### U. S. DEPARTMENT OF LABOR

JAMES J. DAVIS, Secretary

#### BUREAU OF LABOR STATISTICS

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### This Issue in Brief

Cooperation in the building and ownership of homes is being carried out by various cooperative societies in the United States, mainly in apartment houses in New York City and Brooklyn. One of the principal savings in this type of cooperation is cost of financing, because frequently the building society has been able to borrow funds, at favorable interest rates and without commissions, from other cooperative societies. Page 1.

A study of labor productivity and labor costs in an American cotton mill, over a period of years, shows that, in the weaving process, the output per man-hour rose from 13.65 pounds of cloth in 1911 to 24.49 pounds in 1925, an increase of almost 80 per cent. Other processes also showed increases in man-hour output. This general increase in labor productivity was due largely to the introduction of better equipment, but more efficient plant organization and management were also responsible. Labor costs also rose because of wage advances, particularly during and after the war, but the rise was greatly retarded by increased efficiency and by the substitution of unskilled labor in some of the tasks previously performed by skilled workers. Page 7.

The development of motor-bus transportation has created a new and very extensive field of employment for labor. There are at present some 70,000 buses in operation, employing at least 100,000 drivers and conductors. Because of the newness of the industry, wages and hours show striking variations. Thus, in Chicago the wage rates vary from 42.9 to 87.5 cents per hour, and the full-time weekly rates from \$25 to \$52.50. The regular hours of work range from an 8-hour day and a 6-day week to an 11%-hour day and a 7-day week. The results of a preliminary survey of conditions in Chicago and New York made by the Bureau of Labor Statistics are given on page 70.

Wages of farm laborers have not kept pace with the increase in the cost of living.—For the country as a whole, average wages of farm laborers in the United States from 1913 to 1925 increased 63 per cent. During the same period, however, the cost of living increased 75.7 per cent, with the result that the purchasing power of farm wages was about 7.2 per cent less in 1925 than it was in 1913. Page 115.

The common labor wage rate in the United States averaged 42.8 cents per hour on July 1, 1926, the lowest rate reported being 15 cents and the highest 93.8 cents. The highest average rate in any of the 13 industries covered by the survey was 47.9 cents per hour in the petroleum refining industry and the lowest was 33.6 cents in saw-

mills. Page 72.

Wages and hours in the steel industry in 1926.—The biennial survey by the Bureau of Labor Statistics of wages and hours in the iron and steel industry has been completed, and the results for the blast-furnace, open-hearth, and bar-mill departments are presented on page 75. Practically no change in hours of labor has occurred since 1924 in any of these departments. Earnings per hour remained almost stationary in blast furnaces but increased about 10 per cent in open hearths and 3 per cent in bar mills.

VII

Changes in union wage scales and hours of labor from 1913 to 1926, are given in detail, by cities and by trades, on page 92.

Women in industry not only have lower wages than men, but are greater sufferers from unemployment, according to a bulletin of the New York State Department of Labor. Average earnings for men in factory operations in New York in 1924-25 were \$31.36 a week, for women, \$17.45. Women are found more largely than men in the seasonal trades and occupations, and make up a larger part of the reserve of unemployed labor. Page 33.

Medical examination of miners is being carried out in Western Australia under an act of 1925. Of the first 2,680 men examined, 55 were suffering from tuberculosis and were withdrawn from mining. The State is obligated to find suitable employment for those having tuberculosis. The Commonwealth Government pays the salaries of the medical officers and maintains the health laboratory. The other costs are borne by the State Government. Page 46.

A minimum wage of 40 cents per hour for adult male workers in the lumber industry has been established by the wage board of British Columbia. The wage is effective as of November 1, 1926, and represents one of the first applications of the principle of a State determined minimum wage to male workers in Canada. Page 35.

Recent price changes.—The retail prices of food were 1.7 per cent lower in July, 1926, than in the previous month, and 1.8 per cent lower than one year ago. Page 147. Wholesale prices of all commodities also declined 1 per cent between June and July, 1926, and declined 5¾ per cent between July, 1925, and July, 1926. Page 171.

Trend of employment.—Employment in manufacturing industries decreased 1.6 per cent in July, 1926, as compared with the previous month but was 0.6 per cent greater than in July, 1925. Page 124.

Profit-sharing schemes in English industry have a history of over 50 years.—In 1925 there were 252 schemes in operation, covering more than 191,000 employees. The average benefit received by the employees affected varied from a little over £2 for those in engineering, shipbuilding, and metal trades to something over £21 for those in banking, insurance, or other financial business. Page 62.

A study of poverty in Great Britain.—A decrease in the size of the English worker's family, an increase in wage rates for the lowest-paid classes, and a greater extension of social insurance have combined to reduce the extent of primary poverty in Great Britain, according to a comparative study of conditions in 1913–14 with those in 1923–24. In 1913 the average working-class family studied was made up of 1.85 wage earners and 2.61 nonearners; in 1924, the corresponding figures were 1.88 and 2.43. In the interval, the lowest wage rates approximately doubled, while the cost of living increased about 70 points over the 1913 figures, so that the worker, if employed, earned more but had fewer to support. Page 21.

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# Cooperative Home Ownership in the United States

Bureau of Labor Statistics for the principal cities of the United States show that, as regards residential buildings, the volume of construction has more than kept pace with the increasing population. These studies, however, have taken no account of the rentals or purchase price of such dwellings, a factor which is of vital importance to the average working-class family. It is of little consequence to such a family that there is an adequate supply of dwellings, if these are out of its reach financially. And housing studies in such cities as New York and Philadelphia have shown that it is precisely the moderate-priced homes of which there is the greatest shortage and to supply which the private builders are doing least. So serious has the situation become in New York that various legislative measures have been resorted to in the effort to stimulate the building of such dwellings.

Despairing of relief from private builders and determined to eliminate the profit in housing, various groups, especially in New York City and Brooklyn, have been providing their own housing accommodations. The results of their efforts are, of course, negligible in comparison with the total amount of such housing needed, but are significant in showing others what can be done and how the housing item of the family budget can be reduced by cooperative nonprofit

effort. The Bureau of Labor Statistics, as part of its general study of cooperative societies, has been collecting data on these housing societies, taking especial care to include only those which are genuinely cooperative in the main particulars. Many apartments are being sold on the so-called "cooperative plan" by private builders who construct them, for sale, just as they do single houses, and sell them outright to individual buyers. The buyers are allowed to resell at a profit, as well as to rent their apartment or apartments for as large a rent as they can secure. Voting is on the basis of stock ownership, and one person may own several apartments and thus have a number of votes. This is not true of genuine cooperative societies, for in such societies each member has but one vote, regardless of his capital holdings in the society. If any surplus is earned by the society this is rebated, in the truly cooperative society, on the basis of patronage (i. e, the amount of the monthly payment) and not on stock held. The affairs of the society are managed by a board of directors of varying number, elected by the members. The actual management of the apartment house is quite often in the hands of one person chosen for the work.

The bureau has knowledge of the existence of 40 such societies, all but 2 of which are in Brooklyn or New York City; and data are at

[457]

hand for 32. Of these reporting societies, 22 are in Brooklyn (within a radius of seven or eight blocks), 9 in New York City, and 1 in Wisconsin.

Most of these societies have been started in the past five years. One was started in each of the years 1916 and 1919; 2 each in 1922 and 1925; 5 each in 1921 and 1923; 7 in 1924; and 8 in 1920.

# Types of Dwellings Provided

IN BOTH Brooklyn and New York the dwellings provided by all of the societies are apartments exclusively, usually those of the four-story, walk-up type, the 16-dwelling building having four apartments per floor. Another, and more attractive type, is the court building with a simple archway leading from the street to a grassy court, from which one or more entrances (according to the size of the building) lead into the various wings.

The dwellings provided by the Wisconsin society are individual houses, 105 of which have been built on a tract of 28 acres. The settlement includes a parked playground 250 by 600 feet. This was partly a cooperative and partly a city project.

# Groups Undertaking Cooperative Housing

IN BROOKLYN the members are mainly Finns or Finns and Scandinavians; one society which owned a 32-apartment building had living in the same building Germans, Finns, Swedes, and native Americans. In New York City quite often various nationalities are found in the same apartment building. In one apartment building where a number of nationalities were housed, the wife of the secretary stated that she had been pleasantly surprised to find how congenial they all were. In New York City, also, two groups, one of workers of various nationalities and the other of Jewish people entirely, are undertaking housing activities on a very large scale. Neither of these projects is yet complete. The first group has acquired three city blocks of land costing \$425,000 and is building apartment houses thereon; this group of buildings will house approximately 1,000 families. Stores also will be added when the housing work is completed. The Jewish group has land for a group of buildings with accommodations for 238 families, and has already acquired an adjoining plot of ground on which more buildings will be erected. The contracts are now being given out. A community development is planned, with stores, day nurseries for babies whose mothers are at work, etc.

The 32 societies covered have a total membership of 2,073 families, of whom 561 are in Brooklyn, 1,407 in New York City, and 105 in Wisconsin.

# Cost of Cooperative Dwellings

WHEN the individual becomes a member of a housing society he subscribes for a certain amount of capital stock in the society estimated as covering the cost of the apartment or dwelling he will occupy. This total cost is arrived at after consideration of a number

<sup>&</sup>lt;sup>1</sup> This housing project was described in detail in the December, 1922, issue, pp. 155-158.

of factors; the total cost of land, building and other expenses connected therewith are taken as a basis and the cost of each dwelling determined according to the number of rooms, floor space, location, and other points of advantage or disadvantage. The cost figure so arrived at for each individual apartment is the price which the prospective tenant must pay, and the amount for which he must subscribe stock in the society. (No profit is made in the genuine cooperative society.) This stock may be paid for either as a whole or in installments, according to the requirements of the by-laws. The share capital paid in by the members in the 18 societies for which data on this point were secured aggregated \$827,850, or about \$612 per member.

Housing projects, however, especially in large cities, require considerable amounts of money. The buildings owned by the societies studied ranged in cost from \$16,000 to \$152,000 (average, \$59,500) for old apartment buildings mainly of the 4-story, 16-dwelling type, and from \$75,000 to \$425,000 for the land and construction of new buildings. The wage earners who form the great majority of the members of cooperative housing societies are therefore forced to obtain money from outside sources. This is usually secured through mort-

gages or "comrade loans" from fellow cooperators or both.

One society in New York City paid \$67,500 for land and \$95,000 for constructing the building. Of this \$68,000 was raised by the members, and the remainder was secured through a first and a second mortgage, the borrowed money being paid off at the rate of \$3,000 a year. Another society in the same city bought an old building for \$75,000. The members provided the \$25,000 necessary for the down payment and also the \$40,000 which was required for repairs and improvements; \$8,000 was borrowed from private individuals interested in the project; and the remaining amount necessary was obtained by three mortgages. A Brooklyn group of 15 members which bought an old building costing \$40,000, paid for it without resorting to outside financial assistance, each member's share of the expense being \$2,666.67. Another Brooklyn society which also bought an old building for the same price was carrying the bulk of this in a first and a second mortgage. When the time came to renew the second mortgage, however, the holder of the mortgage demanded what the cooperators considered an exorbitant "bonus" for renewal. So each member "chipped in" what he could; some additional funds were secured on comrade loans, and the bank in the community, which was holding the first mortgage, increased its amount, thus enabling the members to pay off the second mortgage.

One group of 42 people who are now occupying a new attractive court-type building, made the mistake of intrusting all the details of purchase and construction to one man. Soon, through his incompetence and mismanagement, they found the bills unpaid and trouble threatening from all sides. When matters came to a head, this man, as one of the members put it, "left them flat." They shouldered the burden but the experience cost them much worry and expense. They are now paying on the principal of both first and second mortgages and this raises their monthly payments to a figure considerably higher than that of other cooperative groups in the neighborhood.

A society a few squares from this one obtained the additional funds necessary to finance its building project through comrade loans and a first mortgage. This latter they expect to pay off some time this year and by doing so will reduce the monthly payment \$8 on each apartment. Then the tenants will pay from \$34 to \$35.50 per month for a 4-room apartment.

The financial arrangements made by some of the societies are

shown below:

#### SOURCES OF FUNDS OF CERTAIN COOPERATIVE HOUSING SOCIETIES

		Paid-in		Amo	unt of—	
Society and location	Total cost of building	share capital	First mortgage	Second mortgage	Third mortgage	Other loans
Brooklyn: No. 2 No. 3 No. 4 No. 6 No. 7 No. 9 No. 9 No. 3 No. 5 No. 5	\$42,000 99,000 23,000 16,000 201,500 67,000  162,500 75,000 152,000	(1) \$16,000 5,000 3,000 35,000 25,000 68,000 41,640 30,000	\$18,000 50,000 8,500 7,000 86,000 27,500 72,000 \$25,360 7 122,000	\$9,500 3,600 	\$2,400	* 33,000 * 80,000

<sup>1</sup> Not reported.

The average cost of apartments in the buildings for which data were secured ranged in the old buildings from \$2,000 to \$4,313 (average, \$3,190) and in the new buildings from \$3,094 to \$6,750 (average, \$5,614). The apartments were generally those of three, four, and five rooms.

The initial payment required varied in certain of the societies covered, from \$100 to \$2,000; 2 societies require only \$100 down, 4 societies from \$300 to \$500, 5 societies from \$600 to \$1,000, and 1 society from \$1,200 to \$2,000 according to the size of the apartment. In those organizations in which the initial payment varies with the number of rooms, the sum per room ranges from \$125 to \$400. In 2 societies the payment is as low as \$125 a room; 2 societies require \$200 a room, 1 society \$200 a room plus \$50 for the kitchenette, 2 societies \$250,

3 societies \$300, and 3 societies \$400 a room.

After the member takes possession of his dwelling he pays as "rent" each month a certain amount which is calculated to cover his proportionate share of such items as taxes, insurance, the general upkeep of the building (repairs, improvements, janitor service), fuel, payments on the mortgage or mortgages, etc. In some cases the members adopt the policy of making these monthly payments large enough to cover unexpected expenses, building up a little surplus for this and other purposes. In others, such expenses are met as they arise through a pro-rata assessment on all the tenants. This latter practice was objected to by some of the housewives interviewed, as they said they never knew what to expect. They would prefer

Friendly loans.

Friendly loans.
Promissory notes of members and friends.

<sup>&</sup>lt;sup>8</sup> Includes second and third mortgages also.

Included in amount of first mortgage.
 Includes second mortgage also.

to pay a somewhat larger amount and be able to count upon paying

that amount and no more.

The monthly amounts paid by the owner-tenants are shown below. As indicated, the amount varies with the size and, in many instances, with the location of the apartment. In one building, where the apartments were all of the same size, all members at first paid the same amount, regardless of the location of the apartments, which were drawn by lot. This system was given up, however, and at present the more desirably placed and arranged dwellings cost more. In addition to the monthly payment shown, the occupant must do for himself any redecorating—papering, painting, etc.—within his apartment. In reading the table, it should be borne in mind that these payments take no account of interest on principal already paid in.

Especially among the Brooklyn cooperators, many of the members are building-trades workmen, who not only are able to do their own decorating, repair work, etc., but lend a hand on similar work for

the whole building, saving the society this cost.

# AVERAGE MONTHLY PAYMENTS ON COOPERATIV& APARTMENTS OF 3, 4, AND 5 ROOMS

[Interest on principal already paid not included]

Society and location		monthly pay		Society and	cooperative apartme				
iocation	3 rooms	4 rooms	5 rooms	location	3 rooms	4 rooms	5 rooms		
Brooklyn:	\$24.00	\$32,00	\$40.00	Brooklyn-Con.			the co		
No. 3	20. 70	27. 60		No. 16 No. 17			\$65. 00 1 42. 00–43. 50		
No. 4	12.00	16.00	20.00	No. 18	\$35.00				
No. 5	24. 00	32, 00		No. 19	19. 40		32. 5		
No. 6 No. 7	15.00	20.00	25. 00 1 40. 00-65. 00	No. 20	38. 00	50. 00			
No. 8	* 24. 00-39. 00	25. 00	40.00-65.00	No. 21 New York:			144.00-54.0		
	124, 00-27, 00		1 40, 00-45, 00	No. 1	1 18, 00-21, 00	1 24, 00-28, 00	130, 00-35, 0		
No. 10	21.00	28, 00	35. 00	No. 2	33.00	44.00	55. 0		
No. 11		130.00-36.50		No. 3		160.00-72.00			
No. 12		1 58. 88–62. 00		No. 4		148.00-52.00			
	121.00-27.00		135.00-45.00	No. 5	45. 00				
No. 14 No. 15	\$32,00	35. 00 \$44. 00		No. 6	39. 00	52. 00	65. 00		

<sup>1</sup> According to location.

Most of the tenants interviewed expressed great satisfaction with the cooperative plan. One woman stated that previous to joining the society her family had been paying \$60 a month for an apartment on which no repairs were ever made and then had to furnish their own heat. "When we got the rent paid, sometimes we had enough left over for something to eat and sometimes we didn't." This family now pays \$35 for a 5-room apartment and of this \$7.50 applies on the second mortgage.

As part of the monthly payment goes to pay off the indebtedness this is gradually reduced and as a consequence not only is the amount of the tenant's equity in the building increased but his monthly payments decrease. When the building or buildings finally become the property of the society, the only expense is that of maintenance.

# Ownership

IN THE genuine cooperative society the tenant never receives a title to his dwelling. Legal ownership remains in the society as a whole. The member merely owns stock in the organization to the value of his apartment or dwelling and receives a permanent lease which he may pass on to his heirs. Should he desire to give up his membership his stock must first be offered to the society and if the latter is unable to redeem it at its par value he is allowed to sell it, at cost, to any person who he considers would be a desirable tenant. Transfers of stock must be made on the books of the society. In this way speculative profit by the members at the expense of the prospective member is prevented. "It is not the purpose of cooperative building societies to enable tenants to obtain homes at bottom prices by building collectively and then to allow the individuals to own and sell them to others for profit. The purpose of cooperative building societies is to provide permanent homes for the people without private profit or speculation in land and buildings, collectively controlled and administered by the tenant members.

It is to be regretted that not all the cooperative housing societies studied follow this practice. In most instances the member does not receive title to his dwelling; in three societies, however, the reverse is true. As regards the principle of selling at cost, not so favorable a situation was found. Eight societies allow the member to sell his holdings for whatever he can get, though in none of these societies has any of the original members attempted to do so.

# Cost of Property Owned

THE 32 societies included in the present study control property costing more than \$4,000,000, distributed among the three localities as follows:

COST OF PROPERTY CONTROLLED BY COOPERATIVE HOUSING SOCIETIES

reporting	families housed	and land
22 2 9 1	<sup>2</sup> 1, 166 105	1 \$2, 176, 000 2 1, 422, 600 504, 000
32	2 1, 805	2 4, 102, 600
	22 29 1	22 29 29 1,166 105

<sup>1</sup> 21 societies.
<sup>2</sup> Includes 1 society with 1,000 members and property costing \$425,100 whose buildings are not yet ready for occupancy.

It should be emphasized that the above figures represent the actual cost, not the present value. In many if not all instances, the value of the property has increased since the society has been holding it. In one organization in Brooklyn, apartments for which the original members paid \$600 are now worth \$1,000 and \$1,100. Such an increase, however, is an asset of the society as a whole, not of the individual members.

<sup>&</sup>lt;sup>2</sup> Report of housing committee to third cooperative congress, Chicago, Oct. 26-28, 1922.

# Labor Productivity and Labor Costs in Cotton Manufacturing

HIS study was made by the Bureau of Labor Statistics to establish the relation between the production of cotton cloth, the man-hours required for such production, and the money paid for labor during a specified period 15 years ago and a similar

period at the present time.

The manufacture of cotton cloth embraces a number of varying processes, which would create many conflicting results, if all were considered. For that reason it was decided to survey only the manufacture of the fundamental article, gray cloths, and disregard any bleaching, dyeing, or other converting process which might be used in connection with it.

It was determined that figures covering a pay-roll period during 1911, one-half month or two weeks, would under normal conditions be sufficiently representative and comparable with figures for a similar period during 1925, and would, when reduced to the man-hour basis, give practically the same results as figures for a longer period.

The question of what constitutes chargeable productive labor is somewhat arbitrary. It was decided, for the purpose of this survey, to include all who were actively engaged in the production of the output, so that productive labor in this instance covers supervisory employees, such as overseers and superintendents, as well as general help, such as machinists, engineers and firemen, carpenters and electricians, or watchmen, whose labor is necessary for the operation of the plant and consequent production of the material. Where any converting process was engaged in, the proportionate amount of time and earnings for supervisory and general help, figured on the

man-hour basis, was deducted from the chargeable figures.

Only one of the mills visited during the course of the survey revealed conditions which would permit a fairly accurate comparison for the 15-year period. Practically the same class, size, and quality of goods had been manufactured during the entire time, though changes had been made in equipment, in hours and in number of workers employed. Considerable study of efficiency and cooperation had been made by the management, resulting in several changes which increased the output and established better conditions for the workers. An excellent system of records was in use but, unfortunately, in order to avoid disclosing the identity of the establishment, careful censoring of the data obtained and the omission of a large amount of valuable material were necessary. Also, one mill may not be representative of the entire industry, and some of the conditions described here may vary altogether from those in other mills. The figures are, however, presented as a result of an attempt in the field, which may later develop into a more comprehensive study.

Manufacturing Processes

MANUFACTURE of cotton cloth divides naturally into two major processes—spinning and weaving. Some mills are devoted entirely to the spinning of yarn, which is sold to other mills in which weaving alone is done. Other mills spin only a part of the yarn used in the weaving department, buying the rest, while another

class, to which the establishment in question belongs, is so equipped and operated as to manufacture all the yarn needed for its own use. Each process is divided into several operations. The various operations, machines, and vocations were described in a bulletin, and those descriptions apply to this mill, except in some minor details.

While, theoretically, the production of cloth ends with the weaving process, there still remain several subsequent operations, usually performed in the cloth room or finishing department, in which the cloth is inspected, folded and baled. The data secured in the present study are shown for each of the three divisions, separately.

#### Production of Yarn

Table 1 shows hourly production and labor cost per pound of yarn based on the total number of employees and also on the largest group of workers in the process, the spinners:

Table 1.—RELATION OF MAN-HOURS, LABOR COST, AND YARN PRODUCTION IN SELECTED PERIODS OF 1911, 1916, AND 1925

Item	1911	1916	Per cent of increase in 1916 over 1911	1925	Per cent of increase in 1925 over 1916
Entire process: Number of man-hours worked Labor cost dollars	40, 018. 78 3, 847. 30	36, 184. 27 4, 572, 74		31, 649. 14 9, 694. 44	
Yarn produced: Totalpounds_ Per man-hourdo	403, 232	382, 527 10, 57	4.9	366, 959 11, 59	9.7
Labor cost per pound of yarndollars	0.00954	0.01195	25.3	0.02642	121.0
Number of man-hours workeddollars_	8, 942. 00 719. 69	8, 871. 16 992. 61		7, 550.00 1, 822.07	
Yarn produced per man-hourpounds_ Labor cost per pound of yarndollars_	45.09 0.00178	43.12 0.00259	14.4 45.4	48. 60 0. 00496	12.7 91.3

<sup>&</sup>lt;sup>1</sup> Decrease

As the data for hours, labor cost, and production were obtained for all departments for identical periods, it follows that these items are not for the same lot of raw stock throughout, and that a relatively smaller or larger portion might have been produced some days in certain operations. The different operations were, however, well balanced, so that each succeeding department could handle just the amount produced by the previous one, and the inclusion of at least 12 days in each period ought to make the figures practically the same as if a special lot of raw stock had been timed while passing through the mill.

It was considered better to treat the yarn production as a whole instead of separating it into warp-yarn production and filling-yarn production, as the latter would involve a great amount of detailed work. These items did, nevertheless, make considerable difference in the amount of production, as the filling yarn in this instance was of

 $<sup>^1\,\</sup>mathrm{United}$  States. Bureau of Labor Statistics. Bul. No. 239: Wages and hours in cotton goods manufacturing, 1916.

a finer grade and consequently required more twist, as well as necessitating more yards to weigh a pound. Roughly, about two-thirds of the yarn produced was warp yarn, and the remaining one-third was

filling varn.

The table shows that, for the entire process, yarn was manufactured at the rate of 10.08 pounds per man-hour during the 1911 period. In 1916, production had increased to 10.57 pounds, or a gain of 4.9 per cent, while in 1925 it advanced to 11.59 pounds, an increase of 9.7 per cent over 1916. The labor cost also shows a constant increase, from 0.954 cents per pound in 1911 to 1.195 cents in 1916 (an advance of 25.3 per cent), and to 2.64 cents in 1925 (a further increase of 121 per cent).

The number of machines operated by each tender has a great deal of influence on the time required, but to give this information would be to disclose the identity of the plant. It is, however, interesting to observe the relation between the man-hours and the labor cost for the process with those for spinning alone. For that reason the items have been included in Table 1. It shows that actual production on the spinning frames per man-hour declined 4.4 per cent between 1911 and 1916, but increased 12.7 per cent between 1916 and 1925. The decrease may have been due to any or all of several factors, such as the manufacture of a larger proportion of finer-grade yarn, fewer spinning frames per operator, breakage of material, etc. The labor cost per pound for spinners follows those for the process more closely than does production, and shows an increase of 45.4 per cent between 1911 and 1916, with an additional increase of 91.3 per cent between 1916 and 1925.

#### Production of Cloth

Table 2, which follows, shows similar data for the cloth-production process and for the largest group of workers in that process, the weavers.

Table 2.—RELATION OF MAN HOURS, LABOR COST, AND CLOTH PRODUCTION IN SELECTED PERIODS OF 1911, 1916, AND 1925

Item	1911	1916	Per cent of increase in 1916 over 1911	1925	Per cent of increase in 1925 over 1916
Entire process: Number of man-hours worked Labor cost Cloth produced— dollars	49, 515. 80 6, 260, 70	47, 837. 49 7, 329. 50		40, 902. 73 13, 078. 81	
Total pounds Per man-hour pounds Labor cost per pound of cloth dollars Weaving:	393, 642 7, 95 0, 01590	395, 259 8. 26 0. 01854	3. 9 16. 6	421, 966 10. 31 0. 03099	24. 8 67. 1
Number of man-hours worked.  Labor cost Cloth produced per man-hour. pounds.  Labor cost per pound of cloth dollars.	28, 830. 50 3, 797. 59 13. 65 0, 00965	23, 910, 17 4, 195, 01 16, 53 0, 01061	21. 1 10. 0	17, 231, 00 5, 797, 02 24, 49 0, 01374	48. 1 29. 4

As in the manufacture of yarn, the data here do not cover identical lots of yarn, but here also the facilities of each division were arranged so that the operations balanced, each succeeding one taking care of the quantity turned out in the preceding one. In

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similar manner the weaving process consumed all of the yarn manufactured but there was of course always a certain amount of finished product left over in each operation at the end of each period. This was, however, balanced by the amount of material consumed in each operation before the involved production from the previous operation reached it.

Actual linear measurement for the cloth production could not be secured, as the only records related to the number of cuts for each weaver, who was paid a specified rate per cut, according to quality of the product. A cut constitutes a rather uncertain, flexible unit for determining yard measure, because a number of yards so figured, would in this case range from 100 to 112 yards. For that reason it was determined to disregard the linear yard measurement of the

cloth produced and confine the calculations to pounds.

It is shown that cloth was manufactured at the rate of 7.95 pounds per man-hour, for the entire process during 1911. In 1916 production had advanced to 8.26 pounds per man-hour, an increase of 3.9 per cent; while in 1925 it rose to 10.31 pounds per man-hour, a further gain of 24.8 per cent and approximately 2½ times the increase which took place in the production of yarn in the same length of time. The difference was, no doubt, due to the installation of the automatic looms, and other labor-saving equipment.

Labor costs per pound for the process show an increase from 1.590 cents in 1911 to 1.854 cents in 1916 (16.6 per cent), and to 3.099 cents during 1925 (an advance in cost of 67.1 per cent per pound over 1916, but approximately only half as large an increase

as shown for the yarn production in the same interval).

During 1911 the number of man-hours for weavers was approximately 60 per cent of the number required for the process, but in 1925 constituted only about 40 per cent of the total hours. Consequently the increase in cloth production per man-hour for weavers alone differed considerably from cloth production per man-hour for the total workers in the process. As the table shows, it increased 21.1 per cent between 1911 and 1916, and 48.1 per cent from 1916 to 1925. Labor costs per pound for weavers alone follow fairly close and show an increase of 10 per cent between the 1911 and 1916 periods, with an additional increase of 29.4 per cent between 1916 and 1925.

It must not be overlooked that during the warp preparation considerable weight is added to the warp yarn by the slashing operation, in which the yarn is impregnated and coated with size, a starchy preparation. No exact record was obtainable of the weight added in the 1911 period, but it was approximately 10.5 per cent. During the 1916 period it ranged from 8.7 per cent to 11.4 per cent, with an average of 10.37 per cent. During the 1925 period it ranged from 7.35 per cent to 9.54 per cent, with an average of 8.39 per cent. The total weight of size added by the slashers does not, however, figure in the total weight of cloth woven, because a certain amount is rubbed off as the warp yarn passes through the looms.

#### Finishing Department

As the amount of cloth turned out by the cloth room was recorded in both pounds and linear yards, the man-hour production and the

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labor cost have been figured on basis of each measurement and are presented for both in Table 3, which follows:

TABLE 3.—RELATION OF MAN-HOURS, LABOR COST, AND OUTPUT OF CLOTH ROOM IN SELECTED PERIODS OF 1911, 1916, AND 1925

Item	1911	1916	Per cent of in- crease in 1916 over 1911	1925	Per cent increase over 1916
Number of man-hours worked dollars dollars	6, 766. 50 688. 06	5, 868. 47 782. 51		6, 053. 90 1, 704. 85	
Total   Spounds   Syards   Spounds   Spounds	383, 127 916, 628 56, 62	437, 966 1, 128, 968. 25		383, 830 957, 362, 75	
yards	135. 47	74. 63 192. 38	31. 8 42. 0	63. 40 158. 14	1 15. 0 1 17. 8
Labor cost: Per pounddollars_ Per yarddo	0.00180 0.00075	0. 00179 0. 00069	1 0. 5 1 7. 7	0. 00444 0. 00178	148. 6 156. 9

<sup>1</sup> Decrease.

The table shows that, based on the pound weight, the output per man-hour increased from 56.62 pounds in 1911 to 74.63 pounds in 1916, a gain of 31.8 per cent. In 1925, when a larger number of workers were used to insure better quality, with a comparatively smaller total production, the rate dropped to 63.40 pounds per manhour, a reduction of 15 per cent from the 1916 figures. On the yard basis, the output per man-hour increased from 135.47 yards in 1911 to 192.38 yards in 1916, a gain of 42 per cent, but dropped in 1925 to 158.14 yards, a reduction of 17.8 per cent. The difference is due to the varying number of yards per pound of the cloth, which ranged from 2.2 to 3 yards.

The labor cost also shows a wide variation between figures on the two bases. On the pound basis, they dropped between 1911 and 1916 from 0.18 cent per pound to 0.179 cent per pound, a decrease of 0.5 per cent. In 1925, however, they rose to 0.444 cent per pound, an increase of 148.6 per cent. On the yard basis, the labor cost dropped from 0.075 cent per yard in 1911 period to 0.069 cent in 1916, a reduction of 7.7 per cent, and in 1925 rose to 0.178 cent, an increase of

156.9 per cent.

#### Summary

Analysis of the figures presented, combined with other information which can not be published, shows that a general increase was experienced in man-hour production during the 15 years, due in a great measure to the installation or substitution of modern equipment or labor-saving devices. Considerable of it was however also due to better organization of the plant and more efficient management of the work.

Labor costs naturally also increased in keeping with the general advances in wages, but the increase was kept down by greater efficiency and by the substitution of cheaper, unskilled labor in some of the tasks previously performed by highly paid skilled workers.

# Difficulties of Survey

/ISITS to several mills for the purpose of securing figures from pay rolls and the production records revealed that some of the mills had no records for the early period which could be safely used. Others, to meet the changes in popular demand, were producing a different class of material from that manufactured in 1911, so that no comparable unit could be obtained for the two periods. especially noticeable in one mill, which contained practically the same equipment and facilities in 1925 as in 1911 but had changed production for about one-third of its looms to a different, and finer, quality of goods. It takes longer to produce 1 pound of fine yarn than I pound of coarse varn, as it consists of a proportionately greater number of yards according to degree of fineness. Yarn is numbered on the basis of the number of hanks of 840 yards required to make 1 pound in weight. A spinning frame which will produce 3,797 pounds of No. 52 yarn per hour will produce only 2,005 pounds of No. 70 yarn per hour. More time is also required to weave goods consisting of fine yarn than goods consisting of coarse yarn, because each linear inch contains a proportionately greater number of threads, or picks, according to the thickness of the yarn, requiring the shuttle in the loom to travel an additional number of times across the warp, as the yarn running lengthwise of the goods is called. With the change in quality, the number of looms operated per man was also reduced from 20 or 24 to 12 looms per man. As weavers constitute the largest group of workers in a cotton mill, practically one-fourth of the producing labor, an increase of 10 to 16 per cent in their number would naturally make an appreciable difference in the manhours worked. The various changes resulted in a decrease in production for the 1925 period, compared with the 1911 period, of 30.83 per cent per man-hour on the linear yard basis, or 9.28 per cent per man-hour on the pound basis. As far as known, no reliable coefficient exists which can be used to compare production time for one class or style of cloth with that for another and consequently a common unit could not be established for the two periods.

Difficulties were also found in the plant from which the published figures were obtained. A regular pay period, showing normal conditions of operation, was selected for 1911, covering a half month or 13 working-days, and a similar period for 1916, covering also a half month but only 12 working-days. In 1925 the pay period was changed to one week, so that to secure a practically similar and representative interval, consisting of 12 working-days, it was necessary to cover two successive weeks. The figures were obtained from the pay roll and the production records. As, however, the employees were listed only by name, grouped in departments, and as one worker might have been shifted from one occupation to another, or several others, during part of the period or even during one day, to meet conditions in lay-offs or labor turnover, it was impossible to determine an absolutely reliable division for the specific occupations in 1911 and

Again, because the majority of the workers are pieceworkers, no record was kept of actual time worked each day, the pay rolls containing only the number of pieces turned out daily by each piece-

worker. During the 1911 and 1916 periods covered, some employees who were listed as pieceworkers in specific occupations may, in fact, have been occupied as time workers in the same or other positions for part of the period, being paid a rate for a number of pieces sufficient to cover the pay for such position, instead of the usual time rate. During these periods some employees who may also have worked temporarily in positions paying higher rates than their usual occupations, have been credited with extra time at their usual rates instead of with the regular rate for the temporary position for such day or part of day. All possible assistance, however, was rendered by the management, and it is felt that where estimates were necessary these are as accurate as it is possible to make them.

In compiling man-hours and money paid for labor, the weights for supervisory and general help have been apportioned on the basis of the man-hours worked in each division. The working-day was reduced between 1911 and 1916, and again between 1916 and 1925; these it was not considered advisable to state in actual time, although

they undoubtedly had some effect on the productivity rates.

### Details of Yarn Production

SUMMARIES follow of the total man-hours worked and the total labor cost for specified groups of workers in the production of yarn during the three selected periods in 1911, 1916, and 1925.

Table 4.—MAN-HOURS WORKED BY SPECIFIED GROUPS OF WORKERS IN YARN PRODUCTION IN SELECTED PERIODS OF 1911, 1916, AND 1925

Group	1911	1916	1925
Supervisory employees	455. 01 930. 21	407. 08 1, 343. 60	370. 40 953. 74
Stock handlers Carding department:	539. 33	482. 67	700.00
Opener division	775. 08	583. 86	620.00
Picker division	1, 870. 91 3, 206. 31	1, 791. 46 2, 949. 57	1, 585. 00 2, 352. 00
Drawing division	13, 828. 48	9, 201. 34	6, 888. 00
General workersSpinning department:	1, 476. 34	1, 194. 33	1, 939. 00
Spinners.	8, 942, 00	8, 871, 16	7, 550, 00
Others	7, 995. 11	9, 359. 20	8, 691. 00
Total	40, 018. 78	36, 184. 27	31, 649. 14

#### Changes in Equipment and Personnel

Some changes were made in equipment between the periods taken in 1911 and 1916. Five new pickers were installed, necessitating the employment of one additional picker tender; 22 new cards and 6 new drawing frames were also purchased, but as these were distributed among the workers in the respective divisions no additional help was required. Three new slubber frames and 9 new speeder frames were also installed in the drawing division, requiring 6 additional tenders. During 1911 the cards were stripped only twice a day, with the old-fashioned movable roller, by 4 men who also hauled laps from the pickers to the cards. When the quality of the work was improved the cards had to be stripped three times a day, occupying the full time of the strippers, and the services of

two special lap haulers. In the spinning division 52 new spinning frames were added, and a change made from a 50-inch to a 44-inch drive pulley, which increased the spindle revolutions about 100 per minute and increased production approximately 1 per cent. The new frames and the increase in speed resulted in employment of two section hands, two oilers and banders, one sweeper, and one overhauler, besides the spinners operating the new frames. The force of general workers was increased by the addition of a special tender for the humidifiers, a regular transformer tender, a waste foreman, a regular cuspidor cleaner, and special gate tenders, but this additional general help did not increase the man-hours for the entire mill appreciably, as most of the work had been performed

previously by spare hands.

Between the periods of 1916 and 1925 new and more complete equipment was installed in the opener division, but caused no change in the personnel, although it eliminated considerable handwork. Automatic strippers were installed on one-half of the cards, reducing the card strippers by one. A regular scrubber was added to the force of the spinning department. During 1911 and 1916 the doffers for about one-half of the spinning frames dumped their own bobbin boxes when filled, as the operation required two men. Adoption of steel-frame, self-dumping bobbin boxes, which could be handled by one worker instead of two, permitted the transfer of the hauling and dumping to one bobbin hauler in the spooler section. The doffers also previously picked up and hauled the empty quills, but installation of an automatic belt conveyor from weave room to spinning room relieved them of this work. The increases and reductions in general help practically balanced each other.2 In 1925 the mill manufactured part of its power, while during the former periods all of this was purchased and steam was manufactured only for heating purposes or special requirements in the processes. While this change necessitated the employment of two additional workers in the engine room, the installation of automatic stokers on the boilers eliminated the coal roller. The special cuspidor cleaner, added to force before the 1916 period, was disposed of and duties were distributed among sweepers or other hands. The increase in consumption of coal, as well as of raw stock, did, however, make a difference in stock handling and required two additional workers.

