchester [England], The University Press, 1920. 25 pp.

After relating briefly what has been accomplished by the industrial councils and works committees, the author expresses the hope that the establishment of these councils and committees will give the workers a real understanding of the problems of industry as a whole. He feels that if this system is to be truly successful, industry must be considered not as a selfish class struggle but as a piece of national service, "the only kind of national service which can sustain our country in the days to come."

WOMEN'S COOPERATIVE GUILD. *Thirty-seventh annual report, May, 1919-May, 1920.* London, 1920. 32 pp.

Reports an increase of over 11,600 members during the year. The guild now has in England and Wales 783 branches, with a membership of over 44,500. The guild's purpose is to make its members "realize the full meaning and necessity of cooperation in local, national, and international affairs," and to prepare them for taking a full part in civic and national life as opportunity offers.

WORLD ASSOCIATION FOR ADULT EDUCATION. *The inauguration of the world association for adult education.* London, July, 1919. 29 pp. *Bulletin No. I.*

— *The university tutorial class movement.* London, November, 1919. 30 pp. *Bulletin No. II.*

— *Adult education in Norway, etc.* London, February, 1920. 24 pp. *Bulletin No. III.*

— *Adult education in France, etc.* London, May, 1920. 31 pp. *Bulletin No. IV.*

— *Adult education in Spain, etc.* London, August, 1920. 23 pp. *Bulletin No. V.*

In 1919 the World Association for Adult Education, having for its object the establishment or development in all parts of the world of movements and institutions for promoting adult education, to encourage cooperation among them, and to serve as

a clearing house of information regarding adult education, was formed in London. Since its organization the association has published five bulletins, listed above, dealing with the subject of adult education in its various phases in different countries. In these accounts the notable work done along educational lines by and among wage earners finds a place.

WRAY, W. J., and FERGUSON, R. W., EDITORS. *A day continuation school at work.* London, Longmans, Green & Co., 1920. 212 pp.

This is a collection of 12 papers dealing with the work of continuation schools organized before the passing of the education act in 1918, and contributed by men and women directly engaged in the conduct of such schools under private auspices. The problems entering into the adaptation of various lines of education to young workers, the necessity for well-prepared teachers, the coordination of school and works, the employer's part in continuation school work, and other related subjects are discussed in these papers which should prove suggestive to those engaged in this work or to those planning to enter it. Appendix I contains extracts from the education act, 1918 (England and Wales), while in appendix II may be found a list of books which has proved useful in the Bournville Girls' Day Continuation School.

SERIES OF BULLETINS PUBLISHED BY THE BUREAU OF LABOR STATISTICS

[The publication of the annual and special reports and of the bimonthly bulletin was discontinued in July, 1912, and since that time a bulletin has been published at irregular intervals. Each number contains matter devoted to one of a series of general subjects. These bulletins are numbered consecutively, beginning with No. 101, and up to No. 236 they also carry consecutive numbers under each series. Beginning with No. 237 the serial numbering has been discontinued. A list of the series is given below. Under each is grouped all the bulletins which contain material relating to the subject matter of that series. A list of the reports and bulletin of the Bureau issued prior to July 1, 1912, will be furnished on application. The bulletins marked thus * are out of print.]

Wholesale Prices.

- * Bul. 114. Wholesale prices, 1890 to 1912.
- Bul. 149. Wholesale prices, 1890 to 1913.
- * Bul. 173. Index numbers of wholesale prices in the United States and foreign countries.
- Bul. 181. Wholesale prices, 1890 to 1914.
- * Bul. 200. Wholesale prices 1890 to 1915.
- Bul. 226. Wholesale prices, 1890 to 1916.
- Bul. 269. Wholesale prices, 1890 to 1919. [In press.]

Retail Prices and Cost of Living.

- * Bul. 105. Retail prices, 1890 to 1911: Part I.
Retail prices, 1890 to 1911: Part II—General tables.
- Bul. 106. Retail prices, 1890 to June, 1912: Part I.
Retail prices, 1890 to June, 1912: Part II—General tables.
- Bul. 108. Retail prices, 1890 to August, 1912.
- Bul. 110. Retail prices, 1890 to October, 1912.
- Bul. 113. Retail prices, 1890 to December, 1912.
- Bul. 115. Retail prices, 1890 to February, 1913.
- * Bul. 121. Sugar prices, from refiner to consumer.
- Bul. 125. Retail prices, 1890 to April, 1913.
- * Bul. 130. Wheat and flour prices, from farmer to consumer.
- Bul. 132. Retail prices, 1890 to June, 1913.
- Bul. 136. Retail prices, 1890 to August, 1913.
- * Bul. 138. Retail prices, 1890 to October, 1913.
- Bul. 140. Retail prices, 1890 to December, 1913.
- Bul. 156. Retail prices, 1907 to December, 1914.
- Bul. 164. Butter prices, from producer to consumer.
- Bul. 170. Foreign food prices as affected by the war.
- * Bul. 184. Retail prices, 1907 to June, 1915.
- Bul. 197. Retail prices, 1907 to December, 1915.
- Bul. 228. Retail prices, 1907 to December, 1916.
- Bul. 266. A study of family expenditures in the District of Columbia. [In press.]
- Bul. 270. Retail prices, 1913 to 1919. [In press.]