While apparently 29 new workers were added to the personnel between 1911 and 1916, and a few more between 1916 and 1925, the total man-hours in Table 4, divided by actual daily working hours, show an increase of only three full-time workers between 1911 and 1916, and a reduction of 13 full-time workers between 1916 and 1925. This was due to the elimination of spare hands, who had been employed to have them available in case of necessity. The reduction in daily working hours accounts for the gradual reduction in total working hours for the mill but the hours shown in Table 4 for 1911 can not be compared with those for 1916 and 1925, as the

1911 period contains one additional day.

One of the important problems was, as already mentioned, to estimate the time worked by drawing-frame tenders, slubber tenders,

<sup>&</sup>lt;sup>2</sup> The general help are chargeable to the entire mill and not to any one process or division.

speeder tenders, spinners and doffers, all pieceworkers. The pay rolls carried records of days on which starts were made by each, and the individual production for each of such days, but did not state the number of hours worked per day. The only method considered safe was to count each day on which a start was made as a full day worked, unless the production for that day should indicate otherwise. As only a half day was worked on Saturday, though marked on the pay rolls as a full day, care was taken to keep the Saturday time separate and to list the correct full-time hours for each day. If production for the day seemed abnormally low, when compared with other days for the same individual, investigation was made to ascertain, if possible, the reason.

Table 5 shows the labor cost in the selected periods:

TABLE 5.—TOTAL LABOR COST FOR SPECIFIED GROUPS OF WORKERS IN YARN PRODUCTION IN SELECTED PERIODS OF 1911, 1916, AND 1925

Group	1911	1916	1925
Supervisory employees	\$212.47	\$246, 17	\$489.67
General employees	149, 76	208. 86	324. 39
Stock handlers	40. 20	55. 20	212, 84
Opener division	60.42	53, 81	144.02
Picker division	208. 67	207, 04	478, 80
Card division	352.11	371.37	722, 29
Drawing division	1, 258. 06	1, 306. 76	2, 455, 30
General workers	157.62	165, 26	604, 91
Spinning department:	200100		
Spinners	719.69	992. 61	1,822.07
Others	688.30	965. 66	2, 440. 15
Total	3, 847. 30	4, 572. 74	9, 694, 44

Labor costs naturally reveal a gradual increase for each succeeding period, but the total costs for the 1911 period are not comparable, even in a general way, with those for the 1916 and 1925 periods, as the 1911 period contains one additional day. The total figures for each period were not intended to show changes in wages but were compiled merely to be used in connection with production, to determine the labor cost per unit, as presented in Table 1.

A bonus system was in effect for full-time work during all three periods, though differing in amount. As these bonuses have been included in all cases, and charges for spoiled work, also varying for the three periods, have been deducted, the figures given for each

period represent the actual money paid for labor.

Different piece rates were paid, during each period, to slubber tenders according to the quality of product, also to speeder tenders, spinners, and doffers, as the finer grades of product require more time per pound than coarser grades.

#### Details of Cloth Production

GIMILAR data relating to the total man-hours worked and the total labor costs are given below for specified groups of workers in cloth production during the three periods in 1911, 1916, and 1925.

TABLE 6.—TOTAL MAN-HOURS WORKED BY SPECIFIED GROUPS OF WORKERS IN CLOTH PRODUCTION IN SELECTED PERIODS OF 1911, 1916, AND 1925

Group	1911	1916	1925
Supervisory employees General employees Spooling and warping sections. Slashing and drawing-in department. Weaving department: Weavers. Others	288. 15 1, 152. 82 8, 709. 85 3, 608. 40 28, 830. 50 6, 926. 08	248. 86 1, 775. 59 9, 190. 00 3, 613. 57 23, 910. 17 9, 099. 30	228. 28 1, 294. 36 8, 025. 40 3, 507. 69 17, 231. 00 10, 616. 00
Total	49, 515. 80	47, 837. 49	40, 902. 7

#### Changes in Equipment and Personnel

The spooling operation is often included by the mills under yarn production, as the spooling frames are commonly located in the spinning department, but it was thought more desirable for this survey, to place it with the weaving process, to which other warp preparation is usually assigned. Spinning of yarn really ends with the spinning frame, and no logical reason can be seen for classing one subsequent preparation of warp yarn with one process while classing all other preparations of warp yarn with the other main process,

even though operations vary. During the interval between the 1911 and 1916 periods some changes took place in equipment. The number of slasher tenders was reduced by one, but this was balanced by employment of a regular size maker, whose duties had previously been performed by one of the slasher tenders' helpers. The original equipment of the weave room consisted of plain looms, which had to be supplied with new quills of filling yarn by hand, necessitating stopping the machines each time. Shortly before the 1916 period covered the installation of automatic heads on the looms was commenced. These ejected the empty quills from the shuttles and inserted new ones automatically without stopping the machines. As one operator could handle only 6 to 8 plain looms, but could take care of 8 to 12 automatic looms, the change resulted in reducing the number of full-time weavers from 214 during the 1911 period to 188 in 1916 period, although 150 more looms were operated. The increase in looms had, however, necessitated the employment of an additional second hand for the weave room.

Between 1916 and 1925, the adoption of the self-dumping bobbin boxes, mentioned before, eliminated one bobbin hauler. A bobbin rewinding machine was installed, which disposed of considerable handwork and waste of yarn but required a winder hand to operate. Installation of an automatic banding machine, for spindle bands eliminated the services of the operator, who previously had worked part time on an old hand-power machine. Two double quill cleaners were also installed, which, while they each required two operators and one helper, did away with a great deal of handwork, and also saved quills. An automatic belt conveyor, which carried the empty quills back to the spinning department, eliminated the hauling of these. In the slashing department an additional slasher was added, requiring one extra tender and one extra helper. Installation of an automatic drawing-in machine changed the operation, so that in the

1925 period a greater production was handled by one machine operator and two hand operators than in the 1916 period by 7 or 8 hand operators. Installation of an additional warp tying machine necessitated employment of one extra operator and one extra helper. The remainder of the looms were made automatic, and 110 new automatic looms were installed. The weavers were relieved of oiling and cleaning the looms, by the employment of three oilers and three loom cleaners, giving the weavers more time for operation of looms. and consequent chance to handle more looms each. The change to the automatic looms and the hiring of oilers and cleaners resulted in a reduction of the full-time weavers from about 188 in 1916 to about 150 in 1925, in spite of the installation of the 110 additional looms. A trial was made of hiring battery fillers, 1 for each 36 looms, to relieve the weavers of this duty, and of increasing the number of looms per weaver to 24 each. The practice was discontinued after a two months' trial, as the workers found it too strenuous, with the class of goods manufactured. One loom fixer was dispensed with, also two filling and quill haulers, but one waste man and one scrubber were added in weave room.

During 1911 and 1916 some of the necessary operations in the weave room were not specialized, and the duties were performed by hands classed as weavers, who received time pay of specified number of cuts per day to cover the pay for positions occupied. During the 1925 period, these were classed as "smash hand," "timekeeper," "cloth checker," "ticket maker," "harness mender," etc. The changes mentioned would create the impression that the personnel had been reduced 25 workers between the 1911 and 1916 periods. The total man-hours in Table 6, divided by actual daily working hours show, however, that there were actually 28 more full-time workers in 1916 than in 1911. The changes would likewise indicate a reduction between 1916 and 1925 of 35 workers, but division of total man-hours by daily hours result in an actual reduction of only 24 workers.

It was necessary to follow the same procedure in estimating the time worked by the pieceworkers in this process as with the pieceworkers in yarn production.

The labor cost for the various groups is shown in Table 7, below:

Table 7.—TOTAL LABOR COST FOR SPECIFIED GROUPS OF WORKERS IN CLOTH PRODUCTION IN SELECTED PERIODS OF 1911, 1916, AND 1925

Group	1911	1916	1925
Supervisory employees	\$133. 28	\$170.74	\$429.97
	185. 63	275.98	440.26
	869. 38	980.49	1,864.80
	394. 93	435.56	1,078.21
Weavers Others	3,797.59	4, 195. 01	5, 797. 02
	879.89	1, 271. 72	3, 468. 55
Total	6, 260. 70	7,329.50	13, 078. 81

As already pointed out, the labor cost for the 1911 period can not be used for comparison with that of the following periods. As in Table 5, the figures include any bonuses paid. Piece rates varying according to quality of product were paid during each period to drawing-in hands and weavers, while the latter also received a varying rate for seconds, or imperfect cloth.

# Details of Cloth Finishing

IN COMPILING the data given below for this department, the amounts chargeable to the department for supervisory and general help have been added and listed as a single item.

Table 8.—TOTAL MAN-HOURS WORKED IN CLOTH ROOM IN SELECTED PERIODS OF 1911, 1916, AND 1925

Group	1911	1916	1925
Supervisory and general Direct labor	298.35 6,468.15	342. 05 5, 526. 42	306. 90 5, 747. 00
Total	6, 766. 50	5, 868. 47	6,053.90

### Changes in Equipment and Personnel

In the interval between 1911 and 1916 no changes were made in equipment in this department, but two knotters, or stitchers, had been dispensed with, as less tacking was done on goods during the latter period. One sweeper had also been disposed of, through the substitution of one man for two boys.

Between 1916 and 1925 more and slower inspection tables had been installed, increasing the force of cloth inspectors by 11. Installation of a horizontal belt conveyor for the cloth, however, eliminated two inspector helpers.

The mentioned reduction of three between the 1911 and 1916 periods corresponds with the total man-hours in Table 8, divided by actual daily working hours, but similar division for 1925 period reveals that only seven full-time workers had been added to the force, in place of the nine mentioned above, probably due to the elimination of some spare hands.

Table 9 contains data on labor cost in this department:

Table 9.—TOTAL LABOR COST IN CLOTH ROOM IN SELECTED PERIODS OF 1911, 1916, AND 1925

Group	1911	1916	1925
Supervisory and general employees		\$119. 92 662. 59	\$230. 13 1, 474. 72
Total	688. 06	782. 51	1, 704. 85

Here, again, no comparison can be made between the 1911 period and the other periods.

# INDUSTRIAL RELATIONS AND LABOR, CONDITIONS

# British Labor Mission to the United States

IN VIEW of the serious depression in the engineering industry in Great Britain, the Daily Mail (London) last February sent over to the United States as its guests a number of working trade-unionists, "so that they might have an opportunity of informing themselves, at first hand, regarding wages, hours, working conditions, and the use of up-to-date machinery in representative establishments."

The party as finally made up consisted of eight trade-unionists, workers in different branches of the engineering industry, accompanied by an industrial adviser, who had been for many years secretary of trade-union organizations. They reached New York on March 9, spent a month in a somewhat strenuous tour of inspection, visiting New York and Brooklyn, Schenectady, Buffalo, Niagara, Detroit, Flint, Chicago, Gary, Washington, Baltimore, Pittsburgh, and Cincinnati, and left the country on April 10. During their tour 42 establishments were visited, and in each they were given opportunities to talk freely with workers and employers, to inspect processes, and to get all the light possible upon what they termed "the secret of high wages in America." Upon their return to England, the Daily Mail published a small volume, giving an account of the trip, and containing a summing up, by each member and the industrial adviser, of their experiences and conclusions.

Several points stand out in these summaries. First of all, the visitors were greatly impressed by the pains taken to utilize the full skill and energy of the workers. Again and again they comment on some method of saving time and strength for the real work of the

shop or process.

The delegates were particularly struck with the use in a machine shop of a steel bedplate, 200 feet long, costing £12,000.2 On this a "job" is clamped down and various tools used for its completion are assembled around it, thus enabling drilling, boring, and shaping machines to be used at the same time, instead of laboriously moving the work from one machine to another.

I found my fellow craftsmen in the United States working no harder than they do in Britain and yet producing much more rapidly simply because of the

I found my fellow craftsmen in the United States working no harder than they do in Britain, and yet producing much more rapidly, simply because of the superior equipment of the shops in which they are employed. Nowhere did I see men waiting for the use of indispensable machines as is frequently the case in Britain where, in a pattern shop, the bandsaw or the planing machine might quite reasonably be mistaken for the village pump by reason of the waiting crowd around it.

A second point which struck them was the extent to which electric power is utilized in the United States. The organized concentration of power units, they found was far in advance of the work done in this direction in Great Britain. "Without such units on a gigantic

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<sup>&</sup>lt;sup>1</sup> Daily Mail. Trade-Union Mission to the United States. Full story of the tour and members' reports. London, 1926.

<sup>2</sup> Pound at par=\$4.8665; exchange rate approximately par.

scale the engineering trade in the United States could never have

been able to reach its present enviable position."

A third point was the excellent relations between employers and employed. The employers, in the opinion of the members of the commission, were really willing that a common workman should get ahead as fast and as far as his capacity made advancement possible. The men, they found, were determined to earn as much as possible, which meant hard, steady work, but they were convinced that the employers were dealing fairly with them, and responded cordially. There was "a spirit of comradeship between employers and men from the highest to the lowest, which was expressed so constantly and in so many ways during their stay as to evoke astonishment as well as satisfaction."

But the feature which most impressed the whole delegation was the attitude of the employers toward high wages, which, they found, were regarded as a prerequisite for high output and low costs. Again and again they recorded with surprise that employers did not object to paying high wages, and that when piece rates had once been set they were not changed, no matter how much the workers made, until some change in the process was introduced, necessitating a new scale. The attention paid to safety devices, the extent of welfare work, and the lack of any bar to the advancement of an able and willing worker were all subjects of favorable comment, but these were overshadowed in their estimation by the policy of using high wages as a means of securing high output, and also as a means of keeping up a good consumers' demand and thereby maintaining good times. Moreover, the policy of high wages, they found, is a strong factor in securing the good feeling between employers and employees which they considered one effective cause of high output.

Naturally the reports of the different members of the delegation emphasized different aspects of the American situation, as they saw it. The report of Mr. C. Wilkinson, a turner, is short, but perhaps

as typical as any:

The secret of the present prosperity of the United States is high wages. This is generally agreed by employers and labor leaders alike. In the course of our tour we have inspected about 40 plants engaged in the engineering industry, mass production, general engineering, and power production.

We have had every opportunity to gather from workmen and officials any information we required with regard to wages, hours, and working conditions. In my opinion one of the most pleasing features in American industrial life is the close cooperation that exists between the workmen and the management.

The American employer studies progressive manufacturing methods and applies them. He can always find room for a machine of the latest type. He studies every method best suited to the sequence of operations, the idea being to concentrate men upon productive work and to use mechanical handling equip-

ment for lifting and moving.

A boring machine I watched in operation was provided with a platform, which a man by touching a lever could raise or lower to bring himself to a position in which he could work comfortably. Compressed air is much used for cleaning metal borings from jigs and molds, thereby saving time and avoiding injury to the workers' fingers and hands. The operator on a machine always has a spare cutter or tool ready in case of a breakage. Every inch of floor space in the workshops is properly utilized and different types of machines arranged so that what is being made is kept on the move to the final assembly. Milling machines in a good many cases are taking the place of shaping and planing machines. On a block of cylinders, I saw five cutters in operation. By these methods the employer gets 100 per cent production instead of 50 per cent which would be the

case if the employee had to wait for tools and cutters, or be stopped in any way which could be avoided. This also applies to the conveyor system on mass

production work.

No expense is spared in the making and designing of jigs and dies. We were shown a die which had cost £2,000 to make and were told that its utility fully justified the expense. A great saving results from the use of jigs. They do away with the marking out of work, and at the same time insure accuracy and make parts interchangeable. The welfare schemes connected with the various plants visited gave me the impression that the employer is trying to induce the

workman to take an interest in the prosperity of the firm.

The factories generally were well lighted and ventilated. The standard of wages is high, the weekly average being £5 to £6 for an operator and from £8 to £9 for a

skilled man.

The cost of living, excluding rent and perhaps clothing, appears to be about 50 per cent above ours. I consider the wage paid to American workmen so much above a living wage as to justify it being described as a saving wage. It certainly enables him to maintain a high standard of comfort and at the same time increases his purchasing power.

American employers have learned that it is good business to pay high wages.

Bad conditions in the workshops, they say, mean poor returns for the employer.

If we had America's electric power, and some of its best machinery, together with the good feeling which undoubtedly exists between the workmen and the management in industrial plants in the United States, we could hold our own with the best in the world. We have the men. As proof of this, a great number of skilled workers who have left Great Britain are now holding responsible positions in the United States.

# Extent of Primary Poverty in England, 1913 and 1924

IN 1915 the Ratan Tata Foundation published a study, made in 1913 and 1914, of five towns which Professors P Hurst had surveyed in order to determine what proportion of their people were living in primary poverty, according to Rowntree's definition of that term. In 1923 and 1924 Professor Bowley in association with M. H. Hogg, made a second study of the same towns, to see whether this proportion had changed during the interval, and if so, in what direction. The results of this study have recently been published, and have attracted considerable attention in England.

The towns studied were Northampton, Warrington, Reading, Bolton, and Stanley. The first study was made in 1913, except in the case of Bolton which was surveyed in 1914. The second study of Stanley was made in April, 1923; of the other four towns, apparently in July, 1924. Stanley is largely a mining town, in Northampton the boot and shoe industry is by far the most important, Warrington has no specialized industry, Bolton has cotton spinning, bleaching, metal and engineering industries, and Reading, although it carries on considerable business, has no industry conducted on a large scale, except the manufacture of food, in which unskilled labor is extensively employed. The second investigation covered 4,141 families, the number per town ranging from 629 in Stanley to 969 in Warrington. The methods pursued and the definitions used were precisely the same in the two investigations, so that the results are regarded as strictly comparable.

According to Rowntree's definition, which has been used in this study, a family is in primary poverty when its "total earnings are

<sup>1</sup> Bowley, A. L., and Hogg, Margaret: Has Poverty Diminished? London, P. S. King & Son, 1925.

insufficient to obtain the minimum necessaries for the maintenance

of merely physical efficiency."

These necessaries are held to include shelter at the lowest rates, a food budget based on the cheapest workhouse scale, and clothing barely sufficient to meet the demands of health and ordinary decency. No allowance is made for expenses of illness, childbirth, or death, for recreation, for trade-union membership, for car fares to and from work, for educational, social, religious or charitable demands; everything which is not essential to the bare maintenance of physical efficiency is eliminated.

In reckoning the family income, compulsory payments for health, old-age, and unemployment insurance were deducted from the earnings, since they could not be counted as effective income; all pensions and insurance received by any members of the family were included. Poor relief and other forms of charitable assistance were excluded. Since the income might differ considerably according to whether wage carners were fully employed, or wholly unemployed, or on part time, for the second investigation two groupings are made, the first showing the classification when full income is assumed, the second showing the results when an actual week's income was used. For the 1913 investigation, a full week's income was assumed. Thus classed, the families show the following results:

Percentage certainly or probably above primary	1913	full-time earnings	actual earnings
poverty	88. 0	95. 3	92. 0
Percentage on margin	1. 0	1. 1	1. 5
Percentage probably or certainly in primary poverty.	11.0	3. 6	6. 5

These figures show a distinct diminution in the proportion of families found living in primary poverty, and the difference is even more striking when the towns are taken separately. Taken thus, the figures are as follows:

T		7 7			7
Pro	nortzon	helmm	primary	monertal	12.20

	1913	full-time earnings	actual earnings
Northampton	8. 0	2. 0	4. 0
Warrington	12. 5	3. 3	7. 9
Bolton	8. 0	2. 2	4. 9
Reading	23. 0	8. 1	11. 3
Stanley	6. 0	6. 4	7.5

It will be seen that with the exception of Stanley every town showed a decrease in the proportion in primary poverty, and in the case of Northampton and Reading the fall was over one-half. From these results the authors draw the conclusion that there has been a marked decrease in poverty in England within the 10 or 11 years covered.

This conclusion has been criticized on the ground first, that the second investigation was made at a time when unemployment was lower than at any other period since the industrial depression began, and, second, that it dealt with towns which, with the exception of Stanley, were less affected by unemployment than the country as a whole. As to the first of these claims, the trade-union figures on unemployment published by the Ministry of Labor Gazette (Jan-

uary 1926, p. 2) show that the mean percentage of unemployment for five years was as follows:

	Per cent
1921	14.8
1922	15. 2
1923	11.3
1924	8.1.
1925	10.5

For four of the towns, therefore, the study was made at a time when general employment was unusually good. For the fifth, Stanley, the time was even less representative, for in 1923, owing to the French occupation of the Ruhr and the consequent diminution in the output of German coal, the English coal industry was enjoying something like a boom. The authors recognize that this was not a typical time, and estimate that allowing for the later depression in the coal industry, the proportion of families studied in Stanley who were living in primary poverty had probably increased by the spring of 1925 to 10 per cent as against 6 per cent in 1913.

As far as the representative character of the towns covered is concerned, the authors admit that the figures are open to question in

regard to the amount of unemployment prevailing.

From this aspect, our review is too favorable; Northampton, Reading, and Bolton were less affected by unemployment in 1924 than were towns dependent on specially depressed trades; Bolton was more prosperous than the cotton district generally. Warrington, however, was typical of towns seriously but not abnormally affected. Stanley, fully employed in 1923, when the detailed investigation was made, suffered as did the coal industry in general in the latter part of 1924.

While it is doubtful, therefore, whether the diminution in the amount of primary poverty is as great as indicated, the study seems to show at least an improvement. The reasons given for this change are of interest. The two outstanding facts, the authors find, are the decrease in the size of the family and the increase in wage rates. At the respective dates of the two studies, the average working-class family was made up as follows:

Earners:  Men over 18  Women over 16  Boys under 18  Girls under 16	. 18	1924 1. 29 . 41 . 14 . 04
Total	1. 85	1. 88
Nonearners:  Men over 18  Women over 16  Boys under 18  Girls under 16_  Children 5 to 14_  Children under 5	1. 00 . 02 . 03 . 96	. 06 1. 08 . 04 . 05 . 79 . 41
Total	2. 61	2. 43
All persons	4. 46	4. 31

It will be seen that while the family has decreased in size, this decrease has taken place wholly among the nonearners. The increase in the number of women nonearners is ascribed partly to the greater

number of older women, including old-age pensioners, living with their married children, and partly to war widows living with their parents, but no detailed analysis has been made of these. A more important change is in the number of children under 14, and especially of those under 5.

Per working class family thus averaged, the fall (of all under 14) is from 1.50 to 1.20 in all the towns together. In particular it was in Bolton from 1.07 to 0.99, in Warrington from 1.78 to 1.48, in Reading from 1.60 to 1.06, in Northampton from 1.25 to 0.96, and in Stanley from 1.77 to 1.49.

This change has been accompanied by a marked diminution in the number of large families. In 1913 over 11 per cent of the families studied had four or more dependent children, against less than 8 per cent in 1924, while 22 per cent had three or more in 1913, against not quite 17 per cent in 1924.

This change is marked in each of the towns investigated, and since largeness of family was one of the principal causes of poverty in 1913, this diminution in the number of children has had a marked effect on the proportion found in poverty.

As to wages, it is pointed out that the cost of living in 1924 was approximately 70 per cent above that of 1913, while the money wages of unskilled labor had in general approximately doubled. Consequently, unskilled workmen, if employed, were better off in 1924 than in 1913. It is calculated that this change in wages has had perhaps twice the effect of the smaller number of children in reducing the number of families found in primary poverty. Still, the effect of the decrease in the number of children is emphasized.

While wages have risen toward meeting needs, these needs themselves have fallen toward meeting wages, with the reduction in the number of children. The proportion of families, in which there are five or more children, that are in poverty has fallen greatly, but the number of such families is also relatively much smaller.

The figures concerning number of dependents show a decrease in the responsibility of wage earners. Generalizing, it is stated that, roughly, in 1913 of the wage-earning men aged 20 or over 20 per cent had no dependents, while in 1924 this percentage had increased to 22 or 23; 74 per cent in 1913 had sole responsibility for an average of 2.6 dependents, while in 1924, 73 per cent had sole responsibility for the smaller average of 2.3.

Of the wage-earning women over 18 years in 1913 about 74 per cent had on our definition no one but themselves to support; this number, which was already a much greater proportion than is commonly supposed, had risen by 1924 to nearly 80 per cent. In 1913 about 9.5 per cent had sole responsibility, in 1924, 6.5 per cent, in both years for an average of 1.5 dependents. The remainder shared responsibility with grown children or others.

Unfortunately, so far as women are concerned, the definition used makes the figures useless for comparative purposes. A married woman at work is held to have no responsibility for the support of her children, if her husband is earning, even though his earnings may be inadequate for the family support, and she is therefore classed as having no dependents unless she is personally supporting some relative other than her children. This definition, so far as known, has not been used in other investigations, and consequently it is impossible to say how these findings compare with those of other studies. Since the same process of calculation was applied to the figures for the two

periods, however, they certainly show a falling off in the number of

dependents for men and women alike.

Summing up the results of the study, they seem to show that in 1924 there was less extreme poverty in England than in 1913, that this was due in part to a falling off in the size of the working man's family, in part to a rise in the wages of unskilled workers, and in part to a third factor, less important but still having its effect, the more general receipt of some form of social insurance, such as old-age pensions, unemployment insurance, and widows' pensions.

# Report of Joint Committee on Costs of Shipbuilding in England 1

IN THE spring of 1925 an English shipowning company placed in Germany an order for five large ships, its reason for doing so being that the Germans had underbid the English builders by a wide margin. As a result of this, the English shipbuilding employers and unions set up a joint committee to review the whole question of foreign competition, and to consider how costs could be reduced at home. A report of this committee, dealing with elements of cost over which the industry itself has no control, contains some figures of interest as showing the burden which industry is called upon to sustain during the present depression.

The committee finds that there are five elements of cost over which the industry has no control: Materials and equipment, local rates and taxes, social services, cost of living, and public services, including under this last head charges for pilotage, towage, harbor

dues, and the like.

As to materials and equipment, the committee is unanimously of opinion that in many cases the prices of materials used in shipbuilding are unreasonably high, as compared with both pre-war prices and the present general level. It is satisfied that prices are maintained by the operations of rings and price-fixing associations, it feels that the effects, both direct and indirect, of these unduly high prices are very serious, and it calls upon the Government to investigate and

take action which will relieve the industry of this burden.

Similarly, the committee feels that the charges for such public services as piloting, towing, harbor dues, public dry-dock dues and railway transport are in many instances "unreasonably high as compared with pre-war charges and unreasonably high also as compared with the general level of prices." It recommends that if the local authorities can not see their way to reduce these charges, appeal should be made to the Board of Trade, and that in regard to railway transport, "in view of the serious extent to which the charges for this service increase the cost of shipbuilding, directly and cumulatively, every effort should be made to reduce them."

As to the cost of living, while the subject is too complicated to go into fully, the committee is of the opinion that it should have fallen farther than it has, and that "in view of the extent to which the wage rates of workers in shipbuilding and other heavy industries are still further depressed by the continued high cost of living," it is desirable

<sup>&</sup>lt;sup>1</sup>Shipbuilding Employers' Federation and Shipyard Trade Unions. Report of joint inquiry into foreign competition and conditions in the shipbuilding industry. London, June, 1926.

that the Government should take steps to see what can be done to secure a substantial reduction in the elements entering into the costof-living items, in order that the purchasing power of wages generally

may be increased.

On the three above-mentioned points the committee was not equipped to investigate and show the actual situation, statistically expressed, but in regard to taxes and social services the position was different. A comparison was made of the taxes and local rates paid by representative establishments in the two periods, July, 1913, to June, 1914, and July, 1924, to June, 1925. In the latter period the amount paid was over three times what it was in the earlier period. This was due in part to extensions made for war purposes, which are now unused but are taken into account in assessing for taxation, partly to the higher basis on which pre-war properties and equipment are now assessed, and partly to the English system of poor relief, which makes each locality responsible for the support of the poor within its limits.

Shipbuilding areas are as a rule the areas in which industrial depression is most severely felt and unemployment is most marked. Under the system which makes poor-law districts responsible for the relief of distress arising within their own borders, these industrial areas are in turn the most heavily burdened with local taxation, and unemployment is thereby intensified.

In view of this situation, it is suggested that the Government should consider "the desirability of devising means for the more equitable distribution of the cost of poor-law relief as between areas which are specially hard hit by industrial depression and areas more fortunately placed."

The figures of most general interest, however, are those relating to the pre-war and the present costs of social insurance. On this

point the committee presents the following table:

COST OF NATIONAL INSURANCE SCHEMES FOR UNEMPLOYMENT, HEALTH, AND PENSIONS

[Pound at par=\$4.8665; shilling=24.3 cents; penny=2.03 cents; exchange rate approximately par]

ИА	Item	1913		1926 1			
Employer Workman State	ek per man employed, paid by— s) at establishment employing 1,000 men, to—	£ 0 0 0 1,146 1,354 868	8. 0 0 0 0	$d$ . $5\frac{1}{2}$ $6\frac{1}{2}$ $4\frac{1}{6}$ $0$ $0$	£ 0 0 0 3, 542 3, 333 1, 979		d. 5 4 9½2 0 0 0

 $^{1}$ 1926 figures represent only the increased cost arising from increased contributions. To that has to be added the further increases due to extension of the personnel brought under the acts.

It appears from this table that while the cost of social insurance has more than doubled, the Government's share has fallen from 25.8 per cent in 1913 to 22.4 per cent in 1926, leaving not far from four-fifths of the whole cost of the service to be borne by the employers and workers. In view of the depressed condition of the industry, the committee feels that this proportion is unreasonable, and presents the following recommendation:

In view of the very heavy burden which present contributions to national insurance schemes are now placing direct upon industry, we agree to recommend that there should be a more equitable distribution of the cost of these schemes between employers and workers on the one hand, and the State on the other.

# Eighth and Ninth Sessions of the International Labor Conference 1

HE eighth session of the International Labor Conference was held in Geneva from May 26 to June 5, 1926, the ninth session

being convened on June 7 and lasting until June 24.

The main item on the agenda of the eighth conference was the simplification of the inspection of emigrants on board ship, while the ninth conference dealt entirely with maritime affairs. At the first conference 129 delegates and 107 advisers and substitutes from 37 States, and at the second conference 126 delegates, 135 technical advisers and substitutes from 38 States were present. The number of incomplete delegations was smaller at the eighth conference than at any previous session.

# Eighth Session-Inspection of Emigrants

T THE outset of the eighth conference the employers' group raised the question of the competency of the International Labor Organization to deal with questions regarding the regulation of the transport of emigrants and offered a resolution stating that the conference accordingly declined to discuss the question of the simplification of inspection of immigrants on board ship. The resolution was defeated and the draft convention which is planned to do away with the present duplication and overlapping in immigrant inspections, after discussion and amendment, was finally accepted. This convention provides that inspection carried out on an emigrant ship for the protection of emigrants shall be undertaken only by the Government of the country whose flag the vessel flies, although other Governments are not prevented from placing a representative on board at their own expense to accompany their nationals in the capacity of observer. The official inspector is concerned solely with the enforcement of laws, regulations, agreements, or contracts immediately concerning the protection and welfare of the emigrants on board and except in case of unforeseen emergency he may not be connected in any way with the shipowner or shipping company.

A recommendation adopted by the conference concerning the protection of emigrant women and girls on board ship provides for the appointment of a properly qualified woman to give such emigrants any material or moral assistance they may need, whenever there are 15 or more of such emigrants who are not accompanied by a responsible person, while a resolution which was adopted recommended that an interpreter should be provided when there are at least 50 emigrants on board who do not speak the language of the country

under whose flag the vessel sails.

By a unanimous vote the standing orders of the conference were amended to provide for a "double discussion" procedure by which an item which is placed on the agenda of any session is presented to the Governments so that the final report will be ready for discussion and vote at the next session of the conference.

Other questions dealt with were the appointment of a special committee to examine the annual reports from the different govern-

<sup>&</sup>lt;sup>1</sup>International Labor Office. Industrial and Labor Information, Geneva, May 31, June 7, 14, 21, 28, 1926.

ments with a view to facilitating action at the ensuing session of the conference; living and working conditions of native labor; the scientific organization of industry; unemployment; the hours convention; and the establishment of a correspondence office in India.

#### Ninth Session—Seamen

THE ninth session of the conference was concerned wholly with questions relating to seamen, the two items on the agenda being the international codification of the rules relating to seamen's articles of agreement, and general principles for the inspection of the condi-

tions of work of seamen.

The proposed convention on seamen's articles of agreement included a section on the disciplinary and criminal penalties applicable to seamen but it was found impossible to prescribe for all maritime countries, by means of international regulations, the manner in which these offenses should be classified. A convention was agreed upon and passed, therefore, which was designed to provide a basis for legislation in countries where improvements were possible and also fixed a number of general principles which should contribute to bring about some uniformity in labor legislation in the different countries. On account of the special conditions in regard to fishing vessels and the differences in this form of navigation, the fishing industry was excluded from the convention and a resolution was adopted recommending the consideration by the national governments of articles of agreement for fishing vessels with a view to providing by legislation for the fullest possible protection for the interests of fishermen.

A convention relating to rights of repatriation of seamen was adopted which provided that any seaman who is landed during the term of his engagement or on its expiration shall be entitled to be taken back to his own country or to the port at which he was engaged or at which the voyage started, without expense to himself, if he was left behind by reason of injury sustained in the course of his employment, or illness not due to his own willful act, because of shipwreck, or if he had been discharged in a foreign port through no fault of his own. A recommendation was passed dealing with the repatriation of masters and indentured apprentices, and a resolution was adopted inviting the governments of all maritime countries which have not already done so to take the measures required to insure the repatriation of fishermen left in a foreign port.

A recommendation was adopted concerning general principles for the inspection of the conditions of work of seamen which outlined the scope and organization of inspection, the powers and duties of inspectors, and the nature of the annual reports to be made by the

inspection authorities.

Other resolutions covered questions to be brought up at future sessions of the conference, as well as one relating to the procedure for the appointment of group secretaries, and another to the consideration of objections to delegates raised by international organizations.

## Limitation Upon Employment of Foreigners in Salvador 1

N MAY 21, 1926, the Legislative Assembly of Salvador issued a decree stipulating that at least 80 per cent of the persons employed by domestic or foreign companies engaged in agricultural, industrial, or commercial business in Salvador shall be Salvadoreans. Any firm failing to comply with this law is to be punished by a fine of from 2 to 10 per cent of its profits, the fine to be given to the most needy charitable organization in that locality.

## Report of South African Economic and Wage Commission

HE Union of South Africa is giving serious thought to the position of white labor in her industries. Native labor can be secured so cheaply that it has been extensively used, with the result that white labor has been in the main employed only for skilled or supervisory work, and the country has become concerned over the disproportion between white and colored workers in its population. In August, 1925, a commission was appointed to investigate and report upon wages in that country and "to consider the effect of different wage and labor policies upon the opportunities of employment at a wage compatible with a civilized standard of life."

The report of the commission, which has recently been published, contains a mass of information upon most of the important economic questions now facing the Union. The prevailing wage levels, the procedure by which wages are determined, the different wage acts, the public regulation of wages, the problem presented by the "poor white," the problem of wages in relation to increasing the scope of white employment, the use of different wage scales for the purpose of excluding natives from certain kinds of employment, the opportunities for employment as affected by agricultural development, the economic future of the native, and the policy of fostering manu-

facturing industry are among the subjects considered.

As to the relation between the natives and whites the commission comes to the conclusion that it is neither possible nor desirable to drive the native out of European industry and leave him to develop an independent economy of his own. He has become an integral part of the industrial system, and justice and expediency alike forbid efforts to eliminate him. But if he is to remain, it is desirable to give him a better chance. At present, the gap between the wages of skilled labor, which is usually white, and unskilled, which is largely native, is too large, tempting employers to the use of the unskilled wherever possible, and releasing them from an incentive to use all labor as efficiently as possible. The first step should be to lessen this gap.

Wage regulation should be made district by district, and it should deal first with the lowest-paid classes of labor, irrespective of color. The best hope for the poorer white workers is the establishment of standards of pay for unskilled labor which will encourage a reorganization of industry on the basis of utilizing all labor to its maximum capacity without depriving of employment any of the workers now employed.

Report from the chargé d'affaires, Leon H. Ellis, at San Salvador, dated June 7, 1926.
 Union of South Africa. Economic and Wage Commission (1925). Report. Cape Town, 1926.

The governing consideration in wage regulation should be to encourage the use to its fullest capacity of every class of labor, and to discourage any waste of capacity. By no other policy can the maximum production of wealth be secured; and an increase in the production of wealth per head is the chief need, if wages are to be raised and employment extended in South Africa.

The legislative color bar is disapproved, on grounds of both justice and expediency, and so is the policy of excluding the native from skilled occupations by fixing a wage rate so high that ordinarily he will not be able to earn it. An extension of native reserves is recommended, to prevent natives from being forced into white settlements in greater numbers than can be utilized. To meet the problem of the poor white, a change in agricultural policy is recommended, with an improvement in the system of land holding, and provision for security of tenure for the "bywoner," or farmer who does not own the land he cultivates. Along with this should go schemes for agricultural training for men who might be placed on the land.

# Government Aid to Large Families in Spain'

ARGE families are to be subsidized by the Spanish Government in accordance with a recent royal decree published in The Gaceta, Madrid, of June 22, 1926 (No. 173). The bonus to laborers is to begin with the eighth legitimate or legitimized child dependent upon the head of the family, and is payable as follows:

	Pesetas 2 per year		Pesetas 2 per year
For 8 children	100	13 children	375
9 children	150	14 children	500
10 children	200	16 children	700
11 children	250	17 children	850
12 children	300	18 or more children	1,000

Employees who have 10 legitimate or legitimized children are to be exempted from the rent and income taxes and are to have the right to pay a "sixteenth-class first tariff" and the privilege of "free

matriculation in all official educational establishments."

Cash bonuses are also to be accorded civil or military officials on the pay roll of the state, the royal house, or the legislative bodies when such officials have more than 10 children, under conditions set forth in the decree. The bonus payable to such officials is 5 per cent of the salary, for 11 children, plus 5 per cent for each additional child up to and including 20, the bonus for 20 or more children being 50 per cent of the salary. These allowances are to be computed on the basic salary the official receives "by reason of his rank," and not on extra compensation for expenses, etc.

Attention is called to the fact that families of 8 children are not unusual in Spain and that to pay these bonuses to smaller families would be a heavy burden on the State exchequer.

The decree granting these subsidies has received favorable press comment. There has been some public discussion over the administrative problems, particularly matters of proof and the question as

<sup>1</sup> Report from the consulate general at Barcelona, July 1, 1926.
2 Peseta at par=19.3 cents; exchange rate about 16 cents.

to which classes of persons may or may not have the right to these subsidies.

Attention has been called to the probable hardship worked by the exclusion of shopkeepers and small landholders, as many persons in these classes are as much in need of assistance as those covered by the decree.

## Migration to Cities in Spain

HAT there is a noteworthy movement of the people from the rural districts of Spain to the cities is pointed out in an article appearing in a recent bulletin of the General Emigration Office of Spain. The writer cites the fact that the total area of Spain is 50,500,000 hectares (124,785,500 acres) and yet only 20 out of 100 persons cultivate the land while in other European countries the number is as follows: France, 53; Germany, 51; and Belgium, 50.

It is pointed out that from 1915 to 1920 the population of Madrid alone increased from 604,908 to 737,549, while other Spanish towns more than doubled their population from 1900 to 1920 as follows: Vigo, from 23,000 to 53,000; Mieres, from 18,000 to 40,000; and La Linea, from 31,000 to 63,000. In the ten-year period from 1910 to 1920, the population of Barcelona increased 124,000; that of Seville 52,000; of Zaragoza 30,000; Bilbao 24,000; San Sebastian

18,000, and Valencia 14,000.

Among the causes cited for the migration are shorter hours of work in the cities, the higher wages and continuous employment offered by industrial concerns, and the desire on the part of the workers to better their living conditions. The social life of the cities is also an attraction to those who have been living in isolated sections

of the country.

Landed properties in Spain are divided into two large classes—those which are too extensive in proportion to the means of their owners to allow them to be scientifically cultivated and improved, and those which have been so subdivided that they are too small to yield an adequate living. Subdivision is greatest on the coast of Cantabria and the eastern part of the Mediterranean coast. There is great need for reform in order to lessen emigration, to populate the Spanish countryside and to bring into cultivation lands which are uncultivated or underfarmed.

The writer suggests three measures which might help in solving the problem: (1) The organization of a social-agrarian service with representatives in the towns and Provinces whose duty it would be to give information and to carry on propaganda in order to check emigration to the cities; (2) the enactment of effective social legislation in order to protect the rural workers as for instance, colonization laws, social insurance against accidents, diseases, invalidity, death, unemployment, etc.; and (3) concerted action by the Provinces and municipalities in order to improve the living conditions in the rural communities by giving them more efficient means of communication, pure drinking water, and sanitation.

<sup>&</sup>lt;sup>1</sup> Spain. Ministerio de Trabajo, Comercio e Industria. Boletin de la Dirección General de Emigración. Madrid. Nos. 6, 1925, and 7, 1926.

### WOMEN IN INDUSTRY

## Women's Wages in the Manufacture of Jewelry in Massachusetts

HE Massachusetts Department of Labor and Industries has issued a report of an investigation, made by the minimum wage commission of that State in the winter of 1923–24, into the wages and earnings of women employed in the manufacture of jewelry, jewelry findings, watches, clocks, and optical goods. The commission visited 48 establishments in 7 cities and towns, taking data for the three months beginning August 1 and ending October 31, 1923. Pay-roll records suitable for tabulation were secured from 44 establishments, and individual records were obtained for 2,653 women and girls. No workers were included unless they had been on the pay rolls for at least four weeks during the three months covered. Forewomen were omitted from the tabulation.

Women formed something over one-third of the total force of workers in the establishments studied, their proportion varying from slightly less than one-third in the optical goods plants to threefourths in the watch and clock factories. They were found to be engaged principally in hand work and simple machine operations, or in factory clerical work.

Taking the group of 2,653 women as a whole, the number and per cent in each specified earnings group were as follows:

#### DISTRIBUTION OF 2,653 WOMEN BY SPECIFIED EARNINGS GROUPS

Average weekly earnings	Num- ber	Per cent	Average weekly earnings	Num- ber	Per cent
Under \$9 \$9 and under \$10. \$10 and under \$11. \$11 and under \$12. \$12 and under \$13.	112 74 106 168 226	4. 2 2. 8 4. 0 6. 3 8. 5	\$16 and under \$17. \$17 and under \$18. \$18 and under \$19. \$19 and under \$20. \$20 and over.	202 193 186 144 552	7. 6 7. 3 7. 0 5. 4 20. 8
\$13 and under \$14 \$14 and under \$15 \$15 and under \$16	240 205 245	9. 1 7. 7 9. 3	Total	2, 653	100.0

It will be seen that in general the wage level is low. Over one-sixth of the group (17.3 per cent) earned on an average less than \$12 a week; over a third earned under \$14, and 51.9 per cent earned less than \$16. The proportion in different earnings groups varied materially from one establishment to another.

In No. 4, for example, more than four-fifths of all the women were scheduled to receive less than \$14 a week. None received as high as \$20. On the other hand, in establishment No. 7, none had scheduled rates below \$14, but nearly one-half (48.1 per cent) had rates of \$20 a week and over. A similar contrast is shown between establishment No. 14, with over three-fourths under \$14 a week and none with rates as high as \$20, and establishment No. 13, with only 7 per cent under \$14 and 45 per cent with rates of \$20 and over.

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There is also a wide variation in earnings according to occupation.

More than one-half of the packers (51.9 per cent) have scheduled rates below \$14 a week, and less than 3 per cent (2.5 per cent) rates of \$20 a week or over \* \* \* On the other hand, only 4 per cent of the chain makers and none of the machine joiners and machine engravers have rates below \$14 a week, while 56 per cent of the chain makers, 14.3 per cent of the machine joiners and 16.7 per cent of the machine engravers have rates of \$20 and over.

The report calls attention to the fact that these figures were collected prior to wage reductions in some of the establishments in certain branches of the work.

# Relative Earnings and Employment of Women in New York Factories in 1924–25

HE State of New York has recently published a study of employment and earnings of men and women in manufacturing industries, made by the bureau of statistics and information, of which a summary is given in the Industrial Bulletin (Albany), for July, 1926. The most conspicuous fact brought out by the study, according to this summary, is the difference in the earnings of the sexes. Women work in different trades and different occupations from those of men, "but taking all places open to women and all those open to men in factories the average earnings for men in 1924–25 were \$31.36 a week, and those for women were \$17.45, or about 56

per cent of the earnings received by the men."

This is perhaps in part due to the narrower field open to women. It is pointed out that there are very few manufacturing industries in which men form less than 20 per cent of the working force, but there are many in which women constitute less than 1 per cent of all the workers. Over 60 per cent of all the women in factories are in either the clothing or the textile groups, and the food industries account for 10 per cent more. On the other hand, they have but a small representation in the important group of metal-working industries, "and very few are at work on wood products or the manufacture of building materials like cement and brick, where employment has been unusually high in the last two years."

A second reason is that women suffer more seriously from unemployment than men do. Seasonal unemployment affects particularly such industries as the sewing trades, in which they are especially numerous, and in these the women's trades are more severely hit than the men's. A different kind of seasonal irregularity is found in such establishments as candy factories, in which a regular force is maintained throughout the year, and extra workers are taken on for the busy season. These extra workers are almost entirely

women.

In the matter of employment women furnish an extra large proportion of the workers in the irregular or satellite industries and in those where the development of highly industrialized organization has proceeded to only a slight degree. They furnish also a large share of the irregular forces in the more highly organized industries.

The study emphasizes the fact that a large reserve of labor is necessary in order to maintain the force which appears on the pay rolls

of each industry. At any given time, some establishments, in the same industry, will be laying off workers and others taking them on. The figures for employment indicate the net change, but beyond that the employment of a much larger number is affected. A few industries are always expanding operations when business is dull, either making ready for their busy season or because they have lagged behind the course of the business cycle. "Their demands help to offset reductions in the volume of employment, but only by providing work for people previously unemployed. In the same way, when the market is improving, many workers are being let out in other factories, and again become the reserve of surplus labor that persists through good times and bad. In this outer circle of the half employed the proportion of women is relatively greater than that of men."

## MINIMUM WAGE

## Minimum Wage in the Lumber Industry of British Columbia

S NOTED in the Labor Review for March, 1926, the Province of British Columbia has by legislation extended the principle of the minimum wage to adult male workers. The administration of the act is in the hands of a previously existing board which administered the eight-hour law of the Province. This board has recently announced an order relating to the lumber industry, fixing a minimum rate of 40 cents per hour to be effective November 1, 1926.¹ Normally, orders are effective after 30 days, but on a representation by the employers that the introduction of this rate as a minimum would influence costs of production, time was allowed for disposing of existing contracts and arranging for future estimates without imposing undue burdens on the industry. The lumber workers themselves asked for a 50-cent minimum, but the board thought it best to make a trial of the 40-cent rate for a time, after which it would be in a position to make such changes as the circumstances

might warrant.

It is estimated that some 8,850 of the approximately 40,000 persons employed in the lumber industry will have their wages raised by the adoption of this minimum, as they now receive less than that sum. Sympathetic increases are recognized as also possible. The minimum wage act itself defines the industry as including "all operations in connection with logging, shingle mills, sawmills, planing mills, box factories, sash and door factories, pulp and paper mills, veneer plants, and cooperages." Distributed through these different branches of the industry in varying percentages are considerable numbers of Asiatic workers whose "rates of pay are such as to bring them seriously into competition with the unskilled white workers who are employed in a similar capacity." In the industry, as a whole, it appears that last year 20.46 per cent were Asiatics, the proportions ranging from 7.53 per cent in the logging camps to 46.89 per cent in shingle mills. The largest actual number were employed in the sawmills, where they formed 33.75 per cent of the working force, though concentrated largely in 50 of the larger mills in the southern coast area, the remaining 195 mills employing only a small fraction of such workers. The orientals will receive the same minimum as other adult workmen, a number of them, in fact, particularly in the shingle mills, having attained a "high degree of skill, which is reflected in the wages they receive."

The board is inclined to the opinion that a readjustment of working force will result in attracting a superior body of workmen with an incentive to regard the occupation they enter as more permanent than in the past. This elevation of quality and increase of stability

<sup>&</sup>lt;sup>1</sup> Report from Harold S. Tewell, American consul, Vancouver, B. C., July 14, 1926.

would tend to a reduction of the losses suffered on account of indifferent and transitory workmen, as well as tending "to bring about a better spirit of cooperation between employer and employed."

## Right of Appeal from Minimum Wage in Quebec

N INTERESTING development in connection with the operation of the minimum wage law of Quebec is reported in a recent consular communication. The law of this Province applies only to women in factories and workshops, and gives employers as well as employees the right of appealing to the commission for wage adjustments which, in their opinion, are necessary. Use has been made of this privilege, the commission being quoted through its president as having up to the present received more complaints from employers than from employees. "Unfair competition, based on unduly low wages paid to women employees, is the reason." The particular occupations involved are laundries and dye works, which the commission is investigating for the purpose of ascertaining whether an order on minimum wages for the women employed is essential.

## INDUSTRIAL ACCIDENTS AND HYGIENE

Phosphorus Necrosis in the Manufacture of Fireworks and in the Preparation of Phosphorus

SINCE the recent investigation of the United States Bureau of Labor Statistics of phosphorus necrosis in the manufacture of fireworks and in the preparation of phosphorus, the results of which have just been published as Bulletin No. 405, an agreement has been reached with the manufacturers by the Department of Labor whereby the manufacture of all types of fireworks containing white (yellow) phosphorus is to be eliminated on or before August 15, 1926.

Because of the intense suffering and often shocking deformity resulting from chronic phosphorus poisoning, almost every civilized country has taken measures to abolish the use of poisonous phosphorus in the match industry where phosphorus necrosis was most prevalent. The present-day hazard of phosphorus poisoning occurs among bone-black makers, brass founders, fertilizer makers, fireworks makers, insecticide makers, phosphate-mill workers, phosphor-bronze workers,

phosphorus-compound makers, and phosphorus extractors.

The investigation made by the Bureau of Labor Statistics covered three industries which offer exposure to phosphorus poisoning—the manufacture of phosphorus fireworks and of vermin exterminator, and the phosphorus-extracting industry. In the manufacture of rat paste, possibly because of the intermittent character of the industry, no case of phosphorus necrosis was found to have occurred. Of the two phosphorus-extraction plants studied, one (which has been shut down for five years) had over a long period of years, four cases of chronic phosphorus poisoning; the other plant had only one minor case in 20 years, having given special attention to the teeth of employees in furnishing free dental care and inspecting the teeth of all workers in phosphorus at frequent intervals.

The study demonstrates that there is a real industrial hazard from phosphorus in the phosphorus fireworks factories, even though the number of workers exposed to the hazard is small. In the 3 plants manufacturing phosphorus fireworks, 366 people were employed—181 men and 185 women. The workers engaged in the phosphorus processes numbered 71, of whom 56 were women. Among the employees of these three factories, there had occurred 14 definite

cases of phosphorus necrosis, 2 of which were fatal.

In addition to the paramount hazard of chronic poisoning, phosphorus fireworks presents two collateral hazards—that of explosion and that of acute poisoning. In the last 15 years, 18 fires or explosions due to phosphorus fireworks have been reported. The danger of acute phosphorus poisoning is not likely to be an industrial hazard, since the cases are mostly those of children who sometimes swallow the lozenges, thinking they are candy. Only passing atten-

tion was paid to it in the investigation and no effort was made to secure the total number of such accidents. The American Museum of Safety reported the deaths of 9 children, with ages ranging from  $2\frac{1}{2}$  to 7 years, Fourth of July, 1925, as a result of eating phosphorus fireworks. One State, Louisiana, has prohibited the sale of such fireworks in the State, and a large distributor of fireworks has refused to handle the phosphorus type and has so notified its customers.

The hazards inherent in the manufacture of phosphorus fireworks are fully realized by the manufacturers themselves, and they have been experimenting for some time to find a less dangerous substitute for

the poisonous phosphorus.

## Quarry Accidents in the United States in 1924

dents in the United States Bureau of Mines on quarry accidents in the United States during the calendar year 1924 (issued as its Bulletin 263) shows that the industry employed 94,242 men during the year, a gain of 2 per cent over the employment in 1923. The number of man-shifts worked, however, was 1 per cent fewer than in the preceding year and the number of days worked per man was 269, a loss for the year of 7 days for each worker. The fatality rate, 1.63 per thousand full-time or 300-day workers, was the lowest reported in any year since 1911, when the Bureau of Mines began to compile accident data for the quarry industry, but the non-fatal injury rate, 175.03, while slightly below that for 1923, was somewhat higher than that prevailing in recent years. The fatality rate in 1923 was 1.68 and the injury rate 176.04.

The accidents during 1924 resulted in 138 deaths and 14,777 injuries and in 1923 in 143 deaths and 14,990 injuries. There were 59,126 men employed inside the quarry pits and of these men 96 were killed and 8,990 injured, giving a fatality rate of 1.90 and an injury rate of 178 per 1,000 300-day workers; outside the quarries, at crushers, mills, rock-dressing plants, etc., there were 35,116 employees, of whom 42 were killed and 5,787 injured, the fatality

rate being 1.24 and the injury rate 170.61.

The slight reduction in the fatality rate in 1924 was the result of a reduction in the number of fatal accidents in quarries producing limestone, slate, or trap rock, all other classes of quarries showing increased rates, while lower nonfatal injury rates were shown for cement-rock quarries, the rates in other kinds of quarries being higher

than in 1923.

Of the 14,915 accidents reported by the quarry industry, 138, or 0.92 per cent, caused death, 13, or 0.09 per cent, resulted in permanent total disability, 457, or 3.06 per cent, in permanent partial disability, 2,708, or 18.16 per cent, caused temporary disability lasting more than 14 days, and 11,599, or 77.77 per cent, caused temporary disability exceeding the remainder of the day or shift but not exceeding 14 days.

The following table shows the number of persons killed or injured

during 1923 and 1924, by kinds of quarries:

NUMBER OF EMPLOYEES AND NUMBER KILLED OR INJURED DURING THE YEARS ENDING DECEMBER 31, 1923 AND 1924, BY KIND OF QUARRY

		Men en	nployed	Killed		Inj	ired
Kind of quarry	Active operators	Actual number	Equivalent number of 300-day workers	Number	Per 1,000 300-day workers	Number	Per 1,000 300-day workers
1923: Cement rock Granite Limestone Marble Sandstone and bluestone Slate Trap rock	72 289 865 51 164 75 166	13, 378 11, 658 46, 325 5, 351 4, 972 4, 329 6, 442	14, 969 9, 950 41, 818 5, 122 4, 170 3, 749 5, 375	25 9 78 3 2 8 18	1. 67 . 90 1. 87 . 59 . 48 2. 13 3. 35	3, 199 1, 771 7, 080 655 498 559 1, 228	213, 71 177, 98 169, 30 127, 88 119, 42 149, 11 228, 47
Total	1, 682	92, 455	85, 153	143	1. 68	14, 990	176.04
1924: Cement rock	69 297 846 45 170 76 157	12, 519 12, 153 48, 391 5, 764 5, 430 4, 114 5, 871	13, 694 10, 111 42, 752 5, 717 4, 258 3, 538 4, 356	31 12 70 7 8 2 8	2. 26 1. 19 1. 64 1. 22 1. 88 . 57 1. 84	2, 316 1, 979 7, 421 754 720 566 1, 021	169, 13 195, 73 173, 58 131, 89 169, 09 159, 98 234, 39
Total	1,660	94, 242	84, 426	138	1. 63	14, 777	175. 03

The principal causes of accidents inside the quarries, in the order of their importance, were handling rock at the face, flying objects, haulage, falls or slides of rock or overburden, machinery, falls of persons, falling objects, drilling and channeling, and timber or hand tools; accidents outside the quarries were caused mainly by flying objects, machinery, falling objects, hand tools, falls of persons, handling rock, and haulage. The principal causes of fatal accidents inside the quarries were falls or slides of rock or overburden, explosives, falls of persons, haulage, and machinery, and in outside plants were machinery, haulage, falling objects, falls of persons, and burns.

## Final Report on Benzol Poisoning by National Safety Council Committee 1

Congress to study the benzol problem has recently issued its final report covering the chemistry and industrial uses of benzol, acute and chronic benzol poisoning, the physiological effect of benzol, the extent of the hazard in American industry, a study of conditions in selected industries with respect to the exposure to benzol, and the results of various tests showing the toxicity of benzol.<sup>2</sup>

Benzol or benzene (C<sub>6</sub>H<sub>6</sub>) is a colorless liquid obtained from the distillation of coal tar and from the strippings of coke-oven gas.

<sup>&</sup>lt;sup>1</sup>National Safety Council. Chemical and Rubber Sections. Committee on benzol, final report. [Chicago] National Bureau of Casualty and Surety Underwriters, May, 1926.
<sup>2</sup>See Labor Review, May, 1924, for the first report of this committee.

Benzol was discovered in 1825 and in 1869 a process for recovering it from illuminating gas was patented. It did not play a really important part in industry, however, until it began to be produced from coke-oven gas between 1884 and 1887. The commercial uses of benzol grew steadily from 1890 to 1915, and the large production of benzol during the war in connection with the manufacture of explosives led to a rapid broadening of the field for the industrial uses of this substance.

Benzol is highly insoluble in water and slightly soluble in alcohol, but can be completely mixed with ether, acetic acid, carbon disulphide and a large number of organic substances. There are a number of substances known commercially as benzol, some of which contain benzene while others do not. All, of course, should be clearly distinguished from benzine which is a petroleum product.

There are two very distinct types of processes involved in the use of benzol in industry. In the first (which includes such industries as the production of benzol through the distillation of coal and coal tar, the blending of motor fuels, and the chemical industries including oil extraction, dye and dye intermediates, and the manufacture of paints, varnishes and stains, and paint and varnish removers) benzol is used in large quantities but because of the amounts used it is necessary that it be kept in a closed pipe-line system, since any openings represent a loss of valuable vapors and a corresponding financial loss. The second group of processes involve the use of benzol as a solvent or vehicle and as a part of the process it must be removed so as to leave the originally dissolved substances in place. The industries in which it is used in this manner are the rubber industry, the artificial leather industry, manufacture of sanitary cans, in dry cleaning and in the handling of paints, varnishes, and stains. The benzol is removed through evaporation and in most cases this is done in the cold, but the compound may be warmed, in which case the benzol is naturally removed with greater rapidity.

#### Poisonous Effects of Benzol

PENZOL is ordinarily introduced into the body through the inhalation of its fumes. It exerts three more or less distinct toxic effects: It acts as an anesthetic or narcotic, leading to dizziness, faintness, and coma, or death; it acts as a nerve irritant, producing characteristic spasmodic movements, with actual damage to nerve tissue which may result in coma and death; and it possesses a definite and destructive power for the blood cells and the organs which produce them.

Like many other toxic substances used in industry, benzol may produce either acute or chronic poisoning, depending upon whether the exposure is brief and intense or moderate and prolonged.

#### Acute Benzol Poisoning

Acute poisoning is usually caused either by the sudden discharge of vapors through the failure to regulate a condensing apparatus or through a leak in the piping, or by the entrance of workmen into tanks or other confined places where benzol has been stored or used.

The symptoms of acute poisoning are dizziness, faintness, and drowsiness, culminating in unconsciousness and coma; pallor of the face and blueness of the lips and finger tips; feeble and rapid pulse; breathlessness and a feeling of constriction in the chest which may end in immediate death from respiratory paralysis; visual disturbances, tremors, and convulsions and occasionally mania or delirium; hemorrhages into the tissues, causing red spots on the skin and internal surfaces, and if the substance has been swallowed, symptoms of acute gastrointestinal irritation. Death may result within a few minutes after the exposure or the patient may apparently recover and then die several days later. There seems to be decided variation in individual susceptibility and the effects of the fumes appear to be increased by vigorous muscular exertion as a man rendered unconscious by benzol vapors may recover while those overcome while rescuing him may die. The treatment of acute benzol poisoning requires first of all prompt restoration of the respiratory function through artificial respiration.

#### Chronic Benzol Poisoning

Chronic benzol poisoning is most liable to occur in the group of industries in which benzol is used as a solvent and is evaporated into the air of the workroom resulting in continuous or repeated

exposure to the fumes.

As the fumes are in concentrations too low to produce marked narcotic effects, the condition is much more obscure and the cause is more likely to be overlooked. The more common symptoms of chronic poisoning are general systemic disturbance resulting in headache, dizziness, weakness, loss of appetite and loss in weight; pallor which is shown by blood examination to be true anemia; marked reduction in white blood cells as shown by microscopical examination; bleeding from mucous membranes with purpuric spots caused by hemorrhages within the tissues; sore and spongy gums and burning sensation in eyes and throat; and shortness of breath and tightness in the chest, There may be, also, abdominal pains, nausea and vomiting and sometimes slight tremors, visual disturbances and abnormal sensitiveness to touch. Rarely, there are rashes and skin eruptions, or convulsions and delirium.

If chronic benzol poisoning is detected in its early stages and the person removed from exposure to the fumes, complete recovery usually takes place, but in severe cases of chronic poisoning part of these symptoms may persist for a long time after exposure has ceased; and about one in five of the cases reported in the literature has ended

fatally.

The most universal and the most characteristic effect of chronic benzol poisoning is the destructive effect on the blood and the blood-forming centers, affecting first the white blood cells and later the red cells, and producing a pronounced anemia. The decrease in the number of white blood cells generally precedes any other symptoms and with a history of exposure to benzol the diagnosis of benzol poisoning may be made on this basis with reasonable accuracy. The seriousness of this condition is also shown by the observations of a number of investigators that it greatly reduces the resistance to pneumonia and other bacterial infections.

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## Extent of the Hazard and Conditions in Factories Using Benzol

THE industries using the largest amounts of benzol were found to be the chemical industries, the can-seal industry, the rubber industries, and the manufacture of artificial leather. In the chemical industries, however, the number of employees exposed is small, as the material is usually used in inclosed processes. During the time the committee was carrying on the study, 22 fatalities and more than 100 nonfatal cases of poisoning were reported in various types of industries, showing that the hazard is a serious one and forms one of

the major problems of industrial hygiene.

A field study was made in 12 plants to show the extent of the benzol hazard under different working conditions. The majority of these were rubber factories manufacturing different kinds of articles, but dry cleaning, sanitary-can manufacture, and artificial leather factories were also included. The conditions under which the benzol was used and the type of exhaust ventilation were studied in the different plants visited and analyses made of the air under both summer and winter conditions. When small amounts of benzol were used without special ventilation the average concentrations were found to vary from 100 to 1,360 parts of benzol per million parts of air, while under similar conditions with large amounts of benzol in use the averages ranged from 220 to 1,800 parts per million. Plants using large amounts of benzol but with inclosed systems or local exhaust ventilation had averages of only between 70 and 500 parts per million while the plant with the most efficient exhaust system had an average of only 70 parts in summer and 90 parts in winter. Some of the workrooms studied, however, had concentrations of benzol approximating the amounts which have been found to cause acute poisoning. In a compound mixing room the amount of benzol present in the air was 2,640 parts and in a dry-cleaning establishment 4,140 parts. It has been shown that 4,700 parts may produce confusion in an individual in half an hour while 550 parts have been found to be associated with clinical poisoning. However, by the use of efficient local exhaust ventilation and the safeguarding of all the details of the processes, it has been shown to be possible to use benzol in coating and mixing rooms, and in sanitary-can manufacture with a degree of air pollution of less than 100 parts of solvent vapors per million parts of air.

Extent of Early Benzol Poisoning Under Different Working Conditions

AN EXAMINATION was made of workers exposed to benzol under different conditions, the white blood cell count being taken as the index of early poisoning. Eighty-one workers were examined, the tests showing clear evidence of blood-cell destruction in 26, or 32 per cent, as indicated by a white count of 5,500 or less. In 10 cases the number of white cells was below 4,000 and in 3 cases below 3,000. Examination of a control group of about 50 workers not exposed to benzol failed to show any abnormal blood condition among them. Complete medical examinations were obtained in only 9 instances but of these 9 five gave a history suggestive of chronic benzol poisoning, with two or more of the characteristic symptoms.

The results of these examinations were regarded as decidedly disturbing not only because about one-third gave evidence of chronic poisoning but also because the evidence of poisoning was clear in a number of cases where there was good exhaust ventilation and a small amount of air contamination. The results of the tests and examinations showed, therefore, that the control of the benzol hazard, in all except completely closed systems, is extremely difficult; that there were few systems of exhaust ventilation capable of keeping the concentration of benzol in the air of the workroom below 100 parts per million; and that even when this is done there is a decreased, but nevertheless a real, hazard of benzol poisoning.

#### Protective Measures

FROM the evidence obtained in the investigation it appears that in the type of industries in which benzol is used in inclosed systems with proper care in the construction, maintenance, and operation of these systems, the use of benzol can be made sufficiently safe to warrant its use. Serious accidents may occur, but the danger may be controlled by proper attention to safeguarding these processes. The principal methods of protection which should be enforced in this type of industry are regular and systematic inspection of apparatus to insure against breaks or leakage, thorough removal of all traces of benzol from tanks or other receptacles which have contained the substance before they are entered for cleaning or repairing; and the protection of persons entering inclosed spaces which may contain benzol fumes by the use of positive-pressure air helmets or hose masks, all such work to be done by two or more men who are familiar with the dangers involved.

The danger of chronic poisoning from benzol used as a solvent may be minimized by the installation of proper safeguards and examination of workers at regular intervals to detect incipient poisoning. In these processes exposure may be diminished by using inclosed systems wherever possible and effective local exhaust ventilation. In most instances where benzol is evaporated at room temperature, local exhaust ventilation with down draft is recommended but where localized heat is applied in the evaporation of the benzol the ventilation system should be provided with upward draft which should be of sufficient intensity and applied so closely to the point of origin of the evaporation as to insure the complete removal of the benzol

fumes.

A thorough physical examination before employment and reexamination, with systematic blood counts, once a month thereafter is considered a necessary precaution for all workers engaged in processes where there is exposure to benzol fumes. No worker should be employed on such a process who shows signs of organic disease of the heart, lungs, or kidneys; hemorrhagic tendencies; or anemia, or any unusual blood picture. Any worker should be removed from these processes who shows, upon reexamination, such symptoms of benzol exposure as hemorrhages from mucous membranes; decrease of more than 25 per cent in either white or red blood cells, or hemoglobin below 70 per cent.

An experimental study of the comparative toxicity of benzol and its higher homologues—toluol, xylol, and Hiflash naphtha—which was carried out on animals showed that although the narcotic effects of the latter group of solvents is greater than that of benzol they are almost without effect on the central nervous system or on the bloodforming organs, both of which are seriously damaged by benzol. As the boiling points of toluol and xylol are relatively high, they would never be present in concentrations of over 1,000 parts except as the result of some temporary accident and in this case their irritant action would serve as an immediate and automatically effective danger signal. The laboratory investigations show, therefore, that the higher homologues of benzene are relatively harmless and the committee urges that manufacturers give serious attention to the. possibility of substituting one of these substances in the place of benzol wherever the conditions of the manufacturing process make it possible to do so.

## Health Survey in the Photo-Engraving Industry

THE variety of the hazards connected with the photo-engraving industry is shown in an article in a recent number of the American Federationist in which an account is also given of the health and the working conditions among the photo-engravers of New

York City.

Practically one-third of all the photo-engravers in the United States and Canada are said to be located in about 100 establishments in New York, which is the center of the printing and publishing business for the country. Photo-engraving is the process of making the printing plates from which pictures and illustrations are printed in one or more colors, all matter except straight type being printed from these plates or engravings. A great many chemicals and acids for etching in various forms are used and part of the photographic development has to be done in rooms absolutely dark with the consequence that the provision of proper ventilation is a problem. The special hazards, aside from poor ventilation, result from the use of inflammable substances, high-speed machines, chemicals, acids, and various gases.

The trade is highly organized and many questions relating to the welfare of the workers are dealt with by a joint industrial council composed of an equal number of representatives of the employers' and the workers' organizations. A sanitary survey of the industry has recently been made and a sanitary code established by the Board of Health of the City of New York at the request of the council.

As a preliminary to the survey, a physical examination was given to all workers in the industry who would volunteer and a detailed and uniform report was kept of all examinations. About two-thirds of the workers volunteered for the examinations which were given at the various plants by the staff of four physicians assigned by the board of health for the purpose. The findings were confidential, but each individual was notified of any condition disclosed by the examination which needed attention and was urged to consult his

<sup>&</sup>lt;sup>1</sup> American Federationist, July, 1926, pp. 802-805: "Health in the photo-engraving industry," by E J. Volz.

family physician. It is expected that the results of the examination will be a guide in the future in the selection of applicants for apprenticeship. For the past five years records have been kept of the physical examination of apprentices, as each applicant is examined prior to being indentured, and these records it is considered will be of increasing value in the future in determining whether any specific

disease is of an occupational origin.

Photo-engraving is divided into a number of distinct processes photography, etching, engraving, etc.—which are carried on under varying conditions and which supposedly involve special hazards. A classification of the results of the examinations by the occupation or the department in which it was carried on seemed to show, however, that the exposure to the various hazards was fairly general throughout the establishment.

As the photo-engraving process has been in use only about 40 years and has developed rapidly in recent years the men employed are comparatively young. The average age of those examined was 34.5

years, although the range was from 16 to 74 years.

From the nature of the work it was expected that diseases of the nose, throat, teeth, eyes, and skin would predominate, and the findings did show a high percentage of such diseases. Sixty-four per cent of the workers were found to have throat affections, and a comparison of the death rate in the industry from various causes with the general death rates showed a higher rate from pulmonary diseases among these workers than among the general population. that such a large proportion was suffering from affections of the respiratory system demonstrated the need for an effective system for removing acid and chemical fumes and gases containing carbon monoxide.

Among the chemicals and acids used in the industry which constitute a hazard to the workers are glacial acetic acid, wood alcohol, ammonia, ammonium bromide, ammonium chloride, anilin, benzine, benzol, ammonium bichromate, sodium bichromate, copper bromide, cadmium bromide, potassium carbonate, carbolic acid, chloroform, potassium chloride, silver chloride, chrome alum, chromic acid, caustic potash, potassium cyanide, sulphuric ether, sodium fluoride, formalin, muriatic acid, hydrochloric acid, ammonium iodide, potassium iodide, lye, bichloride of mercury, mercuric oxalic acid, pyrogallic acid, ammonium sulphide, sodium sulphide, sulphuric acid, and verdigris collodion.

A sanitary survey of the plants showed that in addition to these hazards the men were exposed to glare from unshielded lights and to ultra-violet and infra-red rays from open arc lights; dust from grinding cylinders; carbon monoxide from gas stoves and gas driers, ovens, etc.; dust from dragon's-blood and other powders; excessive heat from rheostats; chips from filings and routings of metal on machines operated at a high speed; and hazards from unguarded machinery.

As a result of the survey about 40 general recommendations were made providing for the mechanical ventilation of all plants and all dark rooms; exhaust systems for all acid machines, etching tubs, chemical sinks, gas stoves, boiling pots, sensitizing pads, dragon's-blood cabinets, etc.; and the use of indirect or semiindirect lighting and the inclosure of arc lights in glass to filter the dangerous light rays.

## Medical Examination of Miners in Australia

THE physical examination of miners in Western Australia provided for by the miners' phthisis act of September 7, 1925, is being carried out at the Commonwealth Health Laboratory and up to the middle of April approximately 2,680 men employed in seven mines had been examined. Reports from all but two of these mines showed that 55 men who were suffering from tuberculosis had been withdrawn from work. It is considered noteworthy that of the more than 2,600 men who were notified to attend for examination not one failed to appear. There remained about as many more miners to be examined in the outlying mining districts, and a portable X-ray plant had been provided to carry out the examinations.

The cost of compensation, of the administration of the act, the transportation of the men to the place of examination, and of finding suitable employment for those having tuberculosis is borne by the State Government, while the salaries of the three medical officers appointed for the examination of the men and the cost of maintaining the health laboratory are paid by the Commonwealth Government.

A miners' phthisis board composed of a representative of the department of mines, a tuberculosis specialist, and a representative of the Australian Workers' Union has charge of the claims for compensation under the act and also has supervision of the welfare of the miners having tuberculosis and of their families and dependents.

## Accidents in British Coal Mines in 1924

which has recently appeared, shows that there were 1,218 mining fatalities during the 12 months covered, of which 1,102 were due to underground and 116 to surface accidents. All but 17 of these deaths occurred in coal mines. Of the underground fatalities in coal mines 35 were due to explosions of fire damp or coal dust, 607 to falls of ground, 59 to shaft accidents, 262 to haulage accidents, and 124 to miscellaneous accidents. Of the surface fatalities 49 were due to accidents on railways, sidings, or tramways, and 65 occurred elsewhere. Of the 17 fatalities in metalliferous mines 15 occurred underground, 7 of these being due to falls of ground, and 2 were on the surface. The number of persons injured but not killed in coal mines was 195,423, of whom 178,779 were hurt in underground and 16,644 in surface accidents. No injury is included unless it caused disablement for more than three days.

The death rate per 1,000 persons employed above and below ground at coal mines was for the year 0.98, an improvement over 1923, when it was 1.06. The death rate per million tons of coal mined was 4.36.

It will be noticed that deaths from falls of ground are by far the most numerous, and considerable space is devoted to a discussion

<sup>&</sup>lt;sup>1</sup> Australia (Western Australia). Department of Labor. The Western Australian Industrial Gazette, May, 1926, p. 5.
<sup>2</sup> Great Britain. Mines Department. Fourth Annual Report of the Secretary of Mines for the Year Ended Dec. 31, 1924, and the Annual Report of the Chief Inspector of Mines. London, 1925. 197 pp.

of whether the fatalities from this cause can not be lessened. From 1873 to the end of 1924, it is pointed out, 26,605 persons have been killed by such falls. Up to 1903 no specific rules were in force as to the number and placing of supports, but from that time onward regulations have been in effect designed to secure greater safety. Comparing the death rates per 1,000 persons for the 10 years preceding 1903 with those of later years, it appears that they have fallen during the period by 6 per cent, from 0.76 to 0.71. This is so slight a decrease that it is held that death rates from falls have remained nearly stationary for 30 years. More mining is being done now than formerly at great depths, which means an increased risk, but notwithstanding it is felt that something should have been accomplished in lowering the death rates from such accidents. Increased supervision and improved discipline may do something toward lowering the rate, but it is suggested that more might be accomplished by voluntary effort on the part of those in charge.

Great benefit resulted from certain rules which were adopted voluntarily by owners, agents, and managers of mines during the war in connection with the use of explosives, and I believe that if this problem of falls of ground were attacked by similar voluntary methods good results would be achieved.

# WORKMEN'S COMPENSATION AND SOCIAL INSURANCE

Unemployment Insurance Plan of the Dennison Manufacturing Co.

N ARTICLE in System, June, 1926 (pp. 795, 796), entitled "Unemployment relief—a burden or an investment," by Henry S. Dennison, gives an account of the unemployment insur-

ance plan of the Dennison Manufacturing Co.

The reasons which are usually advanced in opposition to unemployment insurance are that wages are already high enough to enable the wage earners to tide over a period of unemployment; that it may make the workers less afraid of losing their jobs and consequently less energetic; that it will tend to decrease saving; that it will be too costly for the employer; or that it is too hard to administer. In reply to these objections, the writer says that although average wages show some advancement over pre-war rates, the average yearly wages now paid in the manufacturing industries are only \$1,265, which is a bare subsistence wage for families with two dependent children and, further, that as this figure is an average, about half the workers in this group receive less than this amount. The fear of losing a job through inefficiency may act as an incentive, but fear of an unexpected and unmerited lay-off may have the opposite effect and may foster a belief in the necessity for prolonging the job. As to the objection that unemployment insurance may tend to diminish savings, even savings, it is said, can be purchased too dearly.

The cost of unemployment insurance, where it is actually in effect, is said to be surprisingly small, and compared with the cost of labor turnover it may even be found that unemployment insurance would actually represent a saving. It is admitted that there are difficulties in the administration of unemployment relief, but the writer considers that it is probably no more difficult to administer than other

management features.

In any scheme of unemployment relief, measures to regularize employment are important, since it is better to reduce unemployment than to pay for it. The principal measures taken by this firm to insure steady employment are long-range stock-goods planning; getting seasonal special orders in early; adding stock items to supplement special products; developing lines for supplementary seasons; training operatives for supplementary jobs; and watching the cycle and limiting expansion at its peak. As these methods sometimes fail the company has assumed the responsibility of paying for temporary unemployment on the ground that the opportunity to reduce unemployment rests largely with the employer. There is no guaranty on the part of the firm, however, in the establishment of the unemployment fund, either of employment or of the maintenance of the regular wage rate, nor that the fund will be renewed.