Wages and Hours of Labor.

- Bul. 116. Hours, earnings, and duration of employment of wage-earning women in selected industries in the District of Columbia.
- * Bul. 118. Ten-hour maximum working-day for women and young persons.
- Bul. 119. Working hours of women in the pea canneries of Wisconsin.
- * Bul. 128. Wages and hours of labor in the cotton, woolen, and silk industries, 1890 to 1912.
- * Bul. 129. Wages and hours of labor in the lumber, millwork, and furniture industries, 1890 to 1912.
- * Bul. 131. Union scale of wages and hours of labor, 1907 to 1912.
- * Bul. 134. Wages and hours of labor in the boot and shoe and hosiery and knit goods industries, 1890 to 1912.
- * Bul. 135. Wages and hours of labor in the cigar and clothing industries, 1911 and 1912.
- Bul. 137. Wages and hours of labor in the building and repairing of steam railroad cars, 1890 to 1912.
- Bul. 143. Union scale of wages and hours of labor, May 15, 1913.
- Bul. 146. Wages and regularity of employment and standardization of piece rates in the dress and waist industry of New York City.
- Bul. 147. Wages and regularity of employment in the cloak, suit, and skirt industry.

Wages and Hours of Labor—Concluded.

- * Bul. 150. Wages and hours of labor in the cotton, woolen, and silk industries, 1907 to 1913.
- Bul. 151. Wages and hours of labor in the iron and steel industry in the United States, 1907 to 1912.
- Bul. 153. Wages and hours of labor in the lumber, millwork, and furniture industries, 1907 to 1913.
- Bul. 154. Wages and hours of labor in the boot and shoe and hosiery and underwear industries, 1907 to 1913.
- Bul. 160. Hours, earnings, and conditions of labor of women in Indiana mercantile establishments and garment factories.
- Bul. 161. Wages and hours of labor in the clothing and cigar industries, 1911 to 1913.
- Bul. 163. Wages and hours of labor in the building and repairing of steam railroad cars, 1907 to 1913.
- Bul. 168. Wages and hours of labor in the iron and steel industry, 1907 to 1918.
- Bul. 171. Union scale of wages and hours of labor, May 1, 1914.
- Bul. 177. Wages and hours of labor in the hosiery and underwear industry, 1907 to 1914.
- Bul. 178. Wages and hours of labor in the boot and shoe industry, 1907 to 1914.
- Bul. 187. Wages and hours of labor in the men's clothing industry, 1911 to 1914.
- * Bul. 190. Wages and hours of labor in the cotton, woolen, and silk industries, 1907 to 1914.
- * Bul. 194. Union scale of wages and hours of labor, May 1, 1915.
- Bul. 204. Street railway employment in the United States.
- Bul. 214. Union scale of wages and hours of labor, May 15, 1916.
- Bul. 218. Wages and hours of labor in the iron and steel industry, 1907 to 1915.
- Bul. 221. Hours, fatigue, and health in British munition factories.
- Bul. 225. Wages and hours of labor in the lumber, millwork, and furniture industries, 1915.
- Bul. 232. Wages and hours of labor in the boot and shoe industry, 1907 to 1916.
- Bul. 238. Wages and hours of labor in woolen and worsted goods manufacturing, 1916.
- Bul. 239. Wages and hours of labor in cotton goods manufacturing and finishing, 1916.
- Bul. 245. Union scale of wages and hours of labor, May 15, 1917.
- Bul. 252. Wages and hours of labor in the slaughtering and meat-packing industry.
- Bul. 259. Union scale of wages and hours of labor, May 15, 1918.
- Bul. 260. Wages and hours of labor in the boot and shoe industry, 1907 to 1918.
- Bul. 261. Wages and hours of labor in woolen and worsted goods manufacturing, 1918.
- Bul. 262. Wages and hours of labor in cotton goods manufacturing and finishing, 1918.
- Bul. 265. Industrial survey in selected industries in the United States, 1919. Preliminary report.
- Bul. 274. Union scale of wages and hours of labor, May 15, 1919. [In press.]

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