As at present constituted, the fund is administered by a small committee composed of an equal number of representatives of the management and the works committee. The plan provides that employees with more than six months' service who are temporarily laid off shall receive 80 per cent of their regular wages if they have dependents and 60 per cent if they have none. When employees of either class secure temporary work outside they are entitled to an amount equal to 10 per cent of their outside earnings plus 90 per cent of their earnings with the company, the unemployment fund being used to make up the difference between this amount and the pay they receive outside. When transfers are made within the factory, full wages are paid to time-workers and 90 per cent of their six weeks' average earnings to pieceworkers; the difference between what they are worth on the new job and their earnings is charged to the unemployment fund. The committee administering the fund may stop payments to any employee after six days' payments if in its opinion the employee is not making an attempt to secure outside work. In case of long-continued depressions, if it becomes necessary to discharge workers, they are given two weeks' notice or pay for the same period.

Up to the present time the fund has amounted to about \$150,000, approximately \$40,000 having been paid out of it since 1920. The amounts actually paid out each year have been negligible in comparison with the annual pay roll, as in 1921, although the payments were 10 times greater than in any other year, they totaled only

about seven-tenths of 1 per cent of the total yearly pay roll.

## Recent Workmen's Compensation Reports

#### New York

Bulletin No. 142 a statement of Labor has issued as Special Bulletin No. 142 a statement of the compensation awards for the year ending June 30, 1924, together with a summary of compensated accidents for the eight years, July, 1914, to June, 1922. An earlier bulletin (No. 126) presented an analysis of the disabilities for which closing awards were rendered in the ninth year of the act ending June 30, 1923. These two bulletins taken together complete the publication of compensation data for the first 10 years under the New York law. In the present bulletin are shown for the first time, not only the number of cases, but the length of disability in weeks and the amount of compensation awarded for all classes of cases. Such figures were given in Bulletin No. 126 for deaths and permanent disabilities only.

The number of cases in which awards were closed in the year covered was 72,983. Of these 43,460 were for accidents occurring during that year, while 27,398 came over from the preceding year. Each previous year furnished one or more cases, one coming from the year 1914–15, 3 from the year 1915–16, and 9 from the year 1916–17. The number of cases closed during the year was more than 25 per cent in excess of the number disposed of in the preceding year.

The records of the department of labor do not show the amount of medical benefits received by injured employees, but only the amount of compensation paid on account of wage loss. The total amount awarded during the year was \$26,590,104. The report calls attention to the fact that this does not represent the entire cost of the accidents, which would include also the medical expenses of injured employees, their wage loss not met by compensation (the waiting period, and one-third of all wages, besides any excess above the maximum fixed by law) as well as overhead cost of insurance carriers and the State as insurer, the loss of production occasioned by lost time, and the losses due to labor turnover following accidents.

The following brief table shows the distribution of compensation,

by principal classes of disability:

DISTRIBUTION OF COMPENSATION PAID, YEAR ENDING JUNE 30, 1924

	Ca	ises	Compensation			
Class of disability	Number	Per cent of total	Amount	Per cent of total	A verage per case	
Death Permanent total Permanent partial Temporary	1, 109 22 15, 526 56, 326	1, 5 (1) 21, 3 77, 2	\$6, 448, 655 301, 982 13, 520, 153 6, 319, 314	24. 3 1. 1 50. 9 23. 8	\$5, 815 13, 726 871 112	
Total	72, 983	100.0	26, 590, 104	100.0	364	

<sup>&</sup>lt;sup>1</sup>Less than one-tenth of 1 per cent.

Manufacturing was responsible for the largest number of cases, 32,533, transportation and public utilities coming next with 13,654, closely followed by construction with 13,361. Trade comes next with 5,931 cases, and care of buildings, hotels, etc., 5,589. Mining and quarrying were responsible for but 688 cases, agriculture for 458, and other industries 769. Compensation costs in manufacturing were \$10,334,639, an average of \$318 per case. The highest cost per case was in construction, \$461, the total compensation for this industry amounting to \$6,152,265, transportation being third with \$5,272,145 in compensation, an average of \$386 per case.

The distribution as to nature of injury was as follows:

	Per cen	
Cuts, punctures, and lacerations	38.	1
Bruises, contusions, sprains, etc	29.	
Fractures, traumatic amputations, dislocations	23. 3	3
Burns and scalds	5. 5	2
Other injuries	4.	1
Total	100	0

Other summary tables show location and nature of injury, by causes, the cost of different injuries, weekly wages of injured employees, age of injured employees, and dependents in fatal cases. Detailed tables are given showing, by industries, the facts under each of the above heads.

The maximum benefit in disability cases was, during the year covered, \$20 per week, nearly the same being payable in death cases (\$19.23) by the provision that in them wages beyond \$125 a

month should not be considered in computing the rate of compensation. These amounts are approximately two-thirds of \$30, whereas 25,898 of the injured employees whose cases were settled during the year out of a total of 72,983 were in the wage group earning more than \$30.49 per week. "In other words, 35 per cent of these employees, or their dependents, were compensated at less than two-

thirds wages."

The consolidated statistical presentation for the first eight years is on a different basis from current data, by reason of the fact that the tables are based on the year of accident occurrence. Other qualifications affect the comparability of the earlier yearly data, such as changes in the law, both by statutory enactment and by court decisions; completeness of accident reporting has also considerably affected the lesser disabilities. The total number of cases covered in the tables for each year ranges from 39,622 in 1915 to 55,441 in 1917, the next highest number being 51,213 in 1920, falling again to 44,982 in 1921. The aggregate shows 7,193 deaths, 163 permanent total disability cases, 55,222 permanent partial disabilities, and 316,678 temporary disabilities, a total of 379,256 cases.

## Wyoming

THE Workmen's Compensation Department of Wyoming administers two laws, one providing for compensation for injuries to workmen, and one providing indemnity for peace officers of the State. The report for the calendar year 1925 covers the tenth year of the industrial statute, and the third of the peace officers' indemnity fund.

Å brief statement as to operations under the latter fund shows a balance in hand December 31, 1924, of \$23,991.86. Premiums received during the year amounted to \$3,230.15 and interest \$546.11. The sum of \$4,330.23 was paid out on orders of award, leaving a balance at the end of the year of \$23,437.89, some \$550 less than at

the beginning of the year.

Of the 164 pages of the report, 127 are devoted to statements of individual accounts of employers with the State fund. A summary of receipts and disbursements for each industrial class is also given, as well as a combined statement for the entire fund. This shows a balance in hand December 31, 1924, of \$66,460.22, receipts from assessments amounting to \$501,638.72 and from interest to \$930.45. There was also transferred to the general fund from the reserve fund the sum of \$71,000.

Disbursements included those made on orders of award, amounting to \$536,684.68, costs of administration \$19,206.42, and catastrophe reinsurance premiums for coal mines \$1,000, leaving a balance at

the end of the year of \$83,138.29.

The reserve fund received from interest on investments \$14,565, and from interest on deposits \$892.51, the transfer to the accident general fund of \$71,000 resulting in a reduction of the balance from \$341,000 to \$285,457.51 at the end of the year. However, the aggregate balances in the general fund and reserve fund amounted to \$368,595.80 on December 31, 1925.

There were 91 orders in fatal cases made during the year, of which 40 were supplemental or follow-up awards and 51 original awards.

Coal mining furnished more than one-half of the original awards, 29 in all, besides 10 follow-up awards. The aggregate payment on account of coal-mining deaths was \$61,620.35, more than half of the total of \$117,275.88 for all classes of injury. Permanent total disability awards numbered 19, calling for \$70,838.67; permanent partial disability awards numbered 184, to the amount of \$112,037.50; while for temporary total disability there were 5,615 orders aggregating \$241,796.71. Of these 2,537 were medical or hospital orders, amounting to \$83,372.58; costs of investigation and witness fees are also included, the actual compensation benefits being \$152,097.93 in 1,941 cases.

There were 1,370 employers paying into the fund during the year as against 1,495 in the preceding year. Of the total premiums, 35 per cent were paid by the coal industry, 36 per cent by the oil industry, and 29 per cent by all others. The coal industry this year more than paid for its outgo, the total orders of award amounting to 31 per cent of the aggregate, in the oil industry 32 per cent, while for all other industries 37 per cent of the outgo was required to meet

losses as against a 29 per cent payment of total premiums.

Detailed statements are given of the fatal accidents and the permanent total disability cases for the year. No accident data as to cause, nature of injury, industry distribution, etc., are given.

### Alberta (Canada)

THE workmen's compensation board of the Province of Alberta covers the calendar year 1924 in its seventh annual report. The number of accidents reported during the year was 7,383 as against 9,160 for the previous year. Separate funds are maintained for compensation of accidents, pensions, medical aid, mine-rescue work, and administration, all benefits under the act being paid through the exclusive provincial fund. Employers under the act at the end of the year numbered 3,262. Awards were allowed in 3,627 cases, medical aid only in 1,675, while 428 cases were disposed of for which no application for compensation was received; 587 claims called for continuing payments, while 923 accidents were awaiting further report; no compensation was found due in 2,076 cases.

Pension awards amounted to \$280,374.09 and compensation to \$241,089.57. Medical services totaled \$127,396.89, the total expenditures for the year aggregating \$873,904.24, an excess of expenditure over revenue of \$3,327.23. However, the expenditure includes \$32,000 set aside as a reserve for disasters besides the reserve of \$99,140.27 for claims pending. The total balance at the end of the year was in the accident fund \$180,785.49 and for the pension fund

\$1,163,351.73.

The report shows classifications of schedules in private employments with the basic rate of premiums, number of assessments during the year, and the actual rate of assessments made. Assessments are payable quarterly and may be passed over in the event of sufficient funds in the class. Another table shows total pay rolls and number of employees for certain classes.

Accident data are given, showing temporary disabilities by nature of injuries for each class, permanent disabilities by classes, causes of

accidents, time lost, week of termination, and fatal cases. The average number of days lost in temporary total disability cases was 23.02; the average age was 34.48 years, and the average weekly wage \$27.12.

In 611 cases disability terminated within one week, while 940 terminated during the second week, 551 during the third, 321 during

the fourth, and 222 during the fifth week.

## Workmen's Compensation in New South Wales

A N ACT amending the workmen's compensation law of New South Wales recently passed both houses of Parliament, and became effective about the first of July. Some details concerning it are given in two reports from the United States consul at

Melbourne, writing under date of May 7 and June 11, 1926.

Under the new act, compensation is not allowed for an injury causing incapacity for less than four days, nor, except in case of serious and permanent disablement, if the injury is due solely to the serious and willful misconduct of the worker. With these exceptions, compensation is payable to a worker who receives physical injury, whether at his place of employment, or on his way to or from such place, or elsewhere in the course of employment or while acting under

his employer's instructions.

The amount of compensation payable under the new act is two-thirds of the average weekly earnings, with a minimum of £2 ¹ and a maximum of £3 per week. In addition, if the worker is married, an allowance is made of £1 a week for the wife and 8s.6d.¹ for each child under 14, with a maximum of £5 for the total weekly compensation. The cost of necessary medical, surgical, and hospital treatment for the injured worker is also to be paid, though this amount may not exceed £50, unless otherwise directed by the commission charged with the administration of the act. In case of death, compensation to the dependents is increased to a minimum of £400 and a maximum of £800, from which payments made for disability before death are to be deducted; the final compensation, however, may not be reduced below £200, with an additional allowance of £25 for each child under the age of 16. No limit is placed on the amount to be paid for total and permanent disability. The scale of compensation for certain specified injuries is as follows:

	Amo	ount payable
		(\$3, 284, 89)
Loss of lower part of either arm, either hand, or five fingers of either hand	600	(2, 919. 90)
Loss of a leg		(2, 919, 90)
Loss of lower part of a leg	562.	5 (2, 737. 41)
Loss of a foot.  Loss of one eye with serious diminution of the sight of the		(2, 554. 91)
other	675	(3, 284.89)
Loss of sight of one eye 2	375	(1, 824. 94)
Loss of hearing		(2, 919.90)

<sup>&</sup>lt;sup>1</sup> Pound at par=\$4.8665, shilling=24.3 cents, penny=2.03 cents; exchange rate approximately par.

<sup>2</sup> For the partial loss of the sight of one eye there shall be payable such percentage of the amount that would be payable for the total loss of the sight thereof as is equal to the percentage of the diminution of the sight.

		unt payable
Complete deafness of one ear	£200	(\$973, 30)
Loss of a thumb	225	(1.094.96)
Loss of a little finger, middle finger, or ring finger	112.	5 (547, 48)
Loss of a forefinger	150	
Loss of part of a thumb	112	5 (547, 48)
Loss of toe or the joint of a finger	90	(437, 98)
Loss of a joint of a toe	75	(364.99)

In case of disease contracted gradually, the compensation is to be payable by the last employer, to whom previous employers during the 12 months preceding incapacity are to be liable for contributions.

The act is to be administered by a commission consisting of a chairman and two other members, appointed for a term of 7 years, and eligible to reappointment. Its expenses are to be provided by a tax on the premiums collected by the insurers, and its powers are considerable.

The commission, for the purpose of conducting any inquiry, investigation or hearing under the act, is to have the same powers and authority to summon witnesses and receive evidence as any State court. The commission is to have exclusive jurisdiction to determine all matters and questions arising under the act, and its action or decision upon questions of fact is to be final and conclusive, and, subject to the act, shall not be open to question or review in any court.

\* \* The decisions of the commission are to be on the real merits and justice of the case, and it is not to be bound to follow strict legal precedent.

The act makes insurance compulsory upon employers, unless they have established insurance schemes of their own which are approved by the commission, and in respect of which the amount of deposit is to be fixed by the commission. Insurers may not refuse to issue a policy, nor may they refuse any reinsurance which may be offered "up to the extent of the liability retained by the original office, and commission on such business is not to exceed 10 per cent."

## Canadian Old-Age Pension Bill Defeated in Upper House

HE United States consul at Ottawa, Canada, in a report of June 15, 1926, states that on June 8, 1926, the Canadian Senate defeated, by a vote of 46 to 21, the bill establishing pensions for the aged, which had passed the lower house on May 28 by a unanimous vote. The bill, which was permissive in its terms, allowed any Province to establish a pension system by a provincial statute, which had to be approved by the governor in council. Pensions were to be restricted to British subjects, aged 70 or over, with incomes under \$365 a year, and meeting certain requirements as to residence, etc. The maximum pension payable was to be \$240, this amount to be reduced by the amount of the pensioner's income in excess of \$125 a year. The General Government was to be responsible for one-half the amount paid in pensions.

The senate's opposition is said to have been based upon the alleged encroachment of the General Government upon the field of provincial rights, rather than upon any objection to the principle of old-age

pensions.

## COOPERATION

## Progress and Policies of Cooperative Marketing Organizations<sup>1</sup>

HERE are a number of ways in which the progress of cooperative organizations may be measured. In this paper I am not using any of the generally accepted yardsticks, such as volume of business or number of members.

The most encouraging feature of the cooperative movement during the past year or two has not been its actual expansion, although that has been large, but the evidences of stability and permanence that are now appearing. These factors are apparent and are to be found

in every field of cooperative activity.

In 1920 the Department of Agriculture received reports from 8,449 active cooperative associations; in 1925, 9,966 active organizations were heard from during the year, an increase of 1,517. Reports of failures during the same period ranged from 194 in 1923, 1.9 per cent of all cooperatives reporting that year, to 27, less than 0.3 per cent, in 1925. There are approximately 12,000 cooperative marketing associations in the United States at the present time. We do not have a record of all active organizations, nor of all that have gone out of business, but our information regarding failures since 1920 is fully as complete as that regarding active organizations.

Consequently, the figures quoted give a true picture of the situation and show conclusively that cooperation is a permanent factor in American agriculture. During the same period the cooperatives have increased greatly the volume of business which they handle. Conservative estimates, based on reports from over 60 per cent of all the associations in the United States, place the total business of cooperatives at \$1,600,000,000 in 1921 and \$2,500,000,000 in 1925.

The record of cooperation since 1920 is proof that the members and officials of the associations are gaining in cooperative experience. But further than this it is a demonstration of the inherent soundness of the movement, if such a demonstration was necessary to those who have followed cooperation through the various stages of its develop-

ment.

We see very definite progress in the attitude of the members toward their organizations. First of all, the producers who are members of cooperative associations are gaining a better understanding of their marketing problems and of the relationship which exists between marketing and production. They, as a class, are beginning to think of marketing as something more than the transfer of goods to a

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<sup>&</sup>lt;sup>1</sup> Part of an address delivered by W. M. Jardine, Secretary of Agriculture, before American Institute of Cooperation, St. Paul, Minn., July 8, 1926.

country buyer. They are beginning to follow the whole intricate process by which their products are placed in the hands of the consumers. Consequently, they are obtaining an appreciation of the consumers' needs, an understanding of price factors, and are at least taking the first steps to produce the kinds and qualities of products which the market demands.

This advance in knowledge, of course, enables them to understand more clearly what their cooperative organizations can and can not accomplish. They are better able to judge of the service rendered by their officials and employees, to understand in what part favorable returns are due to efficient service, or poor results to inefficiency. Consequently, they are better fitted to select the proper men as

directors and managers of their associations.

Generally, the organization of cooperative associations has increased the farmers' knowledge of marketing processes and problems, and is stimulating the production of the kinds and qualities of products the markets demand. I believe that in this respect alone—as an educational force—cooperation has more than justified its existence.

Encouraging progress has been made in the management of cooperative associations. This has come from experience and from a more careful selection of the managerial personnel. The promoter and propagandist type of cooperative manager is passing out of the picture. In his place there is developing a group of able business men, who are first of all cooperative business men, who understand the producers' problems, and who are using every improvement of modern business in their attempt to meet these problems.

The associations are getting on a more sound financial basis; they are doing a better job each year of grading, processing, and warehousing farm products. Especially are they making progress in the standardization of the products they handle, and as a result they are merchandising these products more efficiently and enlarging the

market area and marketing season.

There is every evidence, in brief, that the cooperative organizations are consolidating and strengthening the positions they have already gained. This is the present phase of cooperation. The next, I feel confident, will be an enlargement of the functions of the organizations, an increase in the volume of business and the outlining of a definite production and marketing program.

## Cooperation in Foreign Countries

## Belgium

HE June 15, 1926, issue of La Coopération Belge states that the total sales of the Belgian Cooperative Wholesale Society for 1925 amounted to 141,913,153 francs, and those of goods manufactured by the wholesale to 135,888,768 francs.

<sup>&</sup>lt;sup>1</sup>Franc at par=19.3 cents; exchange rate in 1925 approximately 4.76 cents.

The following data on the agricultural cooperative societies of Belgium for the year 1923, the latest year for which information is available, are given in the Belgian Statistical Yearbook for 1923-24.2

MEMBERSHIP AND BUSINESS ACTIVITIES OF AGRICULTURAL COOPERATIVE SOCIETIES IN BELGIUM, 1922 AND 1923

[Franc at par=19.3 cents; exchange rate in 1923 about 5.21 cents]

Type of society	Number of societies		Number of members		Amount of business		
	1922	1923	1922	1923	1922	1923	
Societies for purchase of farm supplies and joint use of machinery	1 1,302 2 190 975	1, 452 2 208 907	1 103,993 2 17, 070 70, 276	110, 658 2 19, 299 73, 236	Francs 1 69, 479, 714 2 40, 332, 751 3 289,023, 559	Francs 82, 846, 962 2 65, 875, 492 3 350, 296, 256	

Data are for societies affiliated to the Boerenbond, and the leagues of Luxemburg and Ermeton only.

<sup>2</sup> Data are for societies affiliated to the Boerenbond and the Luxemburg League only.

3 Loans granted during year.

#### Bulgaria

THE first official study of the cooperative movement in Bulgaria was made by the General Statistical Office of Bulgaria in 1921 and covered the year 1920. The results of that study were given in the Labor Review for June, 1924 (pp. 171, 172). Two later reports covering the years 1921 and 1922 are now available, and from these the following information was taken.3

Table 1 shows the number of registered cooperative societies of each type in operation on December 31, 1921 and 1922, the number

furnishing reports, and their membership.

Table 1.—NUMBER AND MEMBERSHIP OF BULGARIAN COOPERATIVE SOCIETIES, 1921 AND 1922, BY TYPE OF SOCIETY

	Number of registered societies		Number of societies reporting		Membership				
Type of society					Individuals		Organiza- tions		
	1921	1922	1921	1922	1921	1922	1921	1922	
Credit	1, 354 700 51	1, 404 709 53	989 321 18	1, 044 291 18	125, 554 106, 543 3, 622	140, 747 99, 875 2, 939	124 20	202 18	
Purchase, sale, and manufacturing Insurance Workers' productive	352 158 144	390 170 163	138 35 65	150 40 66	36, 429 74, 204 653	42, 824 84, 948 613	180	169	
Miscellaneous Central organizations	112 129 19	132 141 21	45 48 12	62 50 10	5, 781 3, 882 67, 381	11, 930 5, 309 81, 019	31 2 935	130 14 906	
Total	3, 019	3, 183	1, 671	1, 731	424, 049	470, 204	1, 292	1, 439	

<sup>&</sup>lt;sup>2</sup> Belgium. Ministère de l'Intérieur et de l'Hygiène. Annuaire Statistique de la Belgique et du Congo Belge, 1923-24. Brussels, 1926, p. 136. <sup>3</sup> Bulgaria. Direction Générale de la Statistique. Statistique des coopératives dans le royaume de Bulgarie pendant [les années] 1921 and 1922. Sofia, 1926. 108 and 119 pp.

In Table 2 are shown the financial statistics for the societies in 1922. No data on volume of business are given in either report.

TABLE 2.—CAPITAL AND PROFITS OR LOSSES OF BULGARIAN COOPERATIVE SOCIETIES IN 1922, BY TYPE OF SOCIETY

[Leva at par=19.3 cents; exchange rate in 1922 about 0.69 cent]

	V	Vorking capi	Net	Net losses	
Type of society	Share capital	Reserves	Deposits (time, sav- ings, etc.)	profits of societies reporting such	of soci- eties re- porting such
Credit Consumers' Housing and public works Purchase, sale, and manufacturing Insurance Workers' productive Joint use of machinery, etc. Miscellaneous Central organizations.	Levas 96, 620, 402 22, 456, 659 16, 854, 669 32, 362, 127 2, 021, 809 11, 636, 180 40, 836, 767 8, 979, 325 19, 096, 391	Levas 12, 063, 296 2, 927, 728 42, 141 4, 368, 759 4, 092, 272 561, 341 1, 066, 178 952, 076 2, 125, 959	Levas 234, 600, 674 11, 398, 220 4, 142 26, 573, 134 265, 672 44, 485 705, 380 13, 710, 136	Levas 14, 884, 161 9, 563, 917 106, 571 11, 608, 459 1, 925, 081 6, 803, 041 2, 812, 619 1, 987, 687 2, 498, 795	Levas 885, 286 644, 478 55, 728 739, 104 5, 241 198, 606 187, 084 214, 406 1, 888, 086

#### Finland 4

A T the end of 1925 there were 452 societies affiliated with the wholesale (S. O. K.) of the General Cooperative Union of Consumers' Societies, with a combined membership of 182,203. This is a decrease of 9 societies as compared with 1924 but an increase in membership of 1,885 members. The sales of the affiliated societies amounted to 1,295,999,940 Finnish marks,<sup>5</sup> an increase of 84,071,317 marks over the previous year. In 1925, 53 per cent of these goods were bought from the wholesale, as compared with 50.8 per cent in 1924.

The S. O. K.'s sales in 1925 amounted to 700,548,578 marks, and sales of goods manufactured by itself to 48,435,977. The wholesale now has 11 branches and 3 sales offices, and employs 1,470 persons.

#### Netherlands

HE sales of the Netherlands Cooperative Wholesale Society, De Handelskamer, in 1925 amounted to 12,632,150 florins 6 as compared with sales to the amount of 11,304,306 florins in 1924, according to the June 1, 1926, issue of Het Cooperatieve Nieuws (The Hague).

#### Norway

ATA on the development of the Union and Wholesale of Norwegian Consumers' Societies (N. K. L.) are given in News Release No. 38 of the International Labor Office. The table following, taken from the above source, shows the development of the N. K. L. since 1907:

<sup>&</sup>lt;sup>4</sup>International Cooperative Bulletin, London, June, 1926. <sup>5</sup>Finnish mark at par in 1925=19.3 cents; exchange rate 2.52 cents. <sup>6</sup>Florin at par=40.2 cents; exchange rate in 1925 approximately par.

# DEVELOPMENT OF NORWEGIAN COOPERATIVE UNION AND WHOLESALE (N. K. L.), 1907 TO 1925

[Krone at par=26.8 cents; exchange rate in 1925 about 18 cents]

Year	Number of affiliated societies	Number of members	Sales	Paid-in share capital	Reserve funds
1907	23 77 149 295 411 437	(1) 19, 000 32, 000 70, 984 93, 189 103, 157	Kroner 182, 500 1, 233, 800 3, 097, 000 12, 063, 400 20, 745, 200 31, 926, 400	Kroner 18, 300 49, 000 90, 800 404, 000 706, 300 1, 158, 200	Kroner 300 24, 600 66, 300 563, 600 498, 900 926, 600

<sup>1</sup> Not reported.

Occupational data collected by the Union, covering 94,530 of its 103,157 members show the following distribution:

Workers in industry, handicrafts, fishing, shipping, transport and commerce.  Independent cultivators	45. 2 28. 8 8. 3 3. 9
Salaried employeesOther independent workers in industry and commerce	8. 2
Total	100.0

#### Poland

A REPORT from the vice consul at Warsaw, dated May 8, 1926, comments on the "widespread and growing activity" of the Polish cooperative societies. The cooperative movement received a sharp setback during the war, not only through destruction of property but through the depreciation of the currency. "Many of the cooperatives were completely ruined, and the assets of others were reduced almost to the vanishing point so that their activities ceased temporarily." The credit societies suffered the most.

temporarily." The credit societies suffered the most.

By 1924, however, the movement began to recover and has enormously increased since that time. The following table shows the number of societies of each type registered on January 1, 1925 and

1020.	1925	1926
Housing and construction societies	781	934
Credit societies	5, 771	6, 270
Agricultural marketing societies	948	1,000
Other commercial societies	401}	6, 344
Consumers' societies	5, 877	
Societies for purchase of raw materials	393	7 421
Miscellaneous trading		437
Dairy, breeding, and poultry societies	606	774
Other agricultural societies	91	172
Agricultural industries	66	
Other industrial societies	83	91
Publishing and bookselling societies	96	108
Miscellaneous societies	267	314
Total	15, 380	16, 865

<sup>7</sup> Includes workers' productive societies also.

It is pointed out that the above societies are merely those on the register, and that the number in actual operation on January 1, 1926, was estimated as about 14,000.

The majority of the cooperatives in Poland are operated in connection with associations organized primarily for other purposes. The number of such members will probably reach two and a half million persons. Another million and a half are members of exclusively cooperative associations so that the total number of participants in cooperatives of one sort or another is about 4,000,000 persons out of a total population of close to 30,000,000.

#### Russia

ATA concerning the cooperative movement in the Union of Socialist Soviet Republics for the years ending October 31, 1923, 1924, and 1925 are given in the May 10, 1926, issue of Industrial and Labor Information (Geneva). The following table shows the membership of and the business done by the various types of cooperative societies in 1923-24 and 1924-25:

NUMBER AND MEMBERSHIP OF AND BUSINESS DONE BY RUSSIAN COOPERATIVE SOCIETIES, YEARS ENDED OCTOBER 31, 1924 AND 1925, BY TYPE OF SOCIETY [Chervonetz ruble=\$5.146]

	1923–24			1924-25			
Type of society	Num- ber of societies	Member- ship	Amount of business	Num- ber of societies	Member- ship	Amount of business	
Urban and industrial Rural Transport workers Other Regional and provincial unions and	1, 560 20, 129 58 894	3, 027, 182 3, 529, 102 548, 547	Cherv. rubles 649, 100, 000 409, 100, 000 106, 400, 000 2 21, 500, 000	1, 504 22, 864 39 852	3, 763, 396 4, 889, 543 623, 000 (1)	Cherv. rubles 1, 169, 800, 000 897, 900, 000 181, 600, 000 (1)	
other central organizations	(1) (1)	(1) (1)	561, 900, 000 302, 800, 000	(1) (1)	(1)	1, 286, 500, 000 252, 200, 000	
Total	22, 641	7, 104, 831	2, 050, 800, 000	25, 259	9, 275, 939	3, 788, 000, 00	

The report states that although the cooperative capital increased from 1924 to 1925, that furnished by the members is still only a fourth of the working capital. The grants from the Government which form the remainder of the capital are stated to have had a bad effect upon the movement, weakening that spirit of self-help which is the main motive of cooperation.

#### Sweden

RECENT report of the Swedish Ministry of Social Affairs.8 contains data on the cooperative societies of that country for 1924, from which the following information is taken.

<sup>&</sup>lt;sup>1</sup> Not reported. <sup>2</sup> Military societies only.

<sup>8</sup> Sweden. Socialstyrelsen. Kooperativ Verksamhet i Sverige, år 1924. Stockholm, 1926. Similar data from a previous report were given in the September, 1925, issue of the Labor Review, pp. 166-169.

The statement below shows the number of cooperative societies of each type at the end of 1924:

NUMBER OF REGISTERED COOPERATIVE SOCIETIES IN SWEDEN IN 1924, BY TYPE OF SOCIETY

Type of society	Num- ber	Type of society	Num- ber	Type of society	Num- ber
Consumers' societies: Stores Restaurants and cafés Housing Other construction Electricity. Central organizations. Other	1, 561 82 1, 237 2, 634 1, 477 23 818	Agricultural societies; Machinery and supply- Dairies. Breweries and distil- leries. Breeding. Banks. Central organizations.	1, 812 668 124 291 157 37	Other productive societies: Workers' productive Stevedore Printing Credit Total Grand total	150 29 76 93 348 11, 665
Total	7, 832	Other	396	Grand total	11,000

Below is shown the number of members of societies affiliated with the Kooperativa Förbundet and of the independent societies in 1924:

	Num- ber	Member- ship
Societies affiliated with cooperative unionIndependent societies	877 80	284, 247 13, 173
Total	957	297, 420

The table below shows the value of goods produced in 1924 by the various kinds of societies:

VALUE OF GOODS PRODUCED BY EACH TYPE OF SWEDISH COOPERATIVE SOCIETY IN 1924

[Krona at par=26.8 cents; exchange rate approximately par]

Type of society	Number of societies	Value of product	Type of society	Num- ber of soci- eties	Value of product
Productive departments of Kooperative Förbundet	4	Kronor 24, 440, 457	Workers productive societies: Building-trade societies. Carpentry and furniture. Tailoring. Other.	7 6	Kronor 3, 109, 844 746, 224
Productive departments of con- sumers' societies:				7	291, 856 386, 043
Bakeries Slaughterhouses Slaughterhouses	31 40 3	4, 990, 896 8, 605, 894		22	4, 533, 967
Shoe-repair shops Soft-drink factories Other	3 3	87, 604 65, 868 54, 092	Grand total	122	48, 549, 950
Total	79	13, 804, 354			
Consumers' productive socie-					
Bakeries	12 3	4, 076, 887			
SlaughterhousesOther	2	465, 247 1, 229, 038			
Total	17	5, 771, 172			

## PROFIT SHARING

Profit Sharing and Labor Copartnership in Great Britain and Northern Ireland in 1925

In ITS issue for June, 1926, the Ministry of Labor Gazette (London) reviews the annual report of the Ministry of Labor dealing with profit sharing and labor copartnership in Great Britain and Northern Ireland for the year ending December 31, 1925. Excluding from consideration cooperative enterprises and profit-sharing schemes connected with them, at the end of 1925 there were 240 firms practicing profit sharing or copartnership, and of these, 6 had two schemes each in operation. In addition there were six schemes of which no recent information had been received, but which were believed to be still in operation, so that there were totals of 246 firms and 252 schemes, as compared with 245 firms and 251 schemes at the end of 1924. No plans are classed as schemes in this enumeration except those in which employees participate in the profits on some prearranged basis, so that plans in which bonuses are given based on output, or sales, or the employer's goodwill are not included.

The number of workpeople eligible to the benefits of the schemes at the end of 1925 was about 191,000, as compared with 177,000 at the end of the previous year. In a number of the schemes participation is limited to employees who are able and willing to deposit savings with the firm or to purchase shares, which are sometimes offered on especially favorable terms. Usually, also, in order to participate, employees must meet certain conditions, such as a pre-

scribed length of service.

For the most part, the number of schemes in any industry is small, and the workers affected are a very small proportion of those in the industry. The largest number of separate schemes, 46, is found in connection with the supply of gas, water, and electricity, and the largest number of employees eligible to benefit, 38,500, also appears in this connection. There are only 9 schemes connected with insurance, banking, and other financial businesses, but the number of employees affected, 37,000, is next to the largest found. Other industries show smaller numbers, agriculture, with 7 schemes and 400 employees affected, having the smallest number.

## Types of Schemes and Bonuses Paid

THE commonest form of schemes provides for the employees a bonus consisting of a specified portion of the net profit, or of a sum automatically decided by the rise or fall of the dividends paid on the firm's capital. Another type, which has proved popular in recent years, provides the bonus by means of dividends on workers'

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shares, which are issued either free or on specially favorable terms; 46 such schemes are at present known to be in operation. The gas companies are apt to pay a bonus varying inversely with the price of gas. In other cases the bonus may be a percentage on wages,

varying according to the company's rate of dividend.

For 190 schemes, data were received showing the extent to which the employees were benefited during 1925. The average amount of bonus per person varied from £2 1s. 2d.¹, received by the 16,100 employees under 24 schemes in engineering, shipbuilding, and metal trades, to £21 7s. 5d., for 24,300 employees under 4 schemes in banking, insurance, or other financial business. For the 161,300 employees covered by the 190 schemes, the per capita bonus averaged £9 13s. 7d. Included in the 190 schemes are 43, under which 21,900 employees would be entitled to participate, which paid no bonus in 1925.

#### Schemes Discontinued in 1925

FIVE schemes were definitely given up during the year. These were all in connection with small businesses, the number of employees affected ranging from 50 in an agricultural scheme to 175 in a textile manufacturing business. One of these schemes, started in 1923, was given up because the employer was dissatisfied with the results, one because the employees were apathetic, one because the business was amalgamated with another in which profit sharing was not practiced, and one was discontinued in favor of individual wage increases.

## Trend of Profit-Sharing Movement

THE following table, giving the number of schemes started in different periods, the number discontinued, and those still in operation at the end of 1925, gives some indication of the progress of the movement:

NUMBER OF SCHEMES STARTED, 1880 TO 1925, NUMBER DISCONTINUED, AND NUMBER STILL IN OPERATION AT END OF 1925

Period in which started	Total schemes started	Schemes discon- tinued by end of 1925	Schemes sus- pended at end of 1925	Schemes still in opera- tion at end of 1925
Up to 1880	35 79 77 26 55 64 22 106 13 9 15 10 8	30 68 63 19 23 23 6 27 1	2 1 2 1	5 11 14 7 30 40 14 78 12 9 14
Total	519	261	6	252

 $<sup>^1</sup>$  At par, pound = \$4.8665, shilling = 24.3 cents, penny = 2.03 cents; exchange value was about par.

It will be noticed that in the period from 1880 till the close of the century the plans started averaged slightly under 8 a year; the first five years of the new century saw a drop to around 5, and thereafter until 1919 the new schemes were around 11 or 12 a year. In 1919 and 1920 the movement reached its height, with over 50 new schemes to the year. With 1921 came a sudden and pronounced drop, and in 1925 the number had reached the level of the 1880 to 1900 period.

Note is made of the fact that of a total of 519 schemes which are known to have been adopted up to the end of 1925, slightly under one-half were still in operation. Some of these had a long record. "Although a large number of existing schemes are of comparatively recent origin, 4 have been in operation for over 50 years, and 30 for over 25 years; slightly over 100 (or about 42 per cent) date from before the war."

## WELFARE.

# Report on Outdoor Recreation for Industrial Workers

ELOW are given the report and recommendation of the committee on policy and administration of outdoor recreation for industrial workers to the executive committee of the National Conference on Outdoor Recreation:

The rapid development of mechanical processes in industry, which has so greatly increased our national wealth and provided the means for increased leisure, has at the same time brought about a specialization in the labor of industrial workers which tends to reduce opportunities for self-expression or joy of

The rapid development of industry, due so largely to these mechanical processes, has drawn our people in increasing proportion from the farms to the cities until to-day in some of the older States the farm population is smaller than it was eighty or one hundred years ago, though the total population of the State has been several times multiplied. This concentration of population in closely built areas gives rise to serious recreation problems as well as to other social problems, such as housing and health. The growth of our cities, unforeseen and unplanned for as it has been, wasted much of their natural recreation areas, such as shore fronts on rivers and lakes which are used as dumping ground, and needlessly covered with buildings other areas that should have been permanently set aside for recreational use.

Consequently the problem of providing our increasing industrial population with the outdoor recreational facilities necessary to health and stamina has become one of concern not only to the workers themselves but to the industries which employ them and to the community as a whole. These industrial workers must have facilities for wholesome outdoor life if they are to remain a social and economic asset instead of becoming a liability to the Nation.

Industry itself long ago recognized the importance of outdoor recreation for its workers and many firms provided facilities for their own employees. More recently leaders in industry, as well as labor leaders and those in the recreation movement, have earnestly supported the creation and maintenance of outdoor recreational facilities on a community basis in order that these might be available for all the workers.

# The committee on policy and administration believes that—

1. Facilities for outdoor recreation should be provided on a scale adequate to

meet the needs of all the people.

2. There should be a clear recognition of two classifications of outdoor recreation and provision made for both (a) mass or team games and other activities which require comparatively small areas, such as city playgrounds or ball fields; (b) individual or small group activities such as camping, bathing, boating, hiking, which require larger areas, such as lake or river shores, natural parks, etc.

3. It is very important to provide adequately for industrial workers whose

hours of labor are spent indoors.

4. Special consideration must be given to those large and closely built areas of our cities inhabited by industrial workers, which have few accessible open spaces. The committee therefore recommends that the National Outdoor Recreation Conference:

1. Request all national organizations engaged in the field of outdoor recreation to urge every municipality and State and every community organization to [521]

aid in making adequate provision for the outdoor recreational needs of all the people, including industrial workers, and to urge industrial leaders and all employers actively to support constructive recreational programs.

employers actively to support constructive recreational programs.

2. Commend individual industries that themselves make provision for such short-time activities as those which may be practiced during the noon hour and that lend their influence and support to programs which will lead to adequate

facilities for the whole community.

3. Call attention to the fact that one of the greatest values in recreation lies in the possibilities it offers for the practice of self-government by those participating. Consequently responsibility for the proper management and conduct of recreational activities should, to the greatest extent possible, be placed upon those who use the facilities, whether these are provided by the community or by private industry.

## INDUSTRIAL DISPUTES

Conciliation Work of the Department of Labor in July, 1926

By Hugh L. Kerwin, Director of Conciliation

THE Secretary of Labor, through the Conciliation Service, exercised his good offices in connection with 39 labor disputes during July, 1926. These disputes affected a known total of 20,078 employees. The table following shows the name and location of the establishment or industry in which the dispute occurred, the nature of the dispute (whether strike or lockout or controversy not having reached strike or lockout stage), the craft or trade concerned, the cause of the dispute, its present status, the terms of settlement, the date of beginning and ending, and the number of workmen directly and indirectly affected.

On August 1, 1926, there were 50 strikes before the department for settlement and, in addition, 9 controversies which had not reached

the strike stage. Total number of cases pending, 59.

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	37.				Dur	ation	Men in	volved
Company or industry and location	or industry and location Nature of controversy Craft concer		Cause of dispute	Present status and terms of settlement	Begin- ning 1926	Ending 1926	Di- rectly	Indi- rectly
International Shoe Co., Claremont,	Strike	Vamp making	(1)	Pending	(1)		(1)	
N. H. Fur workers, Chicago, Ill Subway workers, New York City	do	Fur workEngineering	Asked 40-hour week Asked \$1 per hour for motormen; 75 cents per	Unable to adjust. Strike lost	July 1 July 7	July 23	700 1, 500	
Roaring Run Stone Quarries, Curwensville, Pa.	do	Stonecutting	hour for switchmen.	Adjusted. Returned without increase.	(1)	July 6	60	3
Bus drivers, Bridgeport, Conn	do	Bus driving	Wages and conditions	Unclassified. Places filled by new	(1)		(1)	
Norwalk Cloak & Suit Co., Norwalk, Conn.	do	Garment trade	Objection to jobbers working on cloaks.	men. Unclassified. Commissioner requested to refrain from acting in the case.	(1)		(1)	
Seigler Range Co., Belleville, Ill	do	Common labor and	Changed from piece rates	Pending. Mounters settled; will not	(1)		42	18
Bell Telephone Co., St. Louis, Mo-	do	stove mounting Electrical work	to day wages. Nonunion labor in build-	return till laborers settle. Unable to adjust. Union disapproved	July 1	July 23	35	400
Detroit-Windsor Ferry, Detroit,	Controversy	Ferry	ing construction. Renewal of contract	of strike. Adjusted. 1925 wage contract re-	(1)	July 17	127	60
Mich. Painters, Seattle, WashA. Sofransky, Lansford, Pa	Strike	Building Common labor	(1)3 men discharged	newed. Pending Adjusted. Reinstated; must do bet-	July 8	July 13	(1) 15	2
Hat and cap manufacturers, Philadelphia, Pa.	do	Hat and cap mak-	Asked \$4 per week increase and 40-hour week.	ter work. Adjusted. Allowed \$3 per week increase and 40-hour week.	July 6	Aug. 7	200	50
Firestone Apsley Co., Hudson, Mass.	do	Rubber work	Change in wage rates	Adjusted. Accept 62 cents per hour;	June 21	July 16	1,600	
Iroquois Gas Corp., Buffalo, N. Y.	do	Boiler making	Asked closed shop	increased later. Adjusted. No concessions. Strikers	May 22	July 26	50	150
Warner Bros., Bridgeport, ConnAlden Bros., Boston, Mass	do	Corset cutting Milk drivers' work	Discharge of cutters	left city. Pendingdo			19	
Building laborers, New Haven, Conn.	do	Building	Asked 8 cents per hour increase.	Unclassified. Increase allowed before arrival of commissioner.	(1) (1)		(1) (1)	
Building laborers, Waterbury,	do	do	Asked 20 cents per hour	Unable to adjust. Refused wage in-	July 13	July 22	150	
Conn. Upholsterers, Philadelphia, Pa	do	Upholstering	organization dispute	crease. Unclassified. All returned to work	July 15	July 24	92	
Boiler makers, Pittsburgh, Pa	do	Boiler making	among employees. Pay for overtime	before arrival of commissioner. Adjusted. Allowed 85 cents mini-	July 12	July 29	7	
Swift Co., Portland, Oreg Shell Oil Co., California	Controversy	Butcher tradeOil workers	(1) Wage agreement	mum wage and pay for overtime. Pending Adjusted. Agreement renewed with some increases.	July 1	July 23	(1) 5, 000	1, 000

Cleaners and dyers, New York	K   Strike	Cleaning and dye- ing.	Asked 20 per cent increase, 44-hour week, and union shop.	Unclassified. Settled before arrival of commissioner.	July 13	July 21	(1)	
Typographical workers, Clinton Iowa.	, Controversy	Printing trade		Adjusted. Improvements promised as requested.	(1)	July 28	14	55
Cleaners and dyers, Los Angeles Calif.	s, Strike	Cleaning and dye-	Wages and conditions	Adjusted. Allowed 10 per cent in- crease and 44-hour week.	July 19	July 27	1, 500	
T. W. Strayer Co., York, Pa Swift Packing Co., Scranton, Pa.		Cement work	(1) (1)		(1) (1)		(1) (1)	
Bakeries, Shenandoah, Pa	do		Wage increase, 8-hour day, and overtime pay.	Adjusted. Same wages, shorter hours and improved conditions.	(1)	July 29	(1)	
Korn Bros., Bangor, Pa	do	Textile work	Speeding process used by foreman,	Pending	(1)		18	
Nazareth Street Railway Co. Bangor, Pa.	., Threatened .	Traction industry		do	May 26		10	
Building crafts, Syracuse, N. Y.		Building	Sympathy with carpenters_	Adjusted. Returned; all questions to be settled in conference.	(1)	Aug. 3	1,300	700
Building craftsmen, Sacramento Calif.	o, Threatened strike.	do	Nonunion labor on gas sta-	Pending	(1)		100	
Fruhauf Bros. & Co., New York		Tailoring	Wages and working condi-	do	July 21		300	25
Sheet-metal workers, Newark, N.	Jdo	Sheet-metal work	Jurisdiction of iron and sheet-metal work.	Unclassified. Returned; award to be made by local board.	(1)		(1)	
A. M. Byers, Youngstown, Ohio.	do	Puddling	Wages	Unclassified. Returned; unauthorized strike.	(1)	July 28	150	
Clothing workers, New York City Building trades, Miami, Fla				Pending	July 15	July 25	(1) 2, 500	2, 000
Plumbers, Clearwater, Fla Painters, Bradenton, Fla	do	do	do	do	July 1	July 1	50 50	18 10
Total							15, 589	4, 489

<sup>1</sup> Not reported.

# WAGES AND HOURS OF LABOR

# Wages and Hours of Motor-Bus Operators

THE use of the motor bus in urban and interurban transportation has increased with remarkable rapidity in recent years. No official census of the industry has been made, but data compiled by the National Automobile Chamber of Commerce and published under the title of "Facts and Figures of the Automobile Industry, 1926 Edition," indicate roughly the present importance of motor-bus transportation. According to this source, there were, in January, 1926, a total of 69,425 motor buses in operation in the United States, of which 37,500 were operating as common carriers and covering a total route mileage approximately as great as the steam-railroad mileage of the country.

The development of this new industry has had an important influence upon the existing transportation agencies, and, in addition, it has created an extensive field of employment for labor. The total number of motor-bus operators in the United States is not known, but as there are approximately 70,000 buses in operation, many of which carry a conductor as well as a driver and many that operate on a two or even three shift system, it is probably safe to conclude that the total number of bus operators is at least 100,000 and may run much higher. This estimate, moreover, does not take into account the mechanics, barn employees, and others employed by the industry in other ways than in the direct operation of the buses.

In order to throw some light on the working conditions of this large and growing number of bus operators, the Bureau of Labor Statistics has made a preliminary survey of the wages and hours of labor of such employees in the cities of Chicago and New York. The results are shown in detail in the accompanying table. The data collected cover 1,557 employees in Chicago and 1,580 in New York. In both cities the services represented were partly urban and partly interurban.

As indicated in the table, both wage rates and working hours are extremely variable. In Chicago the hourly rates vary from 42.9 to 87.5 cents and the full-time weekly rates from \$25 to \$52.50. The regular hours of work ranged from an 8-hour day and a 6-day week to an 11%-hour day and a 7-day week. In New York the variations in wages and hours were similarly wide.

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#### WAGE RATES AND HOURS OF WORK OF AUTO-BUS OPERATORS, MAY, 1926

		Rate	of wag	es		
City, company, and occupation	Per	Per week, full time	For over-time	For Sun- days	For holi- days	Hours: Full day; Saturday; full week
Chicago			Re	gular r	ate	
Company No. 1:			mul	tiplied	by-	
Drivers, first 3 months Drivers, second 3 months	\$0.550 .600	\$36. 58 39. 90	1	1	1	1 91/2- 91/2-661/
Drivers third 3 months	. 650	43, 23	1	1	1	1 91/2- 91/2-661/
Drivers, tenth to fifteenth month Drivers, sixteenth to twenty-first month	.700	46. 55	1	1	1	1 91/2- 91/2-661/
Conductors	.750	49. 88 46. 55	1 1	1 1	1 1	1 91/2- 91/2-661/2
Company No. 2:						
Drivers	- 625	2 35. 00	(3)	1	1	18 - 8 -56
Conductors and lecturersCompany No. 3:	. 446	2 25. 00	(4)	1	1	18 - 8 -56
Drivers, first 6 months	. 670	46. 90	11/2	1	1	5 10 -10 -70
Drivers, first 6 months Drivers, second 6 months Drivers, second year Drivers, third year	. 680	47. 60	1 11/0	1	1	\$ 10 -10 -70
Drivers, second year	. 690	48.30	11/2	1	1	5 10 -10 -70
Drivers, third year	710 730	49.70	11/0		1	\$ 10 -10 -70
Drivers, fourth year	. 750	51. 10 52. 50	11/2	1	1	5 10 -10 -70 5 10 -10 -70
Conductors, first 6 months	. 600	42.00	11/0		1	\$ 10 -10 -70 \$ 10 -10 -70 \$ 10 -10 -70 \$ 10 -10 -70 \$ 10 -10 -70
Drivers, after fourth year. Conductors, first 6 months Conductors, second 6 months	.610	42.70	11/6		1	
Conductors, second year	620	43. 40	1 1/0	3	1	5 10 -10 -70
Conductors, fourth year	.640	44. 80 46. 20	11/2	1	1 1	\$ 10 -10 -70 \$ 10 -10 -70
Conductors, third year Conductors, fourth year Conductors, after fourth year	. 680	47. 60	11/2	1	1	5 10 -10 -70
Company No. 4:						
Drivers, first 6 months	. 545	36.00	11/2	11/2	11/2	11 -11 -66
Drivers, after 6 months	. 568	37. 50	11/2	11/2	11/2	11 -11 -66
Drivers 6	. 526	30.00	1	1	1	91/2 -91/2-57
Drivers "	. 561	32.00	1	1	1	91/2 -91/2-57 91/2 -91/2-57
Drivers d. Company No. 6:	. 614	35. 00	1	1	1	91/2 -91/2-57
Drivers	. 500	35. 00	1	1	1	10 -10 -70
Conductors, long-distance tours	. 500	35. 00	1	1	1	10 -10 -70
Conductors, sight-seeing coaches	. 429	30.00	7 11/2	1	1	10 -10 -70
Conductors, long-distance tours————————————————————————————————————	.610	38. 43 31. 15	65¢	81	1	9 -9 -63 8 10 -10 -65
ompany No. 9:	1210		OOP			
Drivers	(9)	10 35. 00				(9)
Conductors and lecturersCompany No. 10: Drivers	11 . 875	10 25. 00 11 42. 00	1			8 -8 -48
Company No. 11: Drivers	. 500	35. 00	1	1	1	12 112/3-112/3-70
Company No. 11: Drivers Company No. 12: Drivers Company No. 13: Drivers	. 658	37. 50	90¢	î	î	91/2 -91/2-57
Company No. 13: Drivers	.778	42.00	1	1	1.	9 -9 -54
Company No. 14: Drivers	.615	30.00	13 80¢			934 -0 -4834
New York City Company No. 1:						
Drivers, first 2 months	14 . 455	35.00				15 11 -11 -77
Drivers, Brst 2 Months	15.588 14.519	35. 00 40. 00				15 11 -11 -77 14 8½- 8½-59½ 15 11 -11 -77 14 8½- 8½-50½
Drivers, after 2 months	15 . 672	40.00				14 8½-8½-59½ 15 11 -11 -77 14 8½-8½-59½ 8½-8½-51½ (16)
Drivers, first 2 months Drivers, first 2 months Drivers, after 2 months Drivers, after 2 months Company No. 2: Drivers Company No. 3: Drivers	. 765	39.00	11/2	1	1	81/2 -81/2-511/2
Company No. 3: Drivers	(16)	50.00	1 1	1	1	(16)
<sup>1</sup> Estimated average.						
<sup>2</sup> And tips.						
3 \$2.50 each extra trip. 4 \$1 each extra trip.						
Maximum, after which overtime rate is paid.						
6 Rated according to ability regardless of length of	service.					
Overtime for extra drivers 61 cents per hour.						
<ul> <li>Every other Sunday off with pay.</li> <li>No hourly rate, hours vary from 3 to 15 per day.</li> </ul>						
10 Minimum rate, majority are paid higher salary a	nd all re	eceive tir	S.			
10 Minimum rate, majority are paid higher salary a 11 Changed June 1, 1926, to \$7.50 per day of 8 hours.	· · · · · · · · · · · · · · · · · · ·	occi, o oil				
Every seventh and eighth day on with pay.						
13 For time on other than school bus. 14 Minimum.						
ATTUING THE PROPERTY OF THE PARTY OF THE PAR						
15 Maximum.						

WAGE RATES AND HOURS OF WORK OF AUTO-BUS OPERATORS, MAY, 1926-Contd.

		Rate	of wag	es				
City, company, and occupation	Per hour	Per week, full time	For over-time	For Sun- days	For holi- days	day;	urs: Fi Saturd ill week	lay
				gular 1				
Company No. 4:				tiplied		3		
Drivers, first year		14\$38.64	17 11/2	1	1		- 8 -	
Drivers, first year		15 48. 30	17 11/2	1	1	15 10		-70
Drivers, second year	. 700	14 39, 20	17 11/2	1	1		- 8 -	
Drivers, second year		15 49. 00	17 11/2	1				70
Drivers, third year		14 40. 88	17 11/2 17 11/2	1	1		-8 -	
Drivers, third year		15 51. 10 14 41. 44			1	15 10		70
Drivers, fourth year		15 51. 80	17 11/2		1		- 8 - -10 -	
Drivers, fourth year Drivers, after 4 years		14 42, 00	17 11/6	1	1		-8 -	
Drivers, after 4 years		15 52. 50	17 11/2	1			-10 -	
Conductors, first year			17 11/2	1	î		- 8 -	
Conductors, first year		15 43, 40	17 11/2	î			-10 -	
Conductors, second year			17 11/6	1			- 8 -	
Conductors, second year			17 11/2	1			-10 -	
Conductors, third year		14 36, 96	17 11/6	1	1	14 8	- 8 -	56
Conductors, third year		15 46. 20	17 11/2	1	1	15 10	-10 -	70
Conductors, fourth year	. 670		17 11/2	1			-8 -	
Conductors, fourth year.	. 670		17 11/2				-10 -	
Conductors, after 4 years			17 11/2	1			- 8 -	
Conductors, after 4 years	. 680	15 47. 60	17 11/2		1		-10 -	
Company No. 5: Drivers		18 35. 00	(19)	1	1		- 9 -	
Company No. 6: Drivers	. 595	21 50, 00				12	-12 -	84
Company No. 7:	15 000	07 00				14 6		10
Drivers, first 3 months		35, 00 35, 00					- 6 -	
Drivers, first 3 months Drivers, after 3 months	13 . 952	40.00					- 6 -	
Drivers, after 3 months	14 . 635	40.00						63
Company No. 8:		40.00				. 0	- 5 -	00
Drivers, first 6 months	. 556	35, 00	1	1	1	22 9	- 9 -	63
Drivers, second 6 months		38, 50	1	î			- 9 -	
Drivers, third 6 months		42.00	1	1			- 9 -	63
Drivers, fourth 6 months.		43.75	1	1	1	22 9	- 9 -	63
Drivers, fifth 6 months	.722	45. 50	1	1			- 9 -	
Drivers, sixth 6 months		47. 25	1	1			- 9 -	
Drivers, after 3 years	.778	49.00	1	1			- 9 -	
Drivers, interstate	. 643	23 45. 00	1	1		23 10	-10 -	70
Company No. 9:	011	01.07.00	(0.5)	4		01	/ 01/	-
Drivers 6		24 35. 00	(25)	1	1		2- 91/2-1	
Drivers 6	, 658	24 37. 50	(25)	1	1		2- 91/2-	
Drivers 6	. 702	24 40. 00	(25)	1	1	91/	2- 91/2-1	07
Company No. 10:	000	11 00 10	4	4	7	14 0	0	EA
Drivers	. 670	14 36. 18	1	1			- 9 -	
Drivers	. 670	15 40. 20	1	1	1	10 10	-10 -6	00

<sup>6</sup> Rated according to ability regardless of length

# Wage Rates for Common Labor

HE Bureau of Labor Statistics here presents, as of July 1, 1926, its third compilation of common labor wage rates per hour in various industries of the United States. The preceding compilations of this series appeared in the Labor Review for February and May, 1926. General contracting has been added to the 12 industries which appeared in the two earlier publications. This term covers four classes of construction: Building, highway, public works, and railroad.

of service.

14 Minimum.

<sup>18</sup> Maximum.
17 After completion of regular runs.
18 \$40 per week, June 21 to Labor Day.
19 Varies \$1 to \$7 per trip.

<sup>20</sup> One dayoff every two weeks.

<sup>24</sup> And bonus.
25 One Sunday off per month.
25 One day off every 15 days.
26 And \$10 per week bonus June to October,

inclusive. 25 \$3 per trip.

The study is confined to entrance rates—that is, the rates paid newly employed unskilled adult males—in important industries which require considerable numbers of common laborers. Some establishments have reported two rates—for example, one for the 10-hour day and one for the 8-hour day, or one for white and one for colored or Mexican workers; these distinctions have not been maintained in the tabulated data, although it is apparent that the lowest rates are shown for those geographic divisions where there are large numbers of colored or Mexican workers, while the highest rates are shown for localities where an 8-hour day is more or less prevalent.

The number of common laborers reported for each of the several

industries is shown in the following statement:

	Number
Automobiles:	5, 992 3, 832
Cement	
Electrical machinery, apparatus, and supplies	
Foundry and machine-shop products	10, 834
Iron and steel	
Leather	2, 234
Lumber (sawmills)	13, 091
Paper and pulp	
Petroleum refining	3, 405
Slaughtering and meat packing	
Public utilities.	15, 402
General contracting	42, 590
Total	138 521

The number of such laborers reported for each geographic division was as follows: New England, 9,837; Middle Atlantic, 36,751; East North Central, 35,574; West North Central, 9,745; South Atlantic, 12,560; East South Central, 8,008; West South Central, 8,187; Mountain, 5,076; and Pacific, 12,783.

The weighted average rate for the several industries combined is 42.8 cents, the lowest rate reported being 15 cents and the highest 93.8 cents. The highest average rate in any of the industries (47.9 cents) appears in the petroleum refining industry, and the lowest

average rate (33.6 cents) in sawmills.

It will be observed that the highest rates paid in every district were reported in general contracting. The addition of this industry has considerably increased the average rate for the several industries combined, but by deducting the figures for general contracting an average rate of 40.9 cents is obtained. This average rate is computed on the same industries that were reported in the two previous compilations. The three compilations, however, are not entirely comparable, owing to the fact that the establishments reporting are not identical, in every case.

## HOURLY WAGE RATES PAID FOR COMMON LABOR, JULY 1, 1926 [The rates on which this table is based are entrance rates paid for adult male common labor]

					Geogra	aphie d	livision			
Industry	United States	New Eng- land	Mid- dle At- lantic	East North Cen- tral	West North Cen- tral	South At- lantic	South		Moun- tain	Pa- cific
Automobiles:	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents
Low	33. 3		38.0	35. 0	33. 3					50. (
High.	62. 5		62. 5	62.5	62. 5					55.
Average Brick, tile, and terra cotta:	46.1		42.8	46. 9	39. 8					51.
Low	17.5	40.0	35. 0	30. 0	27.0	17.5	20.0	25. 0	38. 5	40.
High	55. 5	50.0	55. 5	46.7	40.0	35. 0	36. 5	37. 5	40.0	52.
Average	40. 7	44.8	47.8	39. 4	32. 2	31.4	25. 1	28. 2	39. 3	41.
Cement: Low	25. 0		35. 0	35, 0	35, 0		26, 0	0= 0		0.4
High	56. 0		45. 0	1 44.0	40. 0		33. 0	25. 0		34. 56.
A verage	40.1		43. 5	40, 4	35. 4		30. 6	27. 3		46.
and supplies:								2		201
Low	31.0	31.0	40.0	39. 0	35.0	40.0				
HighAverage	52. 0 43. 1	48. 0	51.0	52. 0 46. 3	40.0	40. 0				
Foundry and machine-shop prod- ucts:	40. 1	40. 9	42, 1	40, 5	30.8	40.0				
Low	17. 5	33. 0	25. 0	33. 0	35. 0	17.5	22. 5	22. 5	35. 0	44.
High	56. 0	50.0	50.0	55. 0	50.0	43. 1	35. 0	31.3	45.0	56.
Average Iron and steel:	37. 1	40. 5	39. 4	38. 2	40.1	28. 9	29. 9	28. 0	40. 5	49.
Low	20.0	40. 0	300	35. 0	35. 0	20.0	23. 5		49.0	42.
High	50. 0	45. 0	50.0	50. 0	35. 0	44.0	31. 0			50.
Average	42.7	41.4	42.4	45. 0	35. 0	36. 7	29. 4		49.0	45.
Leather:										
Low	20. 0	47.9	33. 3	35. 0		20.0	25. 0			44.
HighAverage	54. 2 40. 9	54. 2 50. 2	50. 0 42. 8	50. 0 43. 9		40. 0 32. 4	35. 0 31. 8			50.
Lumber (sawmills):	40. 0	30, 2	42.0	40. 9		04. 4	01.0			48.
Low	15.0	30.0	35. 0	30.0	32. 5	15.0	16.5	20.0	25. 0	29.
High	62. 5	40.0	40.0	62. 5	35. 0	35. 0	27.5	30, 0	45. 0	50.
Average_	33. 6	38. 8	37. 7	36. 1	34. 4	26. 3	22. 2	23. 9	40.5	42.
Paper and pulp:	22. 5	38. 0	35. 0	35. 0	25.0	30. 0	22. 5	25. 0		10
Low	56. 3	50.0	50. 0	54. 0	35. 0 45. 0	38. 3	27.5	25. 0		40. 56.
Average	42.8	45. 8	41. 2	45. 9	38. 8	36. 9	24.6	25. 0		42.
Petroleum refining:		201.0			00.0			20.0		140
Low	30.0		37. 0	50.0	50.0	30.0		35. 0	55.0	62.
High.	62. 0		53. 0	50.0	50.0	50.0		50. 0	55. 0	62.
Average	47. 9		48. 0	50. 0	50.0	43. 9		43. 2	55. 0	62.
Low	37. 5	38. 0	40.0	40.0	37. 5	40.0		37. 5	40.0	40.
High	50. 0	50.0	45. 0	45.0	43. 0	40.0		37. 5	40.0	45.
A verage	41.5	41.3	42.8	41. 1	42.1	40.0		37.5	40.0	42.
Public utilities: 1										
Low	22. 5	40.0	40.0	32. 5	30.0	22. 5	25. 0	25. 0	35.0	33.
High.	60. 0	59. 5	56. 3	60. 0	40.0	45. 0	40.0	50. 0	35. 0	56.
A verage General contracting: 2	42.0	48. 2	46.8	47. 7	35, 6	37. 0	29. 5	29, 3	35. 0	46.
Low	19. 4	30. 0	30.0	35. 0	25. 0	20.0	22. 5	19, 4	30. 3	40. (
High	93. 8	87. 5	93. 8	87. 5	75. 0	60. 0	40.0	65. 0	62. 5	81.
Average	47. 1	50. 6	51.6	59. 3	41.0	33. 1	30. 7	36. 1	45. 7	49.
Total:										
Low	15. 0	30.0	25. 0	30.0	25. 0	15.0	16. 5	19.4	25. 0	29.
High.	93, 8	87. 5	93. 8	87. 5	75. 0	60. 0	40.0	65. 0	62. 5	81.
Average	42.8	47. 1	45. 1	48. 0	40. 1	32. 8	27. 6	32. 5	44. 4	45.

 $<sup>^1</sup>$  Including street railways, gas works, waterworks, and electric power and light plants.  $^2$  Including building, highway, public works, and railroad construction.

Wages and Hours of Labor in the Blast-Furnace, Open-Hearth, and Bar-Mill Departments of the Iron and Steel Industry, 1926

THE United States Department of Labor through the Bureau of Labor Statistics began a study of wages and hours of labor in 10 departments of the iron and steel industry in the United States early this year. While a survey of all establishments in the industry could not be undertaken, the statistics for each department may be accepted as fully representative, as they are based on a sufficient number of representative plants in each district to show conditions in their locality. Data for practically all establishments covered in the survey are for a period in January, which in most cases was the last half of the month.

Summary figures for the different departments for 1926, together with like figures for earlier years, will be presented in the Labor Review as they become available. Tabulation of the data for the blast-furnace, open-hearth, and bar-mill departments has been completed and figures for those three departments are presented here-

with.

Wherever possible the 1926 data were obtained from the same establishments as were covered in 1924. In a few instances the plants covered in 1924 were not in operation or had ceased to be representative of the industry. It was therefore necessary to substitute plants which were regularly operated under representative conditions. Also in the open-hearth furnace department, tilting or "Talbot" furnaces have been included for the first time. This accounts for the increase in number of plants in 1926 over 1924. Previous studies covered only stationary basic furnaces, but the tilting type of furnace has been gradually increasing in use and is now of sufficient importance to warrant inclusion in the report. Figures are not shown separately for these furnaces, however, as the occupations are essentially the same as for stationary furnaces. While the addition of plants operating the tilting type of furnace may influence the figures in certain localities to a slight extent, they have but little weight when the United States as a whole is considered. Melters' first helpers in all plants covered by the study, stationary and tilting furnaces combined, earned an average of \$1.17 per hour. In plants having only stationary furnaces the average was \$1.176. Melters' second helpers earned an average of 82.7 cents per hour in all plants combined and 83.6 cents in stationary-furnace plants alone, while averages for melters' third helpers were 62.9 cents and 65.7 cents per hour, respectively.

Data were obtained from 37 blast-furnace establishments employing 15,335 men, 31 open-hearth furnace establishments employing 13,421 men, and 35 bar-mill establishments employing 7,591 men. The establishments covered represent from 30 to 40 per cent of the furnaces or mills in the United States. Of the total number of employees covered, 8,058 of those in blast furnaces, 7,373 in open-hearth furnaces, and 5,096 in bar mills were employed in the principal productive occupations for which separate figures are given in this

article.

Index numbers resulting from a combination of the data for the principal productive occupations are also shown for each depart-

ment. These index numbers show the relative changes between the various years for which information is available, with the 1913 figures the base or 100. Secondary productive and nonproductive

occupations do not enter into the table of index numbers.

The study shows that when the principal productive occupations are considered as a whole, there has been practically no change in the customary full-time hours per week of employees in either blast furnaces, open-hearth furnaces, or bar mills since the unprecedented reduction in working time as shown by the figures for 1924. Prior to 1924 the blast-furnace and open-hearth-furnace departments were largely on a 12-hour day basis and bar mills usually operated two turns per day of from 9 to 12 hours each. The figures for 1924, however, show that the 8-hour day had been adopted at that time to a large extent by the plants in all three departments, only a few of them still retaining the 12-hour day.

Earnings per hour remained almost stationary during the period 1924 to 1926 in blast furnaces but increased practically 10 per cent in open-hearth furnaces and 3 per cent in bar mills. The increase in open-hearth furnaces raised the earnings per hour to a point

higher than any recorded by the bureau in any of its studies.

By comparing the 1926 figures with those for 1924, however, it was found that the increase was due largely to an increase in production and not to any radical changes in basic rates of pay. Practically all employees in open-hearth furnace establishments are paid on a tonnage basis, their earnings depending directly upon the amount of metal produced. The increase in the average earnings per hour in bar mills was also largely due to increased production.

Those employed in the principal productive occupations in blast furnaces in 1926 earned over two-and-one-half times as much per hour as those employed in 1913. In Bessemer converters they received almost three times as much and in bar mills over twice the

amount.

Table 1.—INDEX NUMBERS OF WAGES AND HOURS IN PRINCIPAL PRODUCTIVE OCCUPATIONS COMBINED

T1	01	3	40	Inc

	Bl	ast furna	ces	Open-	hearth fu	rnaces	]	Bar mills	
Year	Custom- ary full- time hours per week	Earn- ings per hour	Full- time weekly earnings	Custom- ary full- time hours per week	Earn- ings per hour	Full- time weekly earnings	Custom- ary full- time hours per week	Earn- ings per hour	Full- time weekly earnings
1907	103 101 102 102 102 99 100 97 97 98	88 85 83 87 89 92 100 101 101 156	91 86 85 90 90 90 100 97 97	99 96 98 100 97 92 99	89 89 92 100 100 104 152	86 85 91 100 97 96 150	106 106 107 104 106 103 100 100	94 84 86 95 90 90 100 96 98	99 89 91 96 93 93 100 97
1919 1920 1922 1924 1926	100 93 93 75 75	250 283 191 254 253	248 258 176 190 190	98 98 89 93 74 73	239 282 202 269 294	234 253 188 199 215	103 99 98 89 88	214 252 173 207 213	221 253 171 189 190

TABLE 2.—AVERAGE CUSTOMARY FULL-TIME HOURS PER WEEK, AVERAGE EARNINGS PER HOUR, AND AVERAGE FULL-TIME WEEKLY EARNINGS, AND INDEX NUMBERS THEREFOR, BY OCCUPATIONS

#### Blast furnaces (1907-1926)

			Aver-	Aver-	Aver-		lex num 1913=1					ployee irs per			
Year	Num- ber of plants	Num- ber of em- ploy- ees	age full- time hours per week	age earnings per hour	full- time week- ly earn- ings	Full- time hours per week	Earn- ings per hour	Full- time week- ly earn- ings	48 and un- der	Over 48 and un- der 56	56	Over 56 and un- der 60	60 and un- der 72	72 and un- der 84	84
							Stocke	T8							
1907 1908 1908 1909 - 1990 1911 1912 1915 1917 1919 - 1920 1922 1924 1926	18 18 18 32 32 34 33 35 35 14 20 27 31 36 37	824 473 7, 445 904 1, 069 1, 269 1, 031 878 441 1, 043 1, 316 1, 774 1, 174	81. 4 79. 1 80. 9 79. 9 79. 7 78. 8 78. 0 74. 9 74. 6 77. 4 60. 5 60. 1	\$0. 170 . 157 . 158 . 164 . 168 . 171 . 192 . 188 . 295 . 465 . 527 . 352 . 465	\$13. 83 12. 43 12. 75 13. 17 13. 40 13. 46 15. 00 14. 03 13. 99 22. 79 36. 32 39. 68 26. 06 28. 10 27. 95	104 101 104 102 102 101 100 96 96 99 100 97 95 78 77	89 82 82 85 88 89 100 98 98 154 242 274 183 242 242	92 83 85 88 89 90 100 93 152 242 265 174 187	5 1	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	(1) (1) (1) (1) (1) (1) (1) (1) (1) (28 29	(2) 3 1 3 1 3 3 3 2 3 13 3 10 3 3	11 27 10 19 15 12 21 31 32 3 7 6 11 24 32	13 15 30 17 23 36 34 37 39 56 14 65 64 5	777 558 60 63 62 50 45 29 27 41 66 20 22 8
						В	ottom fi	llers							
1907	7 7 7 14 15 15 13 13 9 3 3 4 6 7 6 4	293 194 282 672 417 468 469 360 148 56 72 249 311 341 344	84. 0 84. 0 84. 0 84. 0 82. 2 82. 1 82. 0 82. 4 84. 0 82. 2 67. 1 72. 8 54. 2 53. 5	\$0. 160 .150 .138 .152 .149 .152 .168 .167 .176 .270 .436 .568 .336 .480 .426	\$13. 40 12. 59 11. 61 12. 77 12. 50 12. 53 13. 88 13. 76 14. 48 22. 68 35. 84 26. 01 22. 79	102 102 102 102 102 100 100 100 100 100	95 89 82 90 89 90 100 99 105 161 260 338 200 286 254	97 91 84 92 90 90 100 99 104 163 258 276 176 187		(¹) (¹) (¹) 71 93	(1) (1) (29 7	3 42 3 16	(4)	15 16 17 14 31 23 53	100 100 100 100 100 85 84 83 86 100 69 35
							Top fill	ers							
1907	8 8 8 13 14 14 14 13 8 3 4 6 7 7	66 44 50 142 92 96 98 80 44 22 28 74 86 111 65	84. 0 84. 0 84. 0 82. 8 82. 2 80. 0 80. 3 80. 1 79. 0 84. 0 76. 7 71. 2 68. 8 56. 8 53. 8	\$0. 177 . 168 . 161 . 169 . 171 . 175 . 191 . 199 . 213 . 257 . 468 . 573 . 388 . 544	\$14. 86 14. 15 13. 56 13. 85 13. 84 13. 81 15. 19 15. 71 16. 44 21. 57 35. 90 39. 72 26. 02 26. 02 26. 90	105 105 105 103 102 100 100 100 98 105 96 89 86 71 67	93 88 84 88 90 92 100 104 112 135 245 300 203 285 262	98 93 89 91 91 100 103 108 142 236 261 177		(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	3 4 3 7 3 6 3 6 3 8 3 14 3 27 3 27	1	19 16 15 9 21 24 53	100 100 100 96 93 75 78 78 77 100 57 49 20

Not presented separately.
 Includes all "Over 48 and under 60"; less than 1 per cent.
 Includes all "Over 48 and under 60."
 Less than 1 per cent.

Table 2.—AVERAGE CUSTOMARY FULL-TIME HOURS PER WEEK, AVERAGE EARNINGS PER HOUR, AND AVERAGE FULL-TIME WEEKLY EARNINGS, AND INDEX NUMBERS THEREFOR, BY OCCUPATIONS—Continued

#### Blast furnaces (1907-1926)—Continued

			Aver-	Aver-	Aver- age		lex nun 1913=1		Per fu	cent o	of em	ployee	es wh	ose av	erage
Year	Num- ber of plants	Number of em- ploy- ees	age full- time hours per week	age earn- ings per hour	full- time week- ly earn- ings	Full- time hours per week	Earn- ings per hour	Full- time week- ly earn- ings	48 and un- der	Over 48 and un- der 56	56	Over 56 and un- der 60	60 and un- der 72	72 and un- der 84	84
						1	Larry n	nen							
1907	11 11 11 21 21 23 23 27 27 27 14 18 24 27 32 34	132 86 135 231 203 241 238 192 212 183 286 369 340 502 422	84. 0 84. 0 84. 0 84. 0 82. 9 78. 2 82. 3 78. 6 78. 6 77. 2 80. 4 73. 8 75. 1 57. 7 57. 9	\$0. 195 . 184 . 186 . 196 . 194 . 199 . 217 . 215 . 211 . 327 . 542 . 586 . 402 . 548 . 551	\$16. 41 15. 48 15. 64 16. 47 15. 99 15. 46 17. 77 16. 88 16. 51 25. 14 43. 58 42. 65 29. 96 31. 48 31. 90	102 102 102 102 101 95 100 96 96 94 98 90 91 70	90 85 86 90 89 92 100 99 97 151 250 270 185 253 254	92 87 88 93 90 87 100 95 93 141 245 240 169 177 180	7	(¹) (¹) (¹) (¹) (¹) (¹) (²) 32 30	(1) (1) (1) (1) (1) (1) 51 60	<sup>3</sup> 15  <sup>3</sup> 6 <sup>3</sup> 17 <sup>3</sup> 4		9 14 14 47 47 59 21 57 73 3 2	100 100 100 100 91 71 86 53 53 41 73 27 22 7
						Larry	men's	helpers				,			
1907	10 10 10 19 19 23 23 27 27 27 12 18 19 24 26 26	115 79 135 278 294 359 250 275 161 310 517 383 627 389	84. 0 84. 0 84. 0 82. 6 79. 6 82. 6 78. 3 79. 6 79. 3 74. 9 57. 1 56. 9	\$0. 159 152 149 165 168 172 191 187 185 292 491 531 356 485 493	\$13, 35 12, 80 12, 53 13, 88 13, 89 13, 64 15, 78 14, 67 14, 43 23, 20 38, 94 39, 09 26, 40 27, 38 28, 05	102 102 102 102 100 96 100 95 95 96 96 89 91 69	83 80 78 86 88 90 100 98 97 153 257 278 186 254 258	85 81 79 88 88 87 100 93 91 147 248 167 174	16	(1) (1) (1) (1) (1) (1) (27) 31	(1) (1) (1) (1) (1) (46 62	3 10 3 10 3 10 3 8 3 4	(4) 10 3 1	12 14 11 46 49 39 22 71 70 3 2	100 100 100 100 88 76 89 54 51 60 68 10 23 6
						Sk	ip opera	itors							
1907	11 11 11 19 19 20 22 28 13 19 22 25 30 32	86 64 94 125 124 138 158 159 152 118 169 217 220 320 267	84. 0 84. 0 84. 0 84. 0 83. 8 79. 3 82. 9 79. 5 79. 4 77. 3 80. 4 75. 8 57. 5 58. 4	\$0. 193 . 184 . 183 . 197 . 198 . 206 . 217 . 214 . 215 . 343 . 536 . 594 . 401 . 543 . 545	\$16. 19 15. 49 15. 40 16. 56 16. 60 16. 19 17. 97 16. 98 17. 03 26. 52 43. 09 43. 30 30. 98 31. 83	101 101 101 101 101 101 96 100 96 96 93 97 89 91 69 70	89 85 84 91 91 95 100 99 99 158 247 274 185 250 251	90 87 86 92 92 90 100 94 95 148 240 241 168 172 177	10	(1) (1) (1) (1) (1) (1) (3) 35 31	(1) (1) (1) (1) (1) (1) 43 55	<sup>3</sup> 13 <sup>3</sup> 5 <sup>3</sup> 18 <sup>3</sup> 3		2 9 9 41 41 56 21 54 68 4	100 100 100 100 98 78 91 60 59 44 74 28 29 7

<sup>Not presented separately.
Includes all "Over 48 and under 60."
Less than 1 per cent.</sup> 

TABLE 2.—AVERAGE CUSTOMARY FULL-TIME HOURS PER WEEK, AVERAGE EARNINGS PER HOUR, AND AVERAGE FULL-TIME WEEKLY EARNINGS, AND INDEX NUMBERS THEREFOR, BY OCCUPATIONS—Continued

#### Blast furnaces (1907-1926)—Continued

		Num-	Average	Aver-	Aver-		lex num 1913=1			cent o					
Year	Num- ber of plants	ber of em- ploy- ees	full- time hours per week	age earn- ings per hour	full- time week- ly earn- ings	Full- time hours per week	Earn- ings per hour	Full- time week- ly earn- ings	48 and un- der	Over 48 and un- der 56	56	Over 56 and un- der 60	60 and un- der 72	72 and un- der 84	84
							Blowe	rs							
	18 18 18 32 33 34 34 38 38 18 24 28 36 37	78 68 86 131 123 139 154 143 149 84 134 198 195 262 241	84. 0 84. 0 84. 0 83. 5 82. 9 80. 3 82. 2 80. 7 80. 6 77. 8 79. 8 73. 2 72. 4 58. 3 58. 5	\$0, 300 .283 .286 .296 .305 .315 .332 .333 .336 .485 .755 .868 .678 .889 .902	\$25. 17 23. 74 24. 04 24. 74 25. 21 25. 01 27. 21 26. 74 26. 93 37. 50 60. 25 62. 87 49. 00 51. 73 52. 77	102 102 102 102 101 98 100 98 98 95 97 89 88 71	90 85 86 89 92 95 100 100 101 146 227 261 204 268 272	93 87 88 91 93 92 100 98 99 138 221 1231 180 190	5	(1) (1) (1) (1) (1) (1) (1) (1) (2) (4) 40 41	(1) (1) (1) (1) (1) (1) (1) (3) (1) (3) (3)	3 6 3 7 3 15 3 11	1 1 1 7	9 16 15 30 31 56 24 56 74 6 5	10 10 10 9 9 77 8 8 6 6 4 6 2 1
						Blow	ving en	gineers							
907 908 909 910 911 912 913 914 915 917 919 920 922 924 926	20 20 20 34 35 35 35 38 38 18 24 28 32 36 37	100 85 103 153 137 142 156 147 153 122 143 164 213 244 197	84. 0 84. 0 84. 0 84. 0 82. 9 80. 6 82. 0 79. 3 79. 1 80. 0 73. 7 74. 2 58. 7 59. 5	\$0. 242 . 235 . 230 . 243 . 244 . 249 . 260 . 262 . 391 . 628 . 720 . 483 . 661 . 658	\$20, 30 19, 77 19, 35 20, 39 20, 15 19, 93 21, 28 20, 64 20, 64 29, 61 50, 24 52, 50 35, 49 38, 65 39, 15	102 102 102 102 101 98 100 97 96 93 98 90 90 72 73	93 90 88 93 94 96 100 101 150 242 277 185 254 253	95 93 91 96 95 94 100 97 97 139 236 247 167 182	7	(1) (1) (1) (1) (1) (1) (34 36	(1) (1) (1) (1) (1) (1) 46 47	3 4 3 7 3 16 8 5		9 18 17 43 45 64 22 54 75 3	10 10 10 10 10 9 7 8 6 5 6 5 3 7 3 1
					Ble	owing e	engineer	rs' assist	ants						
907 908 910 911 912 914 915 920 924 926	11 11 11 18 18 18 18 21 21 17 22 24 26 29	67 51 74 94 91 108 94 99 96 130 189 213 307 231	84. 0 84. 0 84. 0 84. 0 83. 2 79. 0 78. 3 79. 1 71. 7 7. 7 3. 5 56. 2 56. 6	\$0. 203 . 199 . 191 . 205 . 211 . 225 . 223 . 265 . 635 . 632 . 424 . 584 . 579	\$17. 02 16. 72 16. 08 17. 38 17. 06 16. 85 18. 67 17. 57 17. 41 44. 69 45. 24 31. 08 32. 74 32. 77	101 101 101 101 100 97 100 95 94 95 86 88 68	90 88 85 92 91 94 100 99 99 251 281 188 260 257	91 90 86 93 91 90 100 94 93 239 242 166 175 176	7	(1) (1) (1) (1) (1) 50 47	(1) (1) (1) (1) (1) (1) (1) 37 45	3 8 3 7 3 20 3 6		7 10 6 48 55 32 55 83 3 2	10 10 10 10 9 8 9 5 4 6 2 1

Not presented separately.
 Includes all "Over 48 and under 60."
 Including 1 per cent whose full-time weekly hours were 91.
 Including less than 1 per cent whose full-time hours were 91.

Table 2.—AVERAGE CUSTOMARY FULL-TIME HOURS PER WEEK, AVERAGE EARNINGS PER HOUR, AND AVERAGE FULL-TIME WEEKLY EARNINGS, AND INDEX NUMBERS THEREFOR, BY OCCUPATIONS—Continued

#### Blast furnaces (1907-1926)—Continued

		NT	Aver-	Aver-	Aver-		lex nur 1913=1		Per	cent o	of em	ployee irs per	s who	ose av	erage
Year	Number of plants	Number of employ-ees	age full- time hours per week	age earn- ings per hour	full- time week- ly earn- ings	Full- time hours per week	Earn- ings per hour	Full- time week- ly earn- ings	48 and under	Over 48 and un- der 56	56	Over 56 and un- der 60	60 and un- der 72	72 and un- der 84	84
						Sto	ve tend	ers							
1907 1908 1908 1909 1910 1911 - 1912 - 1915 1919 - 1919 - 1922 - 1924 - 1926	20 20 20 34 35 36 35 38 38 38 24 28 32 36 37	140 96 140 200 180 214 220 183 186 204 297 279 473 362	84. 0 84. 0 84. 0 84. 0 82. 7 79. 5 81. 9 79. 7 79. 4 80. 3 73. 7 75. 2 57. 5	\$0. 192 . 185 . 181 . 193 . 190 . 195 . 211 . 209 . 208 . 528 . 592 . 403 . 545 . 548	\$16. 10 15. 52 15. 22 16. 21 15. 68 15. 38 17. 30 16. 56 16. 46 42. 40 43. 38 30. 08 31. 36 31. 51	103 103 103 103 101 97 100 97 98 90 92 70	91 88 86 91 90 92 100 99 99 250 281 191 258 260	93 90 88 94 91 89 100 96 95 245 251 174 181	8	(1) (1) (1) (1) (1) (1) (34 35	(1) (1) (1) (1) (1) (1) (48 55	3 8 3 4 3 19 3 4		11 18 17 40 41 29 55 73 3 2	100 100 100 100 89 74 83 61 58 67 26 23
							Keepe	ers				'		,	
1907	20 20 20 34 35 36 35 38 18 24 28 32 36 37	146 96 141 201 184 218 230 184 187 162 203 280 288 466 380	84. 0 84. 0 84. 0 84. 0 82. 7 79. 6 82. 0 79. 6 77. 4 80. 6 73. 7 75. 3 57. 1 57. 4	\$0. 218 . 210 . 205 . 215 . 217 . 223 . 233 . 232 . 344 . 562 . 635 . 420 . 579 . 577	\$18. 34 17. 26 18. 09 17. 95 17. 59 19. 28 18. 47 18. 33 26. 55 45. 30 46. 45 31. 47 32. 79 33. 12	102 102 102 102 101 97 100 97 97 94 98 90 92 70	93 89 87 91 92 95 100 99 146 239 270 179 246 246	95 92 90 94 93 91 100 96 95 138 235 241 163 170 172	9	(1) (1) (1) (1) (1) (1) (35 37	(1) (1) (1) (1) (1) (46 54	3 3 3 4 3 18 3 4		11 17 17 41 41 59 25 58 71 3 2	100 100 100 100 89 74 83 60 58 41 70 25 7
						Ke	epers' h	elpers							
1907	20 20 20 34 35 36 35 38 38 18 24 28 32 36 37	616 409 596 877 742 870 950 734 727 392 1,168 1,178 1,654 1,516	84. 0 84. 0 84. 0 84. 0 83. 1 80. 2 82. 2 80. 6 80. 1 77. 6 80. 2 74. 5 75. 3 58. 6 59. 1	\$0. 165 .160 .155 .168 .167 .173 .186 .185 .182 .292 .400 .522 .349 .475 .471	\$12. 89 13. 41 13. 04 14. 13 13. 84 13. 75 15. 31 14. 83 14. 48 22. 59 38. 50 26. 16 27. 85 27. 84	102 102 102 102 101 98 100 98 97 94 98 91 92 71	89 86 93 90 90 93 100 99 98 157 258 281 188 255 253	91 88 85 92 90 90 100 97 95 148 251 171 182 182	9	(1) (1) (1) (1) (1) (1) (3) 33 40	(1) (1) (1) (1) (1) (1) (1) 43 41	3 8 3 6 3 15 8 4	3 2 2 2 2	8 14 15 35 35 64 23 52 67 4	100 100 100 100 92 78 85 66 65 36 71 30 26 10

<sup>&</sup>lt;sup>1</sup>Not presented separately. <sup>3</sup>Includes all "Over 48 and under 60."

TABLE 2.—AVERAGE CUSTOMARY FULL-TIME HOURS PER WEEK, AVERAGE EARNINGS PER HOUR, AND AVERAGE FULL-TIME WEEKLY EARNINGS, AND INDEX NUMBERS THEREFOR, BY OCCUPATIONS—Continued

#### Blast furnaces (1907-1926) - Continued

			Aver-	A ver-	Aver-		dex nur (1913=1			cent c					
Year	Number of plants	Num- ber of em- ploy- ees	age full- time hours per week	age earn- ings per hour	full- time week- ly earn- ings	Full- time hours per week	Earn- ings per hour	Full- time week- ly earn- ings	48 and un- der	Over 48 and un- der 56	56	Over 56 and un- der 60	60 and un- der 72	72 and un- der 84	84
						Tron ha	ndlers o	and load	ers						
1907	9 9 9 9 18 19 19 16 16 4 4 8 8 8 7 7 7	203 163 242 305 308 406 446 333 323 106 94 260 386 283 181	73. 2 73. 0 73. 6 74. 2 73. 0 73. 1 72. 5 71. 5 74. 0 71. 4 72. 9 72. 2 70. 4 65. 7 69. 2	\$0. 193 .190 .177 .194 .195 .206 .220 .222 .204 .243 .361 .443 .307 .345 .349	\$14. 20 13. 95 13. 05 14. 36 14. 17 15. 11 16. 09 15. 22 17. 44 26. 32 32. 00 21. 67 22. 67 24. 15	101 101 102 102 101 101 100 99 102 98 101 100 97 91 95	88 86 80 88 89 94 100 101 93 110 164 201 140 157 159	88 87 81 89 88 94 100 95 109 164 199 135 141 150	5	(1) (1) (1) (1)	(1) (1) (1) (1)	3 2 3 4 3 2	60 60 57 59 62 55 55 48 56 85 73 61 49 95 81	6 9 7 6 6 6 13 13 8 2 6 11 15 49	34 32 36 35 31 32 29 34 39 9 16 21 2 5
					,	Pig	machin	ne men		,					
1907 1908 1909 1910 1911 1912 1913 1914 1915 1917 1919 1920 1920 1924 1926	9 9 9 9 16 17 17 17 19 21 21 10 18 21 23 26 29	193 157 152 291 267 275 303 259 245 154 370 390 383 534 506	84. 0 83. 9 83. 9 83. 9 83. 9 81. 9 79. 2 79. 6 77. 9 80. 5 72. 2 73. 1 57. 5 59. 4	\$0. 167 .163 .162 .169 .169 .171 .192 .190 .300 .477 .552 .380 .515 .501	\$14. 03 13. 69 13. 57 14. 14 13. 98 13. 97 15. 72 15. 15 15. 07 23. 21 38. 40 39. 63 27. 73 29. 52 29. 76	103 102 102 102 101 100 100 97 95 98 88 89 70 73	87 95 84 88 88 89 100 100 99 156 248 288 198 268	89 87 86 90 89 100 96 96 148 244 252 176 188	12	(1) (1) (1) (1) 41 46	(1) (1) (1) (1) 37 38	3 9 3 25 3 12	(4) (4) (4) (4) (4) (1) 1 2 2	2 2 2 17 17 17 44 39 53 11 48 64 2	100 98 98 99 87 83 83 6 55 6 60 48 80 27 23 7
							Cinder 1	nen							
1907 1 1908 1 1909 1 1911 1 1912 1 1913 1 1915 1 1917 1 1919 1 1920 1 1924 1 1926	20 20 20 32 32 32 33 31 13 21 22 24 22 22	262 245 380 482 339 397 380 286 254 168 295 87 216 364 183	83, 6 82, 6 82, 2 82, 9 81, 3 75, 2 79, 9 78, 3 78, 6 78, 4 77, 2 68, 4 71, 6 59, 7 59, 2	\$0. 173 . 156 . 150 . 163 . 158 . 164 . 179 . 176 . 174 . 286 . 473 . 557 . 390 . 483 . 484	\$14. 46 12. 88 12. 34 13. 56 12. 84 12. 20 14. 27 13. 78 13. 64 22. 31 36. 52 37. 85 27. 76 28. 71 28. 65	105 103 103 104 102 94 100 98 98 98 97 86 90 75 74	97 87 84 91 88 92 100 98 97 160 264 311 218 270 270	101 90 86 95 90 85 100 97 96 156 256 195 201	3 6 4	(1) (1) (1) (1) (1) (1) (1) (1) (2) (3) 38	(1) (1) (1) (1) (1) (1) (23 13	<sup>3</sup> 17 <sup>3</sup> 4 <sup>3</sup> 14 <sup>3</sup> 34 <sup>3</sup> 13	2 8 10 7 10 17 13 16 11 7 2 14 38 43	10 10 13 4 12 10 22 27 24 44 20 37 52 2	88 82 78 89 78 56 64 57 62 56 60 25 20 1

Not presented separately.
 Includes all "Over 48 and under 60."
 Less than 1 per cent
 Including less than 1 per cent whose full-time hours were 91.

Table 2.—AVERAGE CUSTOMARY FULL-TIME HOURS PER WEEK, AVERAGE EARN-INGS PER HOUR, AND AVERAGE FULL-TIME WEEKLY EARNINGS, AND INDEX NUMBERS THEREFOR, BY OCCUPATIONS—Continued

#### Blast furnaces (1907-1926)—Continued

		37	Aver-	Aver-	Aver-		lex nur 1913=1		Per	cent c	of em	ployee irs per	s wh week	ose av	erage
Year	Num- ber of plants	Number of employ-ees	age full- time hours per week	age earn- ings per hour	full- time week- ly earn- ings	Full- time hours per week	Earn- ings per hour	Full- time week- ly earn- ings	48 and un- der	Over 48 and un- der 56	56	Over 56 and un- der 60	60 and un- der 72	72 and un- der 84	84
					,		Labore	ers		, ,					
997 908 910 9111 912 915 917 919 922 924 926	20 20 20 34 35 35 35 37 37 17 24 27 32 36 36	957 718 757 1, 423 937 1, 049 1, 273 1, 096 885 698 2, 184 1, 770 1, 500 2, 059 1, 600	75. 8 72. 8 73. 0 74. 7 73. 3 73. 1 72. 5 70. 8 71. 3 75. 3 77. 9 72. 3 67. 7 62. 4 62. 4	\$0.146 .140 .138 .150 .151 .152 .171 .177 .171 .281 .457 .474 .315 .401 .390	\$11. 13 10. 24 10. 17 11. 23 11. 14 11. 15 12. 43 12. 52 12. 20 21. 23 35. 60 34. 60 21. 69 25. 15 24. 34	105 100 101 103 101 101 100 98 98 104 107 100 93 86 86	85 82 81 88 88 89 100 104 100 164 267 277 184 235 228	90 82 82 90 90 90 100 101 98 171 286 278 174 202 196	8 (4)	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	(2) (2) (3) 3 2 3 4 3 11 3 5 1 (4)	48 58 63 47 52 50 56 47 45 28 19 32 45 72 83	5 15 9 23 17 19 14 28 26 28 20 40 36 1	4 2 2 2 3 3 3 3 5 2 2 4 5 5 1 1 2 2 4 2 5 5 1 1 2 2 5 1 1 2 5 1 1 1 1 1 1 1 1

## Open-hearth furnaces (1910-1926)

			Aver-	A ver-	Aver-		dex nur 1913=1		Per	cent o	of em	ployed irs per	week	ose av	erage
Year	Num- ber of plants	Num- ber of em- ploy- ees	age full- time hours per week	age earn-	full-	Full- time hours per week	Earn- ings per hour	Full- time week- ly earn- ings	48 and un- der	Over 48 and un- der 56	56	Over 56 and under 60	60 and un- der 72	72 and un- der 84	84
					•		Stocker	.8							
1910 1911 1912 1913 1914 1915 1919 1920 1922 1926	17 17 17 17 17 22 22 22 13 17 19 22 26 30	448 419 413 417 409 366 243 476 573 647 781 687	76. 8 77. 4 77. 0 77. 8 77. 0 77. 3 77. 4 75. 7 70. 9 73. 9 58. 2 57. 8	\$0. 177 . 172 . 176 . 197 . 204 . 199 . 296 . 506 . 573 . 379 . 540 . 535	\$13. 69 12. 73 13. 51 15. 30 15. 66 15. 41 22. 92 38. 30 40. 18 28. 07 31. 37 30. 92	99 96 99 100 99 99 97 91 95 75	90 87 89 100 104 101 150 257 291 192 274 272	89 83 88 100 102 101 150 250 263 183 205 202	3 7 13	(1) (1) (1) (1) (27 15	(1) (1) (1) (1) 52 56	3 10 3 26 3 4	13 29 7 8 8 10  9 29 2 2	58 52 65 62 69 59 71 72 56 46 8 7	28 19 28 31 6 23 30 29 18 10 18

Not presented separately.
 Includes all "Over 48 and under 60"; less than 1 per cent.
 Includes all "Over 48 and under 60."
 Less than 1 per cent.
 Including less than 1 per cent whose full-time hours were 91.

TABLE %—AVERAGE CUSTOMARY FULL-TIME HOURS PER WEEK, AVERAGE EARNINGS PER HOUR, AND AVERAGE FULL-TIME WEEKLY EARNINGS, AND INDEX NUMBERS THEREFOR, BY OCCUPATIONS—Continued

### Open-hearth furnaces (1910-1926) - Continued

			Aver-	Aver-	Aver-		lex nun 1913=1					ployee rs per			
Year	Num- ber of plants	Number of employ- ees	age full- time hours per week	age earn- ings per hour	full- time week- ly earn- ings	Full- time hours per week	Earn- ings per hour	Full- time week- ly earn- ings	48 and un- der	Over 48 and un- der 56	56	Over 56 and un- der 60	60 and un- der 72	72 and un- der 84	84
						Sto	ck cran	emen							
1910	13 13 14 15 20 20 11 15 17 20 25 28	75 70 72 84 98 94 64 115 150 178 228 220	78. 8 75. 6 78. 9 79. 1 78. 4 77. 4 75. 2 67. 8 73. 3 57. 5	\$0. 223	\$17. 60 15. 61 18. 02 18. 85 18. 58 19. 77 26. 11 41. 81 47. 02 33. 85 36. 97 39. 22	100 96 100 100 99 98 98 95 86 93 72 73	94 87 96 100 100 106 142 234 288 193 272 287	93 83 96 100 99 105 139 222 249 180 196 208	9	(1) (1) (1) (1) (1) (1) (1) (36 15	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(3) (3)  3 10 3 35 3 13	3 23 5 4 4 4 	56 53 58 55 61 70 72 77 46 63 11 8	40 23 42 40 35 26 28 13 7 14 1
					C	harging	-machi	ne opera	tors						
1910	17 17 17 17 17 22 22 13 17 19 22 26 31	73 72 72 76 86 86 64 98 137 133 203 221	76. 8 74. 7 75. 8 78. 0 77. 4 77. 7 77. 1 75. 3 67. 2 72. 2 56. 3 55. 7	\$0. 294 . 287 . 312 . 335 . 307 . 330 . 467 . 753 . 895 . 625 . 863 . 951	\$22, 52 21, 37 23, 67 26, 12 23, 66 25, 55 35, 91 56, 70 59, 83 45, 09 48, 43 52, 97	98 96 97 100 99 100 99 97 86 93 72 71	88 86 93 100 92 99 139 225 267 187 258 284	86 82 91 100 91 98 137 217 229 173 185 203	4 10	(1) (1) (1) (1) (1) (3) 33 19	(1) (1) (1) (1) (1) (2) (3) (4)	3 10 8 38 8 16	8 25 14 13 5 5 5	61 58 61 48 66 63 72 72 56 54 5	30 17 25 39 30 33 28 17 2 19
						De	or oper	ators							
1910 1911 1912 1913 1914 1915 1919 1920 1924 1926	15 15 15 15 19 19 15 15 16 16 16	165 160 157 160 170 176 165 264 288 346 222	75. 9 75. 5 76. 0 76. 9 77. 0 76. 5 73. 8 66. 1 70. 1 55. 0 54. 9	\$0.101 .100 .102 .112 .109 .111 .321 .402 .279 .381 .374	\$7. 72 7. 53 7. 72 8. 68 8. 35 8. 43 23. 69 26. 27 19. 76 21. 22 20. 53	99 98 99 100 100 99 96 86 91 72 71	90 89 91 100 97 99 287 359 249 340 334	89 87 89 100 96 97 273 303 228 244 237	5 7 19	(1) (1) (1) (1) (1) (3) 33 22	(1) (1) (1) (1) 56 54	3 14 3 45 8 14	12 21 20 20 14 14 14 	60 55 49 47 56 63 65 41 46	28 24 31 34 31 24 22 4 16 1
						Melter.	s' helpe	rs, first							
1910 1911 1912 1913 1915 1917 1919 1920 1922 1924 1926	17 17 17 17 17 22 22 13 17 19 22 26 31	341 338 347 364 404 422 272 402 620 622 885 924	77. 7 75. 3 76. 5 77. 1 75. 6 75. 5 76. 3 74. 9 69. 4 71. 4 55. 5 55. 3	\$0.416 .400 .417 .440 .420 .437 .586 .966 1.089 .775 1.064 1.170	\$32. 27 30. 12 31. 89 33. 89 31. 60 32. 80 44. 36 72. 35 75. 09 55. 34 59. 16 64. 70	101 98 99 100 98 98 99 97 90 93 72 72	95 91 95 100 95 99 133 220 248 176 242 266	95 89 94 100 93 97 131 213 222 163 175 191	9	(1) (1) (1) (1) (1) (1) (1) (1) 41 25	(1) (1) (1) (1) (1) (1) (1) 54 61	3 9 8 10 3 11 3 33 8 15	7 17 2 3	62 70 79 71 76 76 67 67 66 78 5	31 13 19 26 15 14 33 22 2 5

<sup>1</sup> Not presented separately.

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<sup>3</sup> Includes all "over 48 and under 60."

TABLE 2.—AVERAGE CUSTOMARY FULL-TIME HOURS PER WEEK, AVERAGE EARNINGS PER HOUR, AND AVERAGE FULL-TIME WEEKLY EARNINGS, AND INDEX NUMBERS THEREFOR, BY OCCUPATIONS—Continued

Open-hearth furnaces (1910-1926)—Continued

			Aver-	A ver-	Aver-		lex nur 1913=1		Per	cent	of em	ployee	s who	ose av	erage
Year	Number of plants	Number of em- ploy- ees	age full- time hours per week	age earn-	age full- time week- ly earn- ings	Full- time hours per week	Earnings per hour	Full- time week- ly earn- ings	48 and un- der	Over 48 and un- der 56	56	Over 56 and un- der 60	60 and un- der 72	72 and un- der 84	84
						Melter	s' help	ers, seco	nd						
1910	17 17 17 17 17 22 22 13 17 19 22 26 31	339 335 347 360 402 420 272 410 721 704 1,072 923	76. 6 74. 5 75. 8 76. 7 74. 7 74. 5 75. 9 74. 4 69. 1 71. 2 55. 3 55. 0	\$0. 272 . 263 . 274 . 292 . 278 . 291 . 397 . 693 . 781 . 557 . 758 . 827	\$20. 87 19. 62 20. 77 22. 36 20. 70 21. 57 29. 93 51. 56 53. 80 39. 50 41. 98 45. 49	100 97 99 100 97 97 99 97 90 93 72 72	93 90 94 100 95 100 136 237 267 191 260 283	93 88 93 100 93 97 134 231 241 177 188 203	2	(1) (1) (1) (1) (1) (1) (36 22	(1) (1) (1) (1) (1) (1) (1) (1) 58 62	3 9 3 10 3 12 3 24 3 16	8 35 20 19 15 14  3 12	60 42 51 43 54 55 74 72 62 68 4 3	3 2 2 3 3 2 2 2 2 1
						Melter	s' help	ers, third	ł						
1910	17 17 17 16 21 21 11 17 19 22 26 31	393 394 414 458 442 454 268 602 970 980 1, 329 1, 161	76. 5 73. 9 75. 4 77. 9 77. 4 77. 7 76. 6 67. 8 72. 9 55. 5 55. 2	\$0. 196 . 185 . 199 . 214 . 207 . 212 . 328 . 532 . 645 . 432 . 601 . 629	\$14. 97 13. 67 15. 01 16. 64 15. 98 16. 44 25. 26 40. 75 43. 64 31. 44 33. 39 34. 72	98 95 97 100 99 100 99 98 87 94 71 71	92 86 93 100 97 99 153 249 301 202 281 294	89 82 90 100 96 99 152 245 262 189 201 209	1 10	(1) (1) (1) (1) (1) 41 31	(1) (1) (1) (1) 52 52	3 6 3 38 3 10	8 20 7 1 1	66 73 76 63 69 67 64 66 58 54 4	2 1 3 3 3 3 3 2 2 2
						Sto	pper se	etters				1			
1910	10 10 10 9 10 10 8 10 12 17 21 25	30 29 29 30 32 32 36 45 71 83 123 119	76. 2 73. 5 75. 8 77. 3 75. 0 74. 6 75. 3 73. 8 68. 4 70. 9 55. 1 54. 4	\$0. 313 . 313 . 329 . 325 . 287 . 296 . 414 . 684 . 778 . 561 . 763 . 860	\$23. 63 23. 11 24. 92 25. 10 21. 46 21. 96 30. 90 50. 48 53. 17 39. 73 42. 07 46. 78	99 95 98 100 97 97 97 95 88 92 71 70	96 96 101 100 88 91 127 210 239 173 235 265	91 92 99 100 86 88 123 201 212 158 168 186	7 5 18	(1) (1) (1) (1) (1) 31 28	(1) (1) (1) (1) 58 51	3 16 3 34 3 13	28 25 12	94 73 93 93 88 63 78 63 55 51 3 2	13 13 13 22 22 11 17
						Ste	eel pour	rers							
1910	14 14 15 16 21 21 12 17 18 21 25 31	47 44 50 56 70 70 48 69 112 101 147 148	75. 3 73. 7 76. 5 77. 0 76. 4 75. 7 76. 0 73. 2 68. 0 70. 4 56. 5 55. 6	\$0. 308 . 304 . 321 . 370 . 339 . 356 . 466 . 796 . 929 . 645 . 837 . 889	\$23. 05 22. 32 24. 57 28. 46 25. 94 26. 99 35. 60 58. 27 62. 31 45. 48 47. 38 49. 43	98 96 99 100 99 98 99 95 88 91 73 72	83 82 87 100 92 96 126 215 251 174 226 240	81 78 86 100 91 95 125 205 219 160 166 174	4 13 16	(1) (1) (1) (1) (29 20	(1)	3 16 3 36 3 36 3 18	11 23 20 4 11 11  9	66 68 52 71 66 72 79 74 63 54 7	23 9 23 25 23 17 21 10 2 16 4 3

<sup>&</sup>lt;sup>1</sup> Not presented separately.

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<sup>3</sup> Includes all "Over 48 and under 60."

TABLE 2.—AVERAGE CUSTOMARY FULL-TIME HOURS PER WEEK, AVERAGE EARN-INGS PER HOUR, AND AVERAGE FULL-TIME WEEKLY EARNINGS, AND INDEX NUMBERS THEREFOR, BY OCCUPATIONS—Continued

#### Open-hearth furnaces (1910-1926) - Continued

			Aver-	Aver-	Aver-		lex nun 1913=1					ployee rs per			
Year	Num- ber of plants	Num- ber of em- ploy- ees	age full- time hours per week	age earn- ings per hour	full- time week- ly earn- ings	Full- time hours per week	Earn- ings per hour	Full- time week- ly earn- ings	48 and un- der	Over 48 and un- der 56	56	Over 56 and un- der 60	60 and un- der 72	72 and un- der 84	84
						A	fold cap	opers							
1910 1911 1912 1913 1914 1915 1917 1919 1920 1922 1924	8 8 9 12 13 13 6 11 7 8 7	40 38 52 68 70 72 38 97 73 92 86 70	76. 5 74. 0 79. 3 78. 6 77. 7 76. 1 76. 7 7403 70. 0 65. 5 55. 0 50. 9	\$0. 217 . 215 . 228 . 255 . 232 . 254 . 364 . 588 . 635 . 460 . 609 . 620	\$16. 49 15. 78 18. 00 20. 04 17. 96 19. 24 28. 16 43. 69 44. 65 31. 33 34. 21 31. 56	97 94 101 100 99 97 98 95 89 83 70 65	85 84 89 100 91 100 143 231 249 180 239 243	82 79 90 100 96 141 218 223 156 171 157	14 38 59	(1) (1) (1) (1) 6	(1) (1) (1) (1) 56 41	\$ 11 8 23 3 16	21 15 6 11 11 	70 68 35 53 57 70 63 85 77 57	30 11 50 41 31 18 37
						La	dle cra	nemen							
1910 1911 1912 1913 1914 1915 1917 1919 1920 1922 1924 1926	16 16 16 17 22 22 22 13 17 19 21 25 28	90 86 90 90 104 107 82 119 146 153 241 239	77. 2 74. 6 76. 2 77. 2 76. 5 76. 4 75. 6 68. 3 72. 9 55. 2 54. 9	\$0. 294 . 287 . 317 . 341 . 305 . 327 . 466 . 733 . 837 . 588 . 832 . 900	\$22. 76 21. 32 24. 22 26. 34 23. 34 24. 92 35. 64 55. 41 56. 63 42. 83 46. 06 49. 41	100 97 99 100 99 98 99 98 88 94 72 71	86 84 93 100 89 96 137 215 245 172 244 264	86 81 92 100 89 95 135 210 215 163 175 188	5 21	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	(1) (1) (1) (1) (1) 51 59	3 6 3 36 3 12	9 24 10 9 6 6 6	59 57 63 62 71 76 75 81 59 57 6 3	322 19 277 299 233 199 244 133 27 177
					1	In	got stri	ppers				1		1	
1910	15 15 15 18 18 18 13 15 16 18 20	46 51 55 61 47 48 39 48 71 65 98 126	73. 7 71. 9 72. 9 74. 5 75. 8 76. 3 70. 9 69. 9 69. 3 72. 8 57. 8 56. 0	\$0. 275 . 256 . 278 . 296 . 292 . 303 . 449 . 749 . 790 . 559 . 726 . 767	\$19. 88 18. 06 19. 99 21. 85 21. 72 22. 76 30. 85 52. 36 54. 21 40. 61 42. 11 42. 95	99 97 98 100 102 102 95 94 93 98 78	93 86 94 100 99 102 152 253 267 189 245 259	91 83 92 100 99 104 141 240 248 186 193 197	7	(1) (1) (1) (1) (1) (1) (1) (1) (1) (26 21	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	\$ 6 \$ 5 \$ 5 \$ 6 \$ 6 \$ 23 \$ 33 \$ 34 \$ 15	22 8	47 83 87 76 77 71 52 63 43 58 9 5	24 4 7 20 17 23 26 4 21 20 7
						Engin	neers, l	ocomotiv	e		1				
1910	14 15 15 16 21 21 17 18 20 23 28	107 114 117 119 137 138 166 214 219 325 363	77. 3 74. 3 75. 8 76. 6 76. 5 77. 1 75. 6 69. 6 71. 4 55. 4 54. 7	\$0. 244 . 247 . 262 . 295 . 281 . 279 . 666 . 732 . 527 . 700 . 772	\$18, 92 18, 32 19, 86 22, 55 21, 51 21, 57 50, 35 50, 83 37, 62 38, 73 42, 23	101 97 99 100 100 101 99 91 93 72	83 84 89 100 95 95 226 248 179 237 262	84 81 88 100 95 96 223 225 167 172 187	11 20	(1) (1) (1) (1) 42 20	(1) (1) (1) (1) 40 53	8 4 3 27 3 19 1 (4)	6 38 14 12 10 6 	68 54 77 71 68 70 80 48 58 4 3	26 8 9 17 21 24 16 8 16

<sup>&</sup>lt;sup>1</sup> Not presented separately. <sup>3</sup> Includes all "Over 48 and under 60." <sup>4</sup> Less than 1 per cent.

TABLE 2.—AVERAGE CUSTOMARY FULL-TIME HOURS PER WEEK, AVERAGE EARNINGS PER HOUR, AND AVERAGE FULL-TIME WEEKLY EARNINGS, AND INDEX NUMBER THEREFOR, BY OCCUPATIONS—Continued

Open-hearth furnaces (1910-1926)—Continued

						,									
		27	Aver-	Aver	Average		dex nu (1913=		Per	cent	of em	ploye irs pe	es wh	ose a	verag
Year	Num- ber of plants		age full- time hours per week	age earn- ings per hour	full-	Full- time hours per week	inge	Full- time week- ly earn- ings	48 and un- der	un-	56	Over 56 and un- der 60	60 and un- der 72	72 and un- der 84	84
							Switch	men			,				,
1910	14 15 15 16 21 21 17 18 20 23 28	109 117 118 127 149 150 194 297 275 406 413	77. 3 74. 4 75. 2 76. 3 76. 5 77. 0 76. 2 69. 3 72. 0 56. 0 54. 8	\$0. 185 . 186 . 199 . 230 . 226 . 225 . 555 . 617 . 439 . 586 . 616	\$14. 29 13. 85 14. 92 17. 55 17. 29 17. 33 42. 29 42. 84 31. 61 32. 80 33. 76	101 98 99 100 100 101 100 91 94 73 72	80 81 87 100 98 98 241 268 191 255 268	81 79 85 100 99 99 241 244 180 187	12 22	(1) (1) (1) (1) (3) 25	(1) (1) (1) (1) (1) 41 46	\$ 2 8 27 8 13 (4)	6 38 15 13 11 5 	66 53 75 72 67 70 79 52 58 3	2 1 1 2 2 1
						,	Labor	ers		-		la			
1910	17 17 17 17 17 22 22 13 17 18 21 25 30	1, 038 806 948 1, 109 805 723 653 1, 266 1, 393 992 2, 037 1, 537	74. 5 73. 2 74. 7 76. 2 69. 5 70. 8 74. 4 76. 2 68. 5 67. 9 59. 0 59. 2	\$0. 157 . 161 . 164 . 187 . 185 . 186 . 292 . 468 . 525 . 354 . 434 . 429	\$11. 69 11. 78 12. 21 14. 24 12. 84 13. 19 21. 73 35. 66 36. 21 24. 22 25. 73 25. 40	98 96 98 100 91 93 98 100 90 89 77 78	84 86 88 100 99 99 156 250 281 189 232 229	82 83 86 100 90 93 153 250 254 170 181 178	4  1 3 22	(1) (1) (1) (1) (1) (1) (1) (1) (1) (2) 7	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	3 4 3 4 3 6 3 4 3 11 3 8 3 27 3 17 6 11	26 31 18 10 41 43 22 13 24 39 51 47	48 52 56 56 58 36 58 63 46 35 6	21 21 30 11 20 20 20
				1	Bar n	nills (	1907-	-1926)		1.		1			1
		Num-	Aver-	Aver-	Aver-		ex nui 1913=1					ployee rs per			
Year	Num- ber of plants	ber of em- ploy- ees	age full- time hours per week	age earn- ings per hour	full- time week- ly earn- ings	Full- time hours per week	Earn- ings per hour	Full- time weekly earn- ings	44 and un- der	Over 44 and un- der 48	48	Over 48 and un- der 54	54 and un- der 60	60	Over 60 7
				1			Stocke	ers							
1907	8 8 8 13 15 15 15 31 41 41 15 22 22 22 25 29	93 90 88 170 211 217 374 603 582 298 458 352 298 311	64. 4 64. 1 64. 2 59. 0 60. 9 60. 2 50. 4 60. 2 63. 7 61. 5 59. 2 56. 0 54. 0	\$0.178 .167 .168 .250 .217 .231 .216 .199 .198 .524 .612 .420 .520	\$11. 43 10. 72 10. 79 14. 24 12. 94 13. 79 12. 89 12. 00 11. 91 33. 38 37. 69 24. 90 28. 20 28. 62	107 106 107 98 101 100 100 100 106 102 98 93	82 77 78 116 100 107 100 92 92 243 283 194 232 245	89 83 84 110 100 107 100 93 92 259 292 193 219 222		(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	2 16 2 13 2 12 2 4 2 2 2 1 2 2 2 7 2 11 4 4	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	3 9 3 11 3 9 3 25 3 19 3 17 3 25 3 33 3 46 3 9 3 26 3 40 38 26	9 9 9 4 21 27 34 18 9 31 7 5 17 33	83 80 81 56 47 44 37 47 43 60 59 44 20 3

<sup>1</sup> Not presented separately.
3 Includes all "over 48 and under 60."
4 Less than 1 per cent.
7 All employees in 1924 and 1926 who worked more than 60 hours per week, worked 72 hours or less except 4 roll engineers in 1924 and 7 in 1926 who worked 84 hours.

TABLE 2.—AVERAGE CUSTOMARY FULL-TIME HOURS PER WEEK, AVERAGE EARNINGS PER HOUR, AND AVERAGE FULL-TIME WEEKLY EARNINGS, AND INDEX NUMBERS THEREFOR, BY OCCUPATIONS—Continued

#### Bar mills (1907-1926) - Continued

		Num-	Aver-	Aver-	Aver-		lex nu 1913=1			cent o					
Year	Num- ber of plants	ber of em- ploy- ees	age full- time hours per week	age earn- ings per hour	full- time week- ly earn- ings	Full- time hours per week	Earn- ings per hour	Full- time weekly earn- ings	44 and un- der	Over 44 and un- der 48	48	Over 48 and un der 54	54 and un- der 60	60	Over 60
							Heate	rs							
1907 1908 1908 1910 1911 - 1912 1914 1915 1919 - 1920 - 1922 - 1924 1926	15 15 15 25 26 26 44 57 57 23 24 23 28 32	121 112 112 217 184 199 295 409 392 209 213 169 181	63. 9 63. 9 64. 0 62. 9 62. 7 62. 4 59. 7 59. 9 60. 1 61. 7 60. 1 59. 9 55. 3 54. 8	\$0.508 .467 .488 .507 .510 .482 .590 .548 .562 1.147 1.176 .759 .949 .954	\$32, 35 29, 66 31, 06 31, 73 31, 87 29, 84 34, 74 32, 49 33, 50 70, 77 70, 73 45, 50 53, 03 52, 28	107 107 107 105 105 100 100 101 103 101 100 93 92	86 79 83 86 86 82 100 93 95 194 199 129 161 162	93 85 89 91 92 86 100 94 96 204 204 131 153 150	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	2 2 2 2 3 2 3 2 8 2 10 2 9 2 10 2 9 2 13 2 13 2 9 1 10	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	3 13 3 18 3 18 3 13 3 17 3 22 3 37 3 34 3 35 3 1 3 27 3 34 20 7	2 2 2 7 1 1 1 1 (4) 17 2 27	82 78 78 71 71 68 52 56 57 68 57 31
						He	aters' h	elpers							
907 908 909 - 910 911 912 - 913 915 919 920 - 924 - 926 926	14 14 14 24 25 25 25 42 54 21 23 25 28 33	167 153 151 295 293 319 467 587 570 323 435 326 312 273	65. 3 65. 1 65. 0 62. 6 62. 7 62. 2 60. 5 60. 9 60. 3 60. 7 59. 5 59. 1 54. 7 54. 3	\$0. 246 .227 .234 .273 .259 .260 .269 .265 .272 .655 .744 .517 .630 .632	\$15. 77 14. 50 14. 87 16. 77 15. 94 16. 01 16. 21 16. 09 16. 37 39. 76 44. 16 30. 56 34. 86 34. 32	108 108 107 103 104 103 100 101 100 98 98 98 90	91 84 87 101 96 97 100 99 101 243 277 192 234 235	97 89 92 103 98 99 100 99 101 245 272 189 215 212	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	(1) (2) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1	2 2 2 2 2 2 2 2 16 2 16 2 14 2 8 2 6 2 11 2 24 2 14 2 6 8 7		3 12 3 16 3 16 3 11 3 13 3 23 3 42 3 36 3 32 3 52 3 52 3 6 21	2 3 3 8 2 2 2 1 (4) 17 5	85 80 79 65 68 60 48 57 55 57 51 41
						Char	gers an	d helpers							
907 908 909 910 911 912 913 914 915 919 920 922 924 926	12 12 12 18 19 19 31 41 41 41 21 26 28	104 102 107 179 185 182 262 346 333 189 328 293 295 234	65. 5 65. 6 65. 9 65. 3 64. 8 65. 0 62. 5 61. 9 61. 7 62. 4 61. 9 61. 2 54. 9	\$0.173 .161 .161 .192 .184 .192 .226 .219 .222 .561 .636 .427 .540	\$11. 34 10. 56 10. 60 12. 40 11. 90 12. 45 14. 00 13. 47 13. 56 35. 01 39. 45 26. 24 29. 58 29. 48	105 105 105 104 104 104 100 99 99 100 99 98 88 86	77 71 71 85 81 85 100 97 98 248 281 189 239 244	81 75 76 89 85 89 100 96 97 250 282 187 211	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	2 7 2 6 2 5 2 4 2 4 2 9 2 17 2 5 2 6 5 9	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	3 10 3 10 3 9 3 8 3 14 3 13 3 27 3 32 3 27 3 10 3 28 3 36 21 28	5 5 4 7 3 3 2 1 (4) 5 2 2 34 25	85 86 87 79 77 79 67 64 65 69 65 56 122

<sup>&</sup>lt;sup>1</sup> Not presented separately. <sup>2</sup> Includes all "48 and under." <sup>3</sup> Includes all "over 48 and under 60."

<sup>4</sup> Less than 1 per cent.

Table 2.—AVERAGE CUSTOMARY FULL-TIME HOURS PER WEEK, AVERAGE EARNINGS PER HOUR, AND AVERAGE FULL-TIME WEEKLY EARNINGS, AND INDEX NUMBERS THEREFOR, BY OCCUPATIONS—Continued

#### Bar mills (1907-1926)—Continued

		Num-	Aver-	Aver-	Aver-		lex nu [1913=]			cent o					
Year	Num- ber of plants	ber of em- ploy- ees	age full- time hours per week	age earn- ings per hour	full- time week- ly earn- ings	Full- time hours per week	Earn- ings per hour	Full- time weekly earn- ings	44 and un- der	Over 44 and un- der 48	48	Over 48 and un- der 54	54 and un- der 60	60	Over
						j	Drag do	wns		0		-			
1907	11 11 11 19 20 20 33 45 45 18 20 20 26 27	86 82 83 132 127 130 186 265 256 131 205 161 187 142	64. 5 63. 9 64. 0 65. 1 64. 7 64. 3 60. 8 60. 7 61. 1 64. 9 60. 6 59. 7 55. 2 55. 3	\$0. 271 • 246 • 250 • 269 • 262 • 253 • 282 • 277 • 280 • 725 • 470 • 560 • 593	\$17. 31 15. 58 15. 93 17. 44 16. 78 16. 12 16. 98 16. 58 16. 96 45. 17 43. 33 27. 98 31. 12 32. 79	106 105 105 107 106 106 100 100 107 100 98 91	96 87 89 95 93 90 100 98 99 247 257 167 199 210	102 92 94 103 99 95 100 98 100 266 255 165 183 193	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	2 9 2 6 2 5 2 3 2 17 2 7 9 4	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	3 19 3 24 3 24 3 18 3 24 3 25 3 38 3 36 3 36 3 3 16 3 52 19 20	3  1 11 2  36 42	81 76 76 79 76 75 53 56 59 83 65 40 133
						R	oll engi	neers							
1907	13 13 13 22 22 22 41 52 52 21 22 22 24 26	58 56 56 99 95 97 153 183 178 94 109 100	72. 3 71. 4 71. 5 72. 0 70. 4 70. 0 69. 2 68. 8 9 70. 2 69. 7 69. 1 60. 9 58. 0	\$0. 226 221 217 229 228 229 247 246 558 657 478 569	\$16. 29 15. 76 15. 52 16. 46 16. 07 16. 05 17. 06 16. 77 39. 17 45. 65 32. 75 34. 55 33. 70	104 103 103 104 102 101 100 99 101 100 88 84	91 89 88 93 92 93 100 100 226 266 194 230 235	95 92 91 96 94 100 99 98 230 268 192 203 198	(1) (1) (1) (1) (1) 9 14	(1) (1) (1) (1) 4	2 2 2 3 2 2 17	(1) (1) (1) (1) (1) (1) (1) (20 11	3 4 3 7 3 6 3 6 3 6 3 10 11 6	3 3 1 6 5 4 15 3	100 100 100 97 97 95 87 88 90 83 93 88 53
							Roller	r8							
1907	13 13 13 22 23 24 42 56 56 56 23 25 25 30 35	65 63 63 124 120 128 173 216 215 108 141 119 126 135	65. 5 65. 7 65. 5 62. 4 62. 0 61. 6 59. 3 59. 6 59. 4 61. 3 59. 5 58. 4 53. 9 53. 2	\$1. 013 . 878 . 917 . 928 . 873 . 863 . 985 . 936 . 944 1. 821 1. 949 1. 416 1. 577 1. 700	\$66. 88 57. 88 60. 40 58. 21 54. 65 53. 60 58. 85 56. 13 56. 75 111. 62 116. 13 82. 35 85. 28 90. 44	110 111 110 105 105 104 100 101 100 103 100 98 91 90	103 89 93 94 89 88 100 95 96 185 198 144 160 173	114 98 103 99 93 91 100 95 96 190 197 140 145 154	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	(1) (1) (1) (1) (1) (1) (1) (1) (2) 7	2 12 2 13 2 12 2 12 2 12 2 22 2 11 2 5 13 18	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	3 17 3 19 3 19 3 16 3 22 3 26 3 56 3 49 3 51 3 4 3 26 3 61 37 32	17 13 13 13 13 8 9 	666 688 59 58 54 44 51 49 53 48 30 7

<sup>&</sup>lt;sup>1</sup> Not presented separately. <sup>2</sup> Includes all "48 and under." <sup>3</sup> Includes all "over 48 and under 60."

TABLE 2.—AVERAGE CUSTOMARY FULL-TIME HOURS PER WEEK, AVERAGE EARN-INGS PER HOUR, AND AVERAGE FULL-TIME WEEKLY EARNINGS, AND INDEX NUMBERS THEREFOR, BY OCCUPATIONS—Continued

Bar mills (1907-1926)—Continued

		Num-	Aver-	Aver-	Aver-		lex nu [1913=]			cent o					
Year	Num- ber of plants	ber of em- ploy- ees	age full- time hours per week	age earn- ings per hour	full- time week- ly earn- ings	Full- time hours per week	Earn- ings per hour	Full- time weekly earn- ings	and un- der	Over 44 and un- der 48	48	Over 48 and un- der 54	54 and un- der 60	60	Over 60
							Rough	iers							
1907 1908 1908 1909 1910 1911 1912 1914 1915 1919 1919 1922 1924 1926 1926 1926 1926 1926 1926 1926 1926 1926 1926 1926 1926 1926 1926	15 15 15 25 26 26 26 57 57 23 25 25 25 31	252 242 243 425 403 408 407 385 386 202 319 288 263 258	61. 5 62. 5 62. 4 61. 0 60. 5 60. 2 59. 8 58. 8 58. 9 60. 7 57. 8 57. 3 54. 7 53. 2	\$0. 434 .343 .368 .402 .377 .389 .436 .436 .438 .933 1. 034 .709 .810 .846	\$26. 28 21. 35 22. 72 24. 51 22. 68 23. 36 26. 00 25. 41 25. 76 56. 63 59. 46 40. 41 44. 61 45. 01	103 105 104 102 101 101 100 98 98 102 97 96 91 89	100 79 84 92 86 89 100 100 214 237 163 186 194	101 82 87 94 87 90 100 98 99 218 229 155 172 173	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	2 13 2 10 2 10 2 17 2 18 2 18 2 18 2 6 2 2 2 2 2 2 2 2 2 2 2 16 2 9 4 9	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	3 20 3 23 3 23 3 20 3 24 3 25 3 46 3 65 3 62 3 10 3 44 3 58 24 29	5 5 8 3 3 1 10 1 25 31	61 62 63 55 54 47 32 38 59 39 39 77
							Catch	ers							
1907 1908 1908 1909 1910 1911 1912 1914 1915 1919 1920 1922 - 1924 1926	11 11 11 20 20 20 44 57 57 23 25 25 25	69 70 70 115 111 110 222 293 296 187 217 191 215 208	62. 5 62. 0 61. 9 60. 2 59. 9 59. 7 58. 1 58. 8 60. 6 57. 9 57. 2 54. 8 53. 3	\$0. 442 .381 .400 .419 .392 .399 .445 .430 .936 1. 022 .725 .818 .865	\$27. 68 23. 57 24. 93 25. 45 23. 70 23. 92 25. 73 25. 35 56. 72 58. 68 41. 33 45. 12 46. 10	108 107 107 104 103 103 100 101 101 104 109 98 94 92	99 86 90 94 88 90 100 97 97 210 230 163 184 194	108 92 97 99 92 93 100 97 99 220 228 161 175 179	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	2 13 2 14 2 14 2 3 2 2 2 2 2 2 2 2 2 19 2 10 6 9	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	3 42 3 46 3 46 3 35 3 39 3 63 3 60 3 60 3 11 3 38 3 59 37 26	7 1 27 30	55 54 54 47 48 47 34 38 59 42 31 61
							Strane	lers							
1907 1908	13 13 13 21 22 22 42 56 56 56 23 25 25 29	175 174 174 272 262 266 491 635 615 381 525 474 427 390	59. 5 59. 7 59. 7 60. 6 59. 8 59. 6 58. 3 58. 4 58. 1 59. 5 57. 6 56. 6 53. 0 51. 8	\$0. 334 . 277 . 297 . 301 . 272 . 283 . 345 . 318 . 326 . 762 . 849 . 577 . 700 . 742	\$19. 45 16. 25 17. 34 17. 85 16. 03 16. 62 20. 15 18. 57 18. 99 45. 34 48. 79 32. 31 36. 92 38. 44	102 102 104 103 102 100 100 100 102 99 97 91 89	97 80 86 87 79 82 100 92 94 221 246 167 203 215	97 81 86 89 80 82 100 92 94 225 242 160 183 191	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	2 22 2 22 2 22 2 18 2 18 2 18 2 18 2 14 2 9 6 2	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	3 17 3 17 3 17 3 16 2 27 3 28 3 64 3 57 3 77 8 13 8 46 3 65 34 22	11 11 11 14 8 8 8 11 	49 49 49 53 47 46 31 22 53 53 53 77 1

<sup>&</sup>lt;sup>1</sup> Not presented separately. <sup>2</sup> Includes all "48 and under." <sup>3</sup> Includes all "over 48 and under 60."

Table 2.—AVERAGE CUSTOMARY FULL-TIME HOURS PER WEEK, AVERAGE EARNINGS PER HOUR, AND AVERAGE FULL-TIME WEEKLY EARNINGS, AND INDEX NUMBERS THEREFOR, BY OCCUPATIONS—Continued

Bar mills (1907-1926) - Continued

	3.7	Num-	Aver-	Aver-	Aver-		ex nu 1913=1		Per	cent ill-tim	of em	ployee rs per	es wh	ose av	verage
Year	Num- ber of plants	ber of em- ploy- ees	full- time hours per week	age earn- ings per hour	full- time week- ly earn- ings	Full- time hours per week	Earn- ings per hour	Full- time weekly earn- ings	44 and un- der	Over 44 and un- der 48	48	Over 48 and un- der 54	and un- der 60	60	Over 60
							Finish	ers							
1907	10 10 10 17 19 21 40 54 54 22 24 25 30 33	65 63 63 111 121 137 182 223 222 123 177 165 185 159	65. 9 66. 4 66. 2 64. 0 62. 8 62. 0 59. 6 60. 0 59. 8 61. 6 60. 0 57. 9 54. 0 53. 0	\$0.309 .279 .300 .323 .313 .328 .350 .341 .352 .766 .866 .638 .749 .848	\$20, 45 18, 53 19, 85 20, 48 19, 60 20, 29 20, 77 20, 42 20, 95 47, 19 51, 05 36, 56 40, 35 44, 94	111 111 107 105 104 100 101 100 103 101 97 91 89	88 80 86 92 89 94 100 97 101 219 247 182 214 242	98 89 96 99 94 98 100 98 101 227 251 176 194 216	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	(1) (1) (1) (1) (1) (1) (1) (1) (1) (2) 9 20	2 14 2 12 2 11 2 11 2 16 2 9 2 10 5 9	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	3 12 3 13 3 13 3 7 3 20 3 31 3 63 3 43 3 48 3 13 3 34 3 56 41 28	14 11 10 9 7 7 7 1 13 5 1 23 21	74 76 78 70 62 51 37 55 51 57 51 34 5
							Hook-u	$\iota ps$							
1907 1908 1909 1910 1911 1912 1914 1915 1919 - 1920 - 1924 1926	12 12 12 20 21 22 36 47 47 21 24 25 29	92 84 82 174 154 177 227 262 245 156 277 213 317 207	63. 9 65. 3 65. 7 63. 2 63. 0 61. 9 59. 6 59. 8 60. 3 59. 6 57. 7 59. 0 54. 8 54. 8	\$0, 268 , 225 , 241 , 272 , 250 , 254 , 291 , 268 , 270 , 641 , 771 , 516 , 601 , 623	\$17, 30 14, 70 15, 82 17, 13 15, 66 15, 74 17, 32 16, 03 16, 25 38, 20 43, 83 30, 17 33, 30 34, 14	107 110 110 106 106 104 100 100 101 100 97 99 92 92	92 77 83 93 86 87 100 92 93 220 265 177 207 214	100 85 91 99 90 91 100 93 94 221 253 174 192 197	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	2 10 2 4 2 4 2 16 2 14 2 12 	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	3 3 3 5 3 5 3 6 3 14 3 24 3 46 3 48 3 41 2 20 3 35 3 46 37 29	9 17 10 11 6 8  13 1	78 75 81 68 67 56 53 52 59 45 46 40 4
						Rol	l hands	, other							
1907	9 9 9 18 18 18 24 37 37 18 20 20 24 25	97 94 94 180 177 176 199 240 235 174 352 353 304 230	66. 8 67. 0 66. 8 62. 8 62. 5 62. 7 53. 2 62. 6 62. 1 60. 7 59. 5 53. 2 52. 9	\$0. 278 . 255 . 266 . 295 . 273 . 287 . 316 . 285 . 291 . 684 . 758 . 545 . 702 . 683	\$18. 53 16. 97 17. 65 18. 35 16. 97 17. 97 20. 02 17. 92 17. 92 18. 23 42. 48 45. 99 32. 36 37. 52 36. 13	106 106 106 99 99 99 100 100 99 98 96 94 84 84	88 81 84 93 86 91 100 90 92 216 240 172 222 216	93 85 88 92 85 90 100 90 91 212 230 162 187	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	2 6 2 6 2 6 2 22 2 22 2 22 2 20 	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	\$ 4 \$ 4 \$ 4 \$ 10 \$ 13 \$ 13 \$ 24 \$ 26 \$ 10 \$ 10 \$ 24 \$ 26 \$ 25 \$ 23	4 4 4 4 2 2 (†)	85 85 85 64 62 64 76 79 74 71 54 42 4
						Н	lot-bed	men							
1907 1908 1909 1909 1911 1911 1913 1914 1915 1919 1920 1922 1924 1926	15 15 15 25 26 26 43 56 56 23 24 25 30 33	302 299 286 500 450 461 600 714 721 497 727 755 679 532	63. 3 63. 2 63. 3 62. 9 61. 9 61. 9 60. 3 60. 0 59. 4 58. 8 58. 3 53. 8	\$0. 189 . 174 . 180 . 200 . 188 . 192 . 217 . 213 . 216 . 545 . 618 . 439 . 538 . 565	\$11, 98 10, 93 11, 00 12, 46 11, 61 11, 80 13, 06 12, 77 12, 83 32, 37 36, 46 25, 48 28, 97 29, 95	105 105 104 103 102 100 100 100 99 98 97 89 88	87 80 83 92 87 88 100 98 100 251 285 202 248 260	92 84 84 95 89 90 100 98 98 248 279 195 222 229	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	(1) (2) (3) (4) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1	2 4 2 4 2 4 2 11 2 12 2 12 2 7 2 5 2 14 2 27 2 9 7 7	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	\$ 21 \$ 21 \$ 22 \$ 16 \$ 24 \$ 26 \$ 43 \$ 43 \$ 45 \$ 36 \$ 45 \$ 39 29	14 19 15 14 6 5 2 2 2 2 (4)	62 56 59 58 57 56 49 51 51 50 45 36 5 4

<sup>&</sup>lt;sup>1</sup> Not presented separately. <sup>2</sup> Includes all "48 and under."

<sup>&</sup>lt;sup>3</sup> Includes all "over 48 and under 60." <sup>4</sup> Less than 1 per cent.

TABLE 2.—AVERAGE CUSTOMARY FULL-TIME HOURS PER WEEK, AVERAGE EARN-INGS PER HOUR, AND AVERAGE FULL-TIME WEEKLY EARNINGS, AND INDEX NUMBERS THEREFOR, BY OCCUPATIONS—Continued

Bar mills (1907-1926)—Continued

		Num-	Aver-	Aver-	Aver-		ex nu 1913=1			cent o					
Year	Num- ber of plants	ber of em- ploy- ees	age full- time hours per week	age earn- ings per hour	full- time week- ly earn- ings	Full- time hours per week	Earn- ings per hour	Full- time weekly earn- ings	44 and un- der	Over 44 and un- der 48	48	Over 48 and un- der 54	54 and un- der 60	60	Over 60
				,			Shearm	en							
1907 1908 1909 1910 1911 - 1912 1914 1915 1919 1920 - 1922 - 1924 - 1926	15 15 15 25 25 24 41 54 54 22 25 24 28 32	94 92 93 156 151 156 218 263 264 145 216 178 181	64. 8 65. 1 65. 3 62. 5 62. 4 60. 2 60. 5 60. 5 60. 5 60. 5 53. 4 52. 4	\$0. 249 . 216 . 225 . 264 . 254 . 251 . 281 . 280 . 293 . 634 . 752 . 526 . 631 . 616	\$16. 20 14. 10 14. 72 16. 40 15. 55 15. 40 16. 74 16. 78 17. 56 38. 61 43. 99 30. 79 34. 10 32. 28	108 108 108 105 104 104 100 100 100 101 97 98 89 87	89 77 80 94 90 89 100 104 226 268 187 225 219	97 84 88 98 93 92 100 100 105 231 263 184 204 193	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	2 10 2 10 2 10 2 5 2 4 2 11 2 15 2 14 2 4 7	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	3 15 3 15 3 15 3 16 3 23 3 24 3 42 3 38 3 31 3 23 3 42 3 58 26 21	16 18 18 14 12 10 9 6 8 4	69 67 66 60 56 56 44 49 52 54 40 38
					1	Shea	rmen's	helpers						,	
1907	15 15 15 23 23 23 23 35 48 48 49 22 23 27 31	201 172 185 355 359 358 418 487 471 399 507 610 500 601	65. 9 66. 2 67. 3 64. 7 63. 8 63. 9 62. 7 62. 7 62. 3 60. 8 60. 8 52. 9 52. 3	\$0. 174 . 168 . 169 . 187 . 178 . 184 . 209 . 201 . 203 . 513 . 615 . 415 . 524 . 522	\$11, 46 11, 07 11, 32 12, 02 11, 28 11, 74 12, 98 12, 57 12, 66 31, 96 37, 39 25, 27 27, 72 27, 72	105 106 107 103 102 102 100 100 99 97 97 84 83	83 80 81 89 85 88 100 96 97 245 294 199 251 250	88 85 87 93 87 90 100 97 98 246 288 195 214 210	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	2 13 2 13 2 13 2 13 2 4 2 3 2 10 2 17 2 7 2 6 9	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	3 6 3 7 3 6 3 3 3 8 3 9 3 24 3 24 3 20 3 9 3 40 3 47 3 25 17	10 13 14 12 10 10 6 6 4 6 3 3	83 81 79 79 73 68 67 66 68 50 50 48
							Bundl	ers							
1907	5 5 5 6 7 7 12 13 13 6 10 10 11 14	41 41 41 77 131 132 178 210 115 151 161 184 99	66. 9 66. 9 66. 8 66. 1 62. 0 62. 0 61. 4 63. 9 64. 4 68. 8 60. 9 57. 8 45. 9 49. 7	\$0. 202 . 174 . 186 . 207 . 197 . 193 . 218 . 203 . 208 . 529 . 555 . 382 . 552	\$13. 53 11. 68 12. 42 13. 69 12. 20 11. 94 13. 38 12. 97 13. 38 36. 40 33. 80 22. 29 24. 16 27. 43	109 109 109 108 101 101 100 104 105 112 99 94 75 81	93 80 85 95 90 89 100 93 95 243 255 175 241 253	101 87 93 102 91 89 100 97 100 272 253 167 181 205	(1) 58 7	(¹)	2 2 14 10	(1) (1) (1) (1) (1) (1) (1) (1) (1) (2) 13	3 66 3 65 3 71 3 43 3 37 3 2 3 65 3 68 5 16	2 2 2 1 4 6 1 4 9	1000 1000 1000 1000 34 35 277 55 62 94 27 31
				1			Labore	ers							
1907 1908 1909 1909 1909 1910 1911 1912 1919 1920 1922 - 1924 1926	10 10 10 15 17 21 42 54 54 21 20 23 30 34	296 227 324 511 390 536 891 1, 039 1, 029 1, 058 816 806 936 854	68. 3 64. 8 67. 8 67. 8 65. 5 65. 0 62. 5 63. 3 62. 9 66. 1 65. 1 64. 5 57. 5 55. 0	\$0. 153 . 153 . 150 . 160 . 159 . 160 . 169 . 173 . 173 . 443 . 506 . 316 . 392 . 411	\$10, 44 9, 93 10, 17 10, 86 10, 40 10, 38 10, 66 11, 00 10, 91 29, 28 33, 12 21, 54 23, 06 22, 61	109 104 108 108 105 104 100 101 101 106 104 103 92 83	91 91 89 95 94 95 100 102 262 299 187 232 243	98 95 95 102 98 97 100 103 102 275 311 202 216 212	(4) (1) (1) (1) (1) (1) (1) (1)	(1) (1) (1) (1) (1) (1) (4) 5	2 1 2 1 2 2 2 6 2 2 11 31	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	(4) 3 1 3 2 3 9 3 23 3 26 3 18 3 22 3 9 3 20 3 29 28 20	17 41 23 29 27 15 33 31 27 18 11 13 39 24	82 58 75 65 63 40 51 50 70 63 55 81

<sup>&</sup>lt;sup>1</sup> Not presented separately. <sup>2</sup> Includes all "48 and under."

[547]

Includes all "over 48 and under 60."
 Less than 1 per cent.

Changes in Union Scale of Wages and Hours of Labor, 1913 to 1926 1

THE Bureau of Labor Statistics collects annually, as of May 15, information concerning the union scale of wages and hours of labor in the principal time-work trades in 66 of the principal cities of the United States. A full compilation of the figures for

1926 is now in progress.

In this article an abridged compilation is made of the 1926 data for the following trades in 40 localities with comparative figures for preceding years back to 1913, in so far as effective scales were found for the several years. Data for 1914 are omitted for lack of space, but figures for that year may be obtained by referring to the September, 1925, issue.

Painters.

Bricklayers.
Building laborers.
Carpenters.
Cement finishers.
Compositors: Book and job.
Compositors, daywork: Newspaper.
Electrotypers: Finishers.
Electrotypers: Molders.
Granite cutters, inside.

Hod carriers.

Inside wiremen.

Plasterers. Plasterers' laborers. Plumbers. Sheet-metal workers. Stonecutters. Structural-iron workers.

Typesetting-machine operators:
Book and job.
Typesetting-machine operators,

daywork: Newspaper.

The union scale represents the minimum rate and the maximum hours agreed upon between the unions and the employers. Quite often, however, a higher rate was paid to some of the union members, or variable higher rates were paid to many or possibly all of the members.

The union scale generally represents the prevailing minimum rate for the trade in the locality, even though all persons in the

trade may not be members of the union.

In cases where scales have been revised since May 15, 1926, and made retroactive to that date or earlier the changes have been included in the tabulation, in so far as information has been received.

Two or more 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.

 $<sup>^1\</sup>mathrm{A}$  brief summary of the changes from 1907 to 1925 and also the average money rate per hour for each trade, all cities combined, as of May, 1925, and May, 1924, are published in the November, 1925, issue.

C.						Rate	s per he	our (cer	nts)										Hour	s per	week					1
City	1913	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1913	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926
Atlanta	65.0	45. 0 70. 0 70. 0 65. 0 65. 0	50. 0 70. 0 70. 0 65. 0 65. 0	60. 0 75. 0 70. 0 70. 0 70. 0	60. 0 75. 0 87. 5 80. 0 75. 0	70. 0 100. 0 87. 5 80. 0 85. 0	112. 5 125. 0 100. 0 100. 0 100. 0	100. 0 125. 0 100. 0 100. 0 100. 0	100. 0 125. 0 100. 0 100. 0 100. 0	112. 5 150. 0 112. 5 125. 0 125. 0	{112. 5 125. 0 150. 0 125. 0 125. 0 125. 0	112. 5 125. 0 150. 0 137. 5 125. 0 137. 5	}140. 0 162. 5 150. 0 140. 0 137. 5	53 4 45 5 44 44 48	50 4 45 44 44 1 48	50 4 45 44 44 1 48	50 44 44 44 6 44	50 44 44 44 6 44	44 4 45 44 44 6 44	44 4 45 44 44 6 44	44 4 45 44 44 44	44 4 45 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44
Charleston, S. C. Chicago Cincinnati Cleveland Dallas	75. 0 65. 0 65. 0	40. 0 75. 0 70. 0 70. 0 87. 5	40. 0 75. 0 70. 0 70. 0 87. 5	40. 0 75. 0 75. 0 75. 0 87. 5	50. 6 75. 0 90. 0 90. 0 100. 0	75. 0 87. 5 90. 0 90. 0 100. 0	100. 0 125. 0 125. 0 125. 0 112. 5	85. 0 125. 0 125. 0 125. 0 150. 0	85. 0 110. 0 125. 0 125. 0 137. 5	100. 0 *110. 0 125. 0 140. 0 150. 5	100. 0 9125. 0 150. 0 150. 0 150. 0	100. 0 150. 0 150. 0 150. 0 150. 0	100. 0 150. 0 162. 5 150. 0 162. 5	7 53 44 45 48 44	7 53 44 45 44 44	7 53 44 45 44 44 44	7 53 44 45 44 44	48 44 45 44 44	48 44 45 44 44	48 44 45 44 44	48 44 45 44 44	48 44 45 44 44	48 44 45 44 44	48 44 45 44 44	44 44 44 44 44	48 44 44 44 44
Denver	75. 0 65. 0 55. 0 75. 0 62. 5	75. 0 65. 0 60. 0 75. 0 62. 5	87. 5 70. 0 60. 0 75. 0 62. 5	87. 5 75. 0 65. 0 75. 0 62. 5	100. 0 80. 0 75. 0 85. 0 62. 5	100. 0 90. 0 85. 0 85. 0 75. 0	125. 0 125. 0 115. 0 125. 0 87. 5	125. 0 100. 0 115. 0 115. 0 100. 0	125. 0 100. 0 95. 0 115. 0 87. 5	137. 5 135. 0 110. 0 135. 0 87. 5	150. 0 150. 0 110. 0 150. 0 100. 0	150. 0 150. 0 125. 0 150. 0 125. 0	150. 0 150. 0 125. 0 150. 0 150. 0	44 11 48 48 44 48	44 12 44 48 44 48	44 13 44 44 44 48	44 13 44 44 44 48	44 13 44 44 44 48	44 13 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44
KansasCity,Mo. Little Rock Los Angeles Louisville Manchester	75. 0 75. 0 65. 0	75. 0 75. 0 75. 0 65. 0 60. 0	75. 0 75. 0 62. 5 65. 0 60. 0	75. 0 87. 5 62. 5 70. 0 65. 0	87. 5 87. 5 75. 0 75. 0 75. 0	100. 0 100. 0 87. 5 85. 0 90. 0	112. 5 125. 0 125. 0 115. 0 112. 5	112. 5 125. 0 125. 0 125. 0 112. 5	112. 5 125. 0 125. 0 125. 0 125. 0 112. 5	137. 5 125. 0 125. 0 125. 0 125. 0 112. 5	150. 0 137. 5 125. 0 150. 0 150. 0	150. 0 150. 0 137. 5 150. 0 137. 5	150. 0 150. 0 137. 5 150. 0 137. 5	44 14 44 44 48 48	44 14 44 44 44 44	44 14 44 44 44 44	44 44 44 44 44	44 44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44
Memphis Milwaukee Minneapolis Newark, N. J New Haven	75, 0 67, 5 65, 0 65, 0 60, 0	75. 0 67. 5 70. 0 65. 0 60. 0	75. 0 67. 5 70. 0 70. 0 60. 0	82. 5 72. 5 75. 0 75. 0 65. 0	87. 5 72. 5 75. 0 75. 0 70. 0	87. 5 90. 0 87. 5 87. 5 82. 5	125. 0 125. 0 125. 0 125. 0 100. 0	112, 5 100, 0 112, 5 125, 0 100, 0	112. 5 100. 0 100. 0 125. 0 100. 0	125. 0 125. 0 125. 0 125. 0 125. 0 112. 5	150. 0 125. 0 125. 0 150. 0 125. 0	150. 0 125. 0 125. 0 150. 0 125. 0	162. 5 125. 0 125. 0 162. 5 137. 5	44 44 48 44 44	44 44 48 44 44	44 44 14 44 44 44	44 44 14 44 44 44	44 44 14 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	4-4-4-4-4-
New Orleans New York Omaha Philadelphia Pittsburgh	62. 5 70. 0 70. 0 62. 5 70. 0	62. 5 75. 0 70. 0 65. 0 70. 0	62. 5 75. 0 75. 0 65. 0 70. 0	62. 5 75. 0 75. 0 70. 0 75. 0	62. 5 81. 3 75. 0 80. 0 75. 0	75. 0 87. 5 87. 5 80. 0 90. 0	100. 0 125. 0 125. 0 130. 0 112. 5	100. 0 125. 0 112. 5 130. 0 150. 0	100. 0 125. 0 100. 0 125. 0 130. 0	100. 0 150. 0 125. 0 137. 5 130. 0	125. 0 150. 0 125. 0 150. 0 140. 0	125. 0 150. 0 125. 0 150. 0 155. 0	125. 0 175. 0 125. 0 162. 5 162. 5	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 15 44 44	44 44 44 15 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	4444

UNION

SCALE

HO.

WAGES

AND HOURS

<sup>1 44</sup> hours per week, June to August, inclusive.
4 44\(\)\(\)\_2 hours per week, November to March, inclusive.
4 45\(\)\_2 hours per week, November to March, inclusive.
4 48 hours per week, October to December, inclusive.
4 48 hours per week, Nov. 16 to Mar. 15.

12 48 hours per week, November to April, inclusive.
13 48 hours per week, December to February, inclusive.
14 48 hours per week, October to April, inclusive.
15 40 hours per week, July 1 to Sept. 7.
16 40 hours per week, July 1 to Sept. 7.
17 48 hours per week, December to April, inclusive.
18 40 hours per week, July 1 to Sept. 7.
18 40 hours per week, July 1 to Sept. 7.
18 40 hours per week, July 1 to Sept. 7.
18 40 hours per week, July 1 to Sept. 7.
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19 48 hours per week, Nov. 18 48 hours per week, July 1 to Sept. 7.
19 40 hours per week, July 1 to Sept. 7.
19 40 hours per week, July 1 to Sept. 7.
19 40 hours per week, Nov. 18 40 hours per week, July 1 to Sept. 7.
19 40 hours per week, July 1 to Sept. 7.
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19 40 hours per week, July 1 to Sept. 7.
19 40 hours per week, July 1 to Sept. 7.
19 4

Hours per week

UNION SCALE OF WAGES AND HOURS OF LABOR IN SPECIFIED OCCUPATIONS, 1913 TO 1926, BY CITIES—Continued

\*\*Bricklayers\*\*—Continued\*\*

Rates per hour (cents)

	City	1913	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1913	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926
I	Portland, Oreg Providence Richmond, Va St. Louis St. Paul	70.0	65. 0 75. 0	75. 5 65. 0 65. 0 75. 0 70. 0	75. 0 70. 0 75. 0 75. 0 75. 0		100. 0 80. 0 87. 5 100. 0 87. 5	125. 0 115. 0 100. 0 125. 0 125. 0	125. 0 115. 0 100. 0 125. 0 112. 5	112. 5 115. 0 100. 0 125. 0 100. 0	125. 0 115. 0 150. 0 150. 0 100. 0	125. 0 125. 0 125. 0 175. 0 112. 5	137. 5 125. 0 150. 0 175. 0 112. 5	137. 5 150. 0 150. 0 175. 0 125. 0	44 44 45 44 48	44 44 16 45 44 48	44 44 16 45 44 44	44 44 16 45 44 14 44	44 44 16 45 44 44	44 44 16 45 44 44	44 44 16 45 44 44	44 44 18 45 44 44	44 44 16 45 44 44	44 44 16 45 44 44	44 44 16 45 44 44	44 44 45 44 44	44 44 45 44 44
55	Salt Lake City San Francisco Scranton Seattle Washington	87. 5 60. 0 75. 0		87. 5 65. 0 75. 0	87. 5 70. 0 81. 3	100.0	112. 5 75. 0 112. 5	125. 0 125. 0 112. 5 125. 0 100. 0	112. 5 125. 0 125. 0 112. 5 125. 0	112.5	125. 0 137. 5 137. 5 125. 0 137. 5	137. 5 137. 5 150. 0 137. 5 150. 0	137. 5	137. 5	44 44 10 44 44 17 45	44	44	44 44 44 44 17 45	44 44 44 44 17 45	44 44 44 40 44	44 44 44 40 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44
[550]	, , , ,										Build	ling la	borers														
	Boston	35. 0	35. 0	35.0	37.5	40.0	40.0	67. 5 70. 0	67. 5 70. 0	67. 5 18 70. 0	67. 5 18 70. 0	65.0	65.0	74. 0	48	48	48	48	48	44	44	44	44	48	48	48	48
(	Chicago Cincinnati Cleveland	40. 0 20. 0		42. 5 25. 0 31. 3	45. 0 30. 0 40. 0		57. 5 40. 0 57. 5	100. 0 45. 0 87. 5	100. 0 50. 0 87. 5	72. 5 40. 0 57. 5	72. 5 45. 0 87. 5	72. 5 52. 5 87. 5	82. 5 55. 0 87. 5	87. 5 58. 0 87. 5	44 60	44 50 48	44 50 48	44 50 44	44 50 44	44 50 44	44 50 44	44 50 44	44 50 44	44 50 44	44 50 44	44 50 44	44 50 44
] ]	Denver Detroit KansasCity,Mo. Los Angeles Louisville	34.4	30. 0 35. 0 34. 4 22. 2	37. 5 30. 0 35. 0 34. 4 22. 2	43. 8 40. 0 37. 5 34. 4 22. 2	50. 0 37. 5 43. 8 30. 0	50. 0 65. 0 57. 5 50. 0 35. 0	50, 0 75, 0 75, 0 62, 5 50, 0	62. 5 60. 0 75. 0 62. 5 40. 0	50. 0 70. 0 62. 5 40. 0	60. 0 70. 0 62. 5 50. 0	60. 0 75. 0 62. 5 50. 0	81. 3 60. 0 75. 0 62. 5 50. 0	81. 3 60. 0 75. 0 75. 0 50. 0	48 44 48	54 48 44 54	44 54 48 44 54	44 54 48 44 54	48 48 44 50	44 44 48 44 50	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	49½ 44 44 44 44	49½ 44 44 44	44 44 44 44 44	44 44 44 44 44
	Milwaukee Minneapolis							65. 0	65. 0 55. 0	55. 0 55. 0	60, 0 55, 0	75. 0 55. 0	75. 0 55. 0	75. 0 55. 0							44	44 44	44 44	44 44	44 44	44	44 44
1	New York	22. 5	25. 0	25. 0	30.0	40. 5	40. 5	75.0	$ \begin{cases} 60.0 \\ 81.3 \\ 87.5 \end{cases} $	60. 0 81. 3 87. 5	75. 0 81. 3 87. 5	81. 3	81.3 100.0	105. 0 117. 5	} 48	44	44	44	44	48	48	{ 44 48	44 48	} 44	44	44	44
1	Newark, N.J												100.0	112.5									<b></b>			44	44
			25, 0					10.0	$\begin{cases} 100, 0 \\ 80, 0 \end{cases}$	80. 0 50. 0	100.0	70.0	70.0	80.0	54	54	48	48	48	44	44	44	44	44	44	44	44
1	Portland, Oreg	37.5	37. 5	37. 5	37. 5	50.0	62. 5	75. 0	67. 5	67.5	67. 5	67. 5	67. 5	67. 5	48	48	48	48	48	44	44	44	44	44	44	44	44
	RAISER	25. 0	25. 0	25. 0	30.0	{33. 3 40. 0		54. 0 67. 5	54. 0 67. 5		54. 0 67. 5	} 75.0	75.0	75. 0	44	44	* 44	44	44	44	44	44	44	44	44	44	44

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deral Reserve Bank of St. Louis

City

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	San Francisco Scranton Seattle	27. 8 25. 0 37. 5	31. 3 22. 5 37. 5	31. 3 30. 0 37. 5	37. 5 30. 0 43. 8	43. 8 30. 0 56. 3	62. 5 50. 0 68. 8	75. 0 58. 5 75. 0	81. 3 70. 0 75. 0	62. 5 60. 0 62. 5	62. 5 60. 0 62. 5	62. 5 70. 0 62. 5	62. 5 70. 0 62. 5	62. 5 70. 0 62. 5	54 54 44	48 54 44	48 48 44	48 48 44	48 48 44	48 48 40	48 48 44	48 48 44	44 48 44	44 48 44	44 48 44	48 48 44	48 48 44
											Са	rpente	ers														
	AtlantaBaltimoreBirminghamBostonBuffaloBuffaloB	40. 0 43. 8 52. 5 50. 0 50. 0	40. 0 43. 8 45. 0 55. 0 50. 0	40. 0 43. 8 45. 0 57. 0 50. 0	50. 0 50. 0 45. 0 60. 0 62. 5	50. 0 62. 5 55. 0 65. 0 70. 0	60. 0 80. 0 65. 0 75. 0 70. 0	80. 0 90. 0 75. 0 100. 0 100. 0	70. 0 90. 0 75. 0 100. 0 87. 5	70. 0 80. 0 75. 0 100. 0 87. 5	70. 0 90. 0 75. 0 105. 0 100. 0	80. 0 90. 0 87. 5 110. 0 112. 5	80. 0 100. 0 87. 5 110. 0 112. 5	80. 0 110. 0 95. 0 125. 0 112, 5	50 48 48 44 44 48	50 19 44 48 44 1 48	48	50 44 48 20 44 44	50 44 48 40 44	44 44 44 40 44	44 44 44 40 44	44 44 44 40 44	44 44 44 40 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44
	Charleston, S. C. Chicago Cincinnati Cleveland Dallas	33. 3 65. 0 50. 0 50. 0 55. 0	33. 3 65. 0 55. 0 55. 0 60. 0		33. 3 70. 0 62. 5 70. 0 62. 5	(37. 5 (50. 0 70. 0 65. 0 80. 0 62. 5	\\ \}70.0\\ 80.0\\ 70.0\\ 85.0\\ 87.5\\ \]	80, 0 125, 0 100, 0 125, 0 100, 0	80. 0 125. 0 100. 0 125. 0 100. 0	70. 0 110. 0 95. 0 104. 0 100. 0	70. 0 125. 0 105. 0 125. 0 100. 0	80. 0 125. 0 115. 0 125. 0 100. 0	70. 0 125. 0 125. 0 125. 0 100. 0	{ 70. 0\ 75. 0} 137. 5 131. 3 125. 0 112. 5	7 53 44 44½ 48 44	7 53 44 44½ 44 44	7 53 44 44 <sup>1</sup> / <sub>2</sub> 44 44	7 53 44 44 <sup>1</sup> / <sub>2</sub> 44 44	48 44 44½ 44 44	48 44 44 <sup>1</sup> / <sub>2</sub> 44 44	48 44 44½ 44 44	48 44 44½ 44 44	48 44 44½ 44 44	48 44 44 44 44	\begin{cases} 44 \\ 48 \\ 44 \\ 44 \\ 44 \\ 44 \end{cases} \]	44 44 44 <u>1</u> 44 44	48 44 44½ 44 44
[551]	Denver	60. 0 50. 0 42. 0 50. 0 31. 3	60. 0 44. 0 55. 0 37. 5	60. 0 50. 0 48. 0 55. 0	70. 0 60. 0 50. 0 57. 5 37. 5	75. 0 60. 0 62. 5 60. 0 {40. 0 \45. 0	87. 5 80. 0 75. 0 75. 0 }65. 0	112. 5 100. 0 100. 0 100. 0 80. 0	112. 5 85. 0 100. 0 92. 5 80. 0	100. 0 85. 0 85. 0 92. 5 80. 0	112. 5 115. 0 95. 0 92. 5 80. 0	112. 5 115. 0 95. 0 97. 5 90. 0	112. 5 115. 0 95. 0 110. 0 90. 0	112. 5 115. 0 100. 0 110. 0 100. 0	44 48 48 44 <sup>1</sup> / <sub>2</sub> 48	44 44 44 48	44 44 44 44 48	44 44 44 44 <sup>1</sup> / <sub>2</sub> 48	44 44 44 44 <sup>1</sup> 44 <sup>2</sup> 48	44 44 44 44 <sup>1</sup> / <sub>2</sub> 48	44 44 44 44 <u>1</u> 44 <u>1</u> 44	44 44 44 44 <sup>1</sup> / <sub>2</sub> 44	44 44 44 44 <u>1</u> 44 <u>1</u> 44	44 44 44 44 <sup>1</sup> / <sub>2</sub> 44	44 44 44 44 <sup>1</sup> / <sub>2</sub> 44	44 44 44 44 44	44 44 44 44 <u>1</u> 44 <u>1</u>
	Kansas City, Mo. Little Rock Los Angeles Louisville Manchester	50. 0 50. 0 45. 0	65. 0 50. 0 50. 0 45. 0 40. 0	65. 0 50. 0 50. 0 45. 0 40. 0	65. 0 60. 0 50. 0 50. 0 50. 0	65. 0 60. 0 62. 5 60. 0 60. 0	85. 0 80. 0 75. 0 60. 0 60. 0	100. 0 92. 5 87. 5 80. 0 100. 0	100. 0 80. 0 100. 0 80. 0 90. 0	100. 0 80. 0 100. 0 80. 0 90. 0	100. 0 80. 0 112. 5 100. 0 90. 0	112. 5 90. 0 112. 5 100. 0 100. 0	112. 5 90. 0 100. 0 100. 0 100. 0	112. 5 100. 0 100. 0 100. 0 100. 0	44 48 48 44 48	44 48 48 44 44	44 44 44 44 48	44 44 48 44 44	44 44 48 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44
	Memphis Milwaukee Newark, N. J. New Haven New Orleans	47.5	50. 0 50. 0 50. 0 50. 0 40. 0	50. 0 50. 0 56. 3 50. 0 40. 0	55. 0 56. 3 65. 0 55. 0 40. 0	65. 0 56. 3 70. 0 55. 0 50. 0	75. 0 70. 0 80. 0 65. 0 60. 0	100. 0 100. 0 100. 0 100. 0 75. 0	75. 0 85. 0 100. 0 100. 0 100. 0	75. 0 85. 0 112. 5 90. 0 100. 0	75. 0 95. 0 112. 5 90. 0 90. 0	87. 5 100. 0 131. 3 100. 0 90. 0	100, 0 100, 0 137, 5 100, 0 90, 0	100. 0 100. 0 140. 0 100. 0 90. 0	44 44 44 44 48	44 44 44 44 48	44 44 44 44 48	44 44 44 44 48	44 44 44 44 48	44 44 44 44 48	44 44 44 44 48	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44
	New York Omaha. Philadelphia Pittsburgh		62. 5 50. 0 55. 0 62. 5	62. 5 50. 0 55. 0 62. 5	68. 8 57. 5 60. 0 71. 0	68, 8 60, 0 70, 0 71, 0	75. 0 75. 0 80. 0 80. 0	112. 5 112. 5 112. 5 90. 0	112. 5 101. 3 112. 5 125. 0	112. 5 90. 0 90. 0 100. 0	112. 5 100. 0 112. 5 120. 0	131.3 100.0 112.5 137.5	131.3 100.0 112.5 137.5	150. 0 100. 0 125. 0 150. 0	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44

<sup>1 44</sup> hours per week, June to August, inclusive.

<sup>7</sup> Work 53 hours, paid for 54.

 <sup>10 48</sup> hours per week, September to April, inclusive.
 14 48 hours per week, October to April, inclusive.
 16 44½ hours per week, December to February, inclusive.

<sup>17 44</sup>½ hours per week, October to April, inclusive.

<sup>18</sup> Old scale; strike pending.

<sup>19 48</sup> hours per week, November to March, inclusive. 20 40 hours per week, June to September, inclusive.

# UNION SCALE OF WAGES AND HOURS OF LABOR IN SPECIFIED OCCUPATIONS, 1913 TO 1926, BY CITIES-Continued Carpenters—Continued

						Rate	s per h	our (cei	nts)										Hour	s per	week					
City	1913	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1913	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926
Portland, Oreg.	50. 0	50.0	50. 0	56. 3	75. 0	86. 0	100.0	90.0	90.0	100.0	100.0	100.0	100.0	44	44	44	44	44	44	44	44	44	44	44	44	44
Providence Richmond, Va St. Louis Salt Lake City	62. 5	50, 0 37, 5 62, 5 62, 5	50. 0 37. 5 62. 5 62. 5	50. 0 43. 8 65. 0 75. 0	60. 0 62. 5 70. 0 75. 0	70. 0 62. 5 82. 5 100. 0	100. 0 72. 5 100. 0 112. 5	100. 0 72. 5 125. 0 100. 0	85. 0 72. 5 110. 0 90. 0	90. 0 80. 0 125. 0 100. 0	100. 0 90. 0 150. 0 106. 3	110. 0 90. 0 150. 0 106. 3	110. 0 90. 0 150. 0 106. 3	44 48 44 44	44 48 44 44	44 48 44 44	44 48 44 44	44 48 44 44	44 48 44 44	44 47 44 44	44 47 44 44	44 47 44 44	44 47 44 44	44 47 44 44	44 47 44 44	44 47 44 44
San Francisco Scranton Seattle Washington	62, 5 42, 5 56, 3 50, 0	62. 5 47. 5 56. 3 55. 0	62. 5 50. 0 56. 3 55. 0	68. 8 50. 0 65. 0 62. 5	75. 0 60. 0 82. 5 62. 5	87. 5 70. 0 93. 8 87. 5	106. 3 87. 5 100. 0 95. 0	112. 5 87. 5 87. 5 105. 0	104. 4 87. 5 87. 5 105. 0	104. 4 93. 8 100. 0 112. 5	104. 4 112. 5 100. 0 112. 5	104. 4 112. 5 112. 5 112. 5	112, 5 112, 5 112, 5 112, 5 112, 5	44 48 44 44 <sup>1</sup>	44 44 44 44 <sup>1</sup> / <sub>2</sub>	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44			
			·							Cen	nent fi	nisher	8													
Atlanta Baltimore Birmingham Boston Buffalo	50. 0 62. 5 50. 0	50. 0' 62. 5 50. 0	50. 0 62. 5 62. 5 50. 0	50, 0 62, 5 62, 5 50, 0	62. 5 62. 5 70. 0 65. 0	75. 0 75. 0 75. 0 65. 0	100. 0 75. 0 100. 0 100. 0	100. 0 100. 0 100. 0 100. 0	100, 0 100, 0 100, 0 100, 0 85, 0	100. 0 125. 0 100. 0 105. 0 100. 0	100. 0 125 0 125. 0 110. 0 112. 5	100. 0 125. 0 125. 0 110. 0 112. 5	100. 0 125. 0 125. 0 137. 5 112, 5	48 48 48	48 44 48	48 48 44 48	48 48 44 44 48	44 48 44 48	44 48 44 48	44 48 44 44	44 48 44 44	44 44 48 44 44	44 44 48 44 44	44 44 48 44 44	44 44 44 44 44	44 44 44 44 44
Chicago	65, 0 50, 0 60, 0 50, 0 50, 0 68, 8	65. 0 50. 0 60. 0 55. 0 62. 5	65, 0 50, 0 }60, 0 62, 5	67. 5 55. 0 65. 0 62. 5 75. 0	75. 0 57. 5 77. 5 62. 5 75. 0	80. 0 60. 0 80. 0 87. 5 87. 5	125. 0 90. 0 90. 0 100. 0 100. 0	125. 0 90. 0 125. 0 125. 0 100. 0	110. 0 87. 5 104. 0 125. 0 100. 0	110. 0 97. 5 125. 0 125. 0 112. 5	125. 0 107. 5 125. 0 125. 0 112. 5	125. 0 117. 5 125. 0 125. 0 125. 0	137. 5 123. 8 125. 0 125. 0 125. 0	44 50. 48 48 44	44 50 21 48 48	44 50 44 48	44 50 44 48 44	44 50 44 48 44	44 50 44 48 44	44 44 <sup>1</sup> / <sub>2</sub> 44 48 44	44 44½ 44 48 44	44 44 <sup>1</sup> / <sub>2</sub> 44 48 44	44 44 <sup>1</sup> / <sub>2</sub> 44 48 44	44 44½ 44 48 44	44 44½ 44 44 44	44 44 44 48 44
Detroit Fall River Indianapolis Jacksonville Kansas City,Mo_	50. 0 50. 0	50. 0 57. 5 65. 0	50. 0 60. 0 57. 5	55. 0 65. 0 60. 0	60. 0 75. 0 62. 5	80. 0 85. 0 70. 0	125. 0 115. 0 90. 0	100. 0 115. 0 100. 0	100. 0 95. 0 90. 0 87. 5 100. 0	112. 5 110. 0 95. 0 100. 0 100. 0	150. 0 110. 0 105. 0 100. 0 125. 0	112. 5 125. 0 105. 0 125. 0 125. 0	112. 5 125. 0 105. 0 125. 0 125. 0	54	54	54 44 50	48 44 50	44 44 50	44 44 50	44 44 50	44 44 50	44 44 50 44 44	44 44 50 44 44	44 44 50 44 44	44 44 50 44 44	44 44 50 44 44
Little Rock Los Angeles Louisville Manchester Memphis	55. 6 62. 5 45. 0	55. 6 45. 0	55. 6 62. 5 45. 0 60. 0	75. 0 62. 5 60. 0	75. 0 60. 0	87. 5 70. 0 90. 0	100. 0 100. 0 80. 0 112. 5 87. 5	112. 5 112. 5 90. 0 112. 5	112. 5 112. 5 90. 0 112. 5 100. 0	112. 5 112. 5 110. 0 112. 5 100. 0	125. 0 125. 0 110. 0 150. 0 112. 5	125. 0 125. 0 110. 0 137. 5 112. 5	125. 0 125. 0 125. 0 125. 0 137. 5 112. 5	54 48 60	54	54 48 60 44			22 44 	44 44 44 44 44	44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44 44

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deral Reserve Bank of St. Louis

Minneapolis	45. 0	45. 0 50. 0 65. 0	45, 0 50. 0 70. 0 60. 0	50. 0 55. 0 75. 0 65. 0	60. 0 55. 0 75. 0 70. 0	70. 0 75. 0 87. 5 82. 5	85. 0 100. 0 125. 0 100. 0	100. 0 100. 0 125. 0 100. 0 100. 0	100. 0 100. 0 125. 0 100. 0 100. 0	100. 0 100. 0 125. 0 112. 5 100. 0	100. 0 100. 0 150. 0 125. 0 100. 0	100. 0 100. 0 150. 0 125. 0 100. 0	100. 0 100. 0 162. 5 137. 5 112. 5	48	48 48 44	48 48 44 44	48 48 44 44	44 48 44 44	44 44 44 44	44 44 44 44	44 44 44 44 45	44 44 44 44 45	44 44 44 44 45	44 44 44 44 45	44 44 44 44	44 44 44 44 44
New York Omaha Philadelphia Pittsburgh Portland, Oreg	62. 5 45. 0 62. 5	62. 5 62. 5 50. 0 50. 0 62. 5	62. 5 62. 5 50. 0 50. 0 62. 5	70. 0 62. 5 55. 0 56. 3 62. 5	70. 0 62. 5 65. 0 75. 0 87. 5	75. 0 75. 0 72. 5 75. 0 87. 5	112. 5 112. 5 100. 0 82. 5 100. 0	112. 5 100. 0 100. 0 112. 5 90. 0	112. 5 100. 0 100. 0 87. 5 90. 0	112. 5 100. 0 112. 5 112. 5 100. 0	131. 3 112. 5 112. 5 125. 0 102. 5	131. 3 112. 5 112. 5 125. 0 112. 5	150. 0 112. 5 125. 0 135. 0 112. 5	44 49½ 48	44 44 44 48 48	44 44 44 44 48	44 44 44 44 44	44 44 44 44 40								
Providence	60. 0 50. 0	50. 0 60. 0 55. 0	62. 5 62. 5 65. 0 60. 0	62. 5 62. 5 65. 0 60. 0	62. 5 }75. 0 60. 0	80. 0 82. 5 75. 0	100. 0 125. 0 100. 0	100. 0 125. 0 100. 0	87. 5 100. 0 80. 0	100. 0 125. 0 100. 0	115. 0 150. 0 100. 0	125. 0 150. 0 100. 0	115. 0 150. 0 100. 0	44 48	44 44 48	44 44 48	44 44 48	44 44 48	44 44 44	44 44						
San Francisco Scranton Seattle Washington	75. 0 62. 5		75. 0 62. 5 62. 5	75. 0 68. 8 70. 0		100. 0 100. 0 87. 5	112. 5 112. 5 90. 0	112. 5 112. 5 100. 0	104. 4 100. 0 100. 0	112. 5 125. 0 100. 0 112. 5	112. 5 150. 0 112. 5 112. 5	112. 5 150. 0 112. 5 112. 5	112. 5 150. 0 112. 5 112. 5	44	44	44 48 44	44 	44 48 44	44 	44  40 44	44  40 44	44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44

Co	mposi	tors:	Book	and	job

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Boston	34. 4 37. 5 40. 6 41. 7 39. 6	37. 5 37. 5 40. 6 43. 8 41. 7	40.6	37. 5 43. 8 44. 8 45. 8 43. 8	37. 5 43. 8 44. 8 50. 0 45. 8	43. 8 54. 2 44. 8 55. 2 59. 4	57. 5 81. 3 76. 0 72. 9 71. 9	75. 0 83. 3 80. 0 87. 0 83. 3	80. 0 83. 3 80. 0 87. 0 90. 9	80. 0 90. 9 80. 0 87. 0 90. 9	80. 0 90. 9 80. 0 92. 0 90. 9	80. 0 90. 9 80. 0 92. 0 90. 9	80. 0 90. 9 92. 5 92. 0 100. 0	48 48 48 48 48	48 48 48 48 48	48 48 44 48 48	48 48 48 48 48	48 48 48 48 48	48 48 48 48 48	48 48 48 48 48	48 48 44 44 48	44 48 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44
Charleston, S. C. Chicago Cincinnati Cleveland Dallas	33. 3 46. 9 40. 6 39. 6 52. 1	33. 3 50. 0 43. 8 41. 7 52. 1		37. 5 50. 0 46. 9 43. 8 52. 1	37. 5 57. 3 46. 9 50. 0 57. 3	37. 5 75. 0 51. 0 62. 5 70. 8	37. 5 95. 8 75. 0 87. 5 88. 5	98. 9 106. 0 104. 5 93. 8 100. 0	98, 9 106, 0 104, 5 93, 8 93, 2	90, 9 110, 0 104, 5 93, 8 93, 2	84. 1 115. 9 109. 1 100. 0 93. 2	90. 9 115. 9 109. 1 104. 5 93. 2	84. 1 115. 9 109. 1 106. 8 93. 2	48 48 48 48 48	44 44 44 48 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44	44 44 44 44 44	44 44 44 44 44						
Denver Detroit Fall River Indianapolis Jacksonville	54. 2 38. 5 33. 3 43. 8 37. 5	33. 3	54. 2 45. 8 35. 4 45. 8 43. 8	37. 5	59. 4 54. 7 39. 6 52. 1 43. 8	65. 6 72. 9 41. 7 54. 2 52. 1	81. 3 92. 7 62. 5 75. 0 75. 0	81. 3 96. 9 72. 7 100. 0 81. 8	95. 5 105. 0 72. 7 92. 7 81. 8	95. 5 105. 0 72. 7 95. 5 81. 8	95, 5 105, 0 81, 8 95, 5 81, 8	102. 3 105. 0 81. 8 98. 0 81. 8	102. 3 110. 0 81. 8 100. 0 98. 9	48 48 48 48 48	48 48 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44						
Los Angeles	37. 5 46. 9 35. 4	35. 4	50.0	45. 8 43. 8 50. 0 37. 5 47. 1	50. 0 43. 8 52. 1 39. 6 48. 1	54. 2 43. 8 58. 3 41. 7 55. 4	72. 9 72. 9 75. 0 66. 7 93. 8	84. 4 72. 9 95. 5 77. 3 93. 8	84. 4 70. 0 95. 5 79. 5 82. 3	88. 6 70. 0 95. 5 79. 5 82. 3	92. 0 70. 0 102. 3 79. 5 82. 3	94. 3 85. 2 102. 3 79. 5 80. 0	96. 6 96. 6 102. 3 79. 5 80. 0	48 48 48 48 48	48 48 44 44 48	48 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44						

21 44 hours per week, June to September, inclusive.

22 48 hours per week, October to March, inclusive.

MONTHLY LABOR REVIEW

City						Rate	s per h	our (cer	nts)										Hour	s per	week					
City	1913	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1913	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926
Milwaukee Minneapolis Newark, N. J New Haven New Orleans	41. 7 43. 8 47. 9 40. 6 43. 8	45. 8 43. 8 47. 9 40. 6 43. 8	45. 8 43. 8 50. 0 40. 6 43. 8	47. 9 45. 8 50. 0 40. 6 43. 8	47. 9 45. 8 56. 3 44. 8 43. 8	54. 2 54. 0 72. 9 45. 8 50. 0	72. 9 87. 5 91. 7 58. 3 71. 9	85. 4 87. 5 111. 4 58. 3 71. 9	93. 2 95. 5 102. 3 86. 4 78. 4	93. 2 95. 5 109. 1 86. 4 78. 4	93. 2 95. 5 115. 9 86. 4 78. 4	93. 2 95. 5 115. 9 86. 4 78. 4	95. 5 95. 5 118. 2 86. 4 78. 4	48 48 48 48 48	48 48 48 48 48	48 48 48 48 48	48 48 48 48 48	48 43 48 48 48	48 48 48 48 48	48 48 48 48 48	48 48 44 48 48	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44
	50. 0 37. 5 39. 6 39. 6 53. 1	50. 0 43. 8 41. 7 41. 7 53. 1	52. 1 45. 8 41. 7 43. 8 53. 1	52, 1 46, 9 43, 8 43, 8 53, 5	58. 3 53. 1 50. 0 47. 9 59. 4	75. 0 68. 8 60. 4 60. 4 75. 0	93. 8 87. 5 89. 6 81. 3 85. 4	113. 6 93. 2 89. 6 100. 0 95. 8	113. 6 93. 2 89. 6 100. 0 95. 8	113. 6 93. 2 89. 6 100. 0 90. 9	120. 5 93. 2 89. 6 100. 0 90. 9	120. 5 93. 2 90. 0 100. 0 102. 3	122. 7 93. 2 90. 0 100. 0 102. 3	48 48 48 48 48	44 44 48 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44						
	37. 5 43. 8 43. 8 50. 0	37. 5 43. 8 43. 8 52. 1	37. 5 45. 8 43. 8 54. 2	37. 5 47. 9 45. 8 54. 2	45. 8 52. 7 45. 8 54. 2	50. 0 52. 7 54. 0 62. 5	72. 9 79. 2 83. 3 75. 0	72. 9 92. 8 87. 5 75. 0	79. 5 92. 8 95. 5 75. 0	79. 5 92. 8 90. 9	90. 9 98. 0 95. 5 93. 2	9.0. 9 98. 0 95. 5 93. 2	90. 9 98. 0 95. 5 93. 2	48 48 48 48	48 44 48 48	44 44 44 48	44 44 44	44 44 44 44	44 44 44 44	44 44 44 44						
ScrantonSeattle	50. 0 43. 8 53. 1 40. 0	50. 0 43. 8 53. 1 40. 0	43. 8 53. 1	54. 2 47. 9 56. 3 47. 9	58. 3 47. 9 59. 4 50. 0	62. 5 52. 1 75. 0 62. 5	81. 3 71. 9 87. 5 83. 3	104. 5 77. 1 93. 8 90. 9	104. 5 85. 2 93. 8 90. 9	104. 5 90. 9 93. 8 90. 9	104. 5 90. 9 93. 8 90. 9	115. 9 100. 0 93. 8 90. 9	115. 9 100. 0 93. 8 90. 9	48 48 48 48	48 48 48 48	48 48 48 48	48 48 48 24 48	48 48 48 24 48	48 48 48 24 48	48 48 48 24 48	44 48 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44

# Compositors, day work: Newspaper

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Baltimore Birmingham Boston	50, 0 52, 5 63, 0	59. 5 54. 5	59. 5 55. 5 63. 0	61. 9 56. 5 68. 0	50. 0 61. 9 57. 5 68. 0 59. 4	65. 5 67. 5 83. 0	93. 3 67. 5 95. 0	67. 5	95. 5 82. 5 107. 0	95. 5 82. 5 107. 0		106. 8 82. 5 117. 0		42 25 42 26 42	26 42	25 42 26 42	42 25 42 26 42	25 42 26 42								48 44 25 42 25 44 48
Cincinnati	62. 0 52. 1 53. 8	62. 0 56. 3 53. 8	62. 0 56. 3 53. 8	62. 0 56. 3 62. 5	42. 9 66. 0 56. 3 62. 5 62. 5	79. 0 87. 5 68. 8	89. 0 107. 3 87. 5	115.0 107.3	115. 0 107. 3 96. 9	115. 0 113. 3 103. 1	129.0	129. 0 113. 8 107. 3	129. 0 113. 8 116. 7	27 45 28 47 <sup>2</sup> 48	27 45 48	27 45 48	48 48	25 42 25 45 48 48 48	25 42 25 45 48 48 48 48	25 42 25 45 45 48 48	48 48 45 48 48	48 48 45 48 48	48 48 45 48 48	48 45 45 48 48	48 45 45 48 48	48 45 45 45 48

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555]	St. Paul Salt Lake City San Francisco Scranton Seattle Washington Atlanta Baltimore Birmingham Boston	54. 5 62. 5 64. 4 47. 9 75. 0 60. 7	54, 5 62, 5 69, 0 47, 9 75, 0 60, 7	54. 5 62. 5 69. 0 47. 9 75. 0 60. 7	54. 5 62. 5 69. 0 52. 1 78. 6 60. 7	54. 5 62. 5 68. 9 52. 1 78. 6 69. 8	71. 9 75. 6 60. 4 100. 0 92. 9	87. 5 87. 5 93. 3 81. 3 114. 3 104. 0 88. 5 81. 3 72. 9 78. 1	96. 6 81. 3 99. 8 99. 8	88. 8 96. 9 107. 8 87. 5 114. 3 104. 0	88. 8 96. 9 107. 8 95. 8 114. 3 104. 0	93. 8 96. 9 107. 8 95. 8 121. 4 110. 0 pers:	101. 3 104. 3 115. 6 104. 2 121. 4 110. 0	101. 3 104. 3 115. 6 110. 4 121. 4 128. 6 102. 3 87. 5 102. 3	48 48 45 48 42 42 42 42 42 48 48 48 48 48	48 48 42 48 42 42 42 42 42 48 48 48 48 48 48	48 48 42 48 42 42 42 42 42	30 48 48 42 48 42 42 42 42 42 48 48 48 48 48 48 48	30 48 48 45 48 42 42 42 42 42	30 48 48 45 48 42 42 42 42	30 48 48 45 48 42 42 42 42	30 48 48 45 48 42 42 42 42	30 48 48 45 48 42 42 42	30 48 48 45 48 42 42 42	30 48 48 45 48 42 42 42 42	30 48 46 45 48 42 42	30 48 46 45 48 42 42 42 42
[5]	Omaha Philadelphia Pittsburgh Portland, Oreg Providence Richmond, Va St. Louis St. Paul	55. 0 68. 3 47. 9 33. 3 58. 7	53.1 41.7 60.0 68.3 50.0 37.5 58.7	37. 5 58. 7	53. 1 41. 7 61. 0 68. 3 50. 0 37. 5 63. 4	53. 1 50. 0 65. 0 72. 7 52. 1 45. 8 63. 4	68. 8 66. 7 77. 0 100. 0 66. 7 45. 8 63. 4	87. 5 81. 3 87. 5 106. 7 87. 5 58. 3 91. 3	87. 5 79. 2 111. 8 106. 7 100. 0 87. 5 91. 3	87. 5 79. 2 111. 8 106. 7 95. 8 87. 5 91. 3	87. 5 79. 2 118. 9 106. 7 95. 8 87. 5 91. 3	90. 6 87. 5 121. 1 106. 7 104. 2 87. 5 102. 2	90. 6 87. 5 121. 1 106. 7 104. 2 87. 5 106. 5	90. 6 87. 5 125. 6 106. 7 104. 2 94. 8 110. 9	45 48 48 46	45 48 48 46	45 48 48 46	45 48 48 46	48 48 25 45 45 48 48 46	48 48 25 45 45 48 48 46	48 48 48 45 48 48 46	48 48 46 45 48 48 46	48 48 46½ 45 48 48 46	45 48 48 46	48 48 45 45 48 48 46	48 48 45 45 48 48 46	48 48 45 45 48 48 46
	Minneapolis Newark, N. J New Haven	45. 8 54. 0 60. 9 46. 9 66. 7	50. 0 54. 0 60. 9 47. 9 66. 7	50. 0 54. 0 60. 9 47. 9 66. 7	54. 2 54. 0 63. 0 50. 0 66. 7	56. 3 54. 0 69. 6 50. 0 71. 1	56. 3 62. 5 76. 1 50. 0 96. 7	77. 1 87. 5 89. 1 72. 9 122. 2	93. 8 93. 8 110. 9 79. 2 122. 2	93. 8 88. 5 110. 9 79. 2 122. 2	93. 8 88. 5 110. 9 79. 2 122. 2	97. 9 97. 9 110. 9 85. 4 128. 9	102. 5 98. 0 119. 6 85. 4 133. 3	102. 5 98. 0 121. 7 87. 5 133. 3	48 48 46 48 45	48 48 46 48 45	48 48 46 48 45	48 48 46 48 45	48 48 46 48 45	48 48 46 48 45	48 48 46 48 45	48 48 46 48 45	48 48 46 48 45	48 48 46 48 45	48 48 46 48 45	48 48 46 48 45	48 48 46 48 45
	Louisville	47. 9 49. 0 35. 4	59. 4 50. 0 50. 0 35. 4 57. 8	59. 4 50. 0 50. 0 35. 4 57. 8	59. 4 52. 1 54. 2 37. 5 57. 8	59. 4 52. 1 54. 2 39. 6 60. 0	68. 8 62. 5 62. 5 41. 7 66. 7	90. 6 72. 9 87. 5 66. 7 86. 7	90. 6 83. 3 82. 9 70. 8 92. 8	90. 6 83. 3 87. 5 72. 9 88. 9	90. 6 83. 3 87. 5 72. 9 93. 3	90. 6 83. 3 93. 8 80. 2 93. 3	95. 8 84. 4 93. 8 82. 3 83. 3	102. 1 84. 4 93. 8 83. 3 93. 3	48 48 48 48 45	48 48 48 48 45	48 48 48 48 45	48 48 48 48 45	48 48 48 48 25 45	48 48 48 48 25 45	48 48 48 48 48 25 45	48 48 48 48 25 45	48 48 48 48 25 45	48 48 48 48 25 45	48 48 48 48 25 45	48 48 48 48 48	48 48 48 48 45
		55. 0 37. 5 50. 0	63. 3 55. 0 43. 8 50. 0 46. 9	63. 3 55. 0 43. 8 50. 0 46. 9	63. 3 60. 5 44. 8 56. 3 52. 1	72. 7 60. 5 45. 8 56. 3 52. 1	72. 7 74. 5 49. 0 60. 4 65. 6	97.8 87.0 75.0 81.3 83.3	97. 8 97. 0 79. 2 93. 8 83. 3	93. 3 97. 0 79. 2 89. 6 83. 3	93. 3 97. 0 79. 2 100. 0 83. 3	103. 3 113. 0 87. 5 100. 0 83. 3	103. 3 113. 0 87. 5 100. 0 89. 6	103. 3 120. 0 87. 5 104. 2 100. 0	45 48 48 48 48	45 48 48 48 48	45 48 48 48 48	45 29 48 48 48 48 48	45 29 48 48 48 48	45 29 48 48 48 48 48	45 29 48 48 48 48 48	45 29 48 48 48 48 48	45 48 48 48 48	45 48 48 48 48	45 48 48 48 48	45 48 48 48 48	45 30 48 48 48 48

<sup>At hours per week for 3 months, between June 1 and Sept. 30.
Minimum; maximum, 8 hours per day.
Actual hours worked, minimum, 6; maximum, 8 hours per day.
Actual hours worked, minimum, 7; maximum, 8 hours per day.</sup> 

<sup>Work at 47\( \) hours, paid for 48.
Maximum; minimum, 7 hours per day.
Maximum; minimum, 45 hours per week.</sup> 

MONTHLY LABOR REVIEW

## Electrotypers: Finishers—Continued

Cita						Rate	s per h	our (cer	ats)										Hour	rs per	week					
City	1913	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1913	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926
Detroit		47. 9 45. 8 46. 9 50. 0	52. 1 47. 9 46. 9 56. 3	52, 1 50, 0 50, 0 56, 3	56. 3 50. 0 50. 0 56. 3	56. 3 63. 6 62. 5 70. 8	93. 8 63. 6 90. 6 86. 4	102. 3 63. 6 89. 6 86. 4	102. 3 85. 2 89. 6 36. 4	107. 5 31100.0 89. 6 102. 3	113. 6 95. 5 100. 0 102. 3	113.6 95.5 104.5 102.3 73.9	113. 6 95. 5 104. 5 102. 3 102. 3	48 48 48 48	48 48 48 48	48 44 48 48	48 44 48 48	48 44 48 48	48 44 48 48	48 44 48 44	44 44 48 44	44 44 48 44	46½ 44 48 44	44 44 46 44	44 44 44 44 44	44
Memphis Milwaukee Minneapolis Newark, N. J New Haven	43. 8 36. 1		45, 8 43, 8 45, 8	45. 8 50. 0 50. 0	45. 8 50. 0 50. 0	62. 5 56. 3 59. 4 75. 0 46. 7	62. 5 75. 0 81. 3 109. 1 62. 5	68. 2 81. 3 91. 7 134. 1 75. 0	81. 3 91. 7 134. 1 75. 0	81.3 87.5 134.1 79.5	93. 8 95. 8 140. 9 79. 5	100. 0 93. 8 95. 8 140. 9 79. 5	102. 3 93. 8 95. 8 140. 9 79. 5	48 48 54 	48 48 48 	48 48 48 54	48 48 48	48 48 48 53½	48 48 48 44 53½	48 48 48 44 48	44 48 48 44 48	48 48 44 44 48	48 48 44 48	48 48 44 48	44 48 48 44 48	44 48 48 44 44
New Orleans New York Omaha Philadelphia Pittsburgh	43.8	65. 6 43. 8 47. 9 43. 8	40. 0 68. 8 43. 8 50. 0 43. 8	40. 0 68. 8 52. 1 52. 1 45. 8	40. 0 68. 8 52. 1 64. 2 45. 8	55. 0 75. 0 66. 7 70. 0 45. 8	88. 9 109. 1 113. 6 103. 1 85. 4	90. 9 134. 1 <sup>32</sup> 102.3 113. 6 79. 2	90. 9 134. 1 32102.3 113. 6 79. 2	134. 1 33 97. 7 125. 0 87. 5	140. 9 102. 3 125. 0 91. 7	90. 9 140. 9 102. 3 114. 6 91. 7	102.3 140.9 102.3 114.6 91.7	44 48 48 48	44 48 48 48	45 44 48 48 48	25 45 44 48 48 48	25 45 44 48 48 48	25 45 44 48 48 48	25 45 44 44 48 48	44 44 44 44 48	44 44 44 44 48	44 44 44 48	44 44 44 48	44 44 44 48 48	4 4 4 4 4
Portland, Oreg. Richmond, Va. St. Louis St. Paul.	45.8	50. 0 46. 3 45. 8 43. 8	50. 0 46. 3 45. 8 45. 8	56. 3 52. 1 47. 9 50. 0	56. 3 57. 3 55. 0 50. 0	90. 9 60. 4 55. 0 59. 4	104. 5 78. 1 85. 4 81. 3	104. 5 93. 8 89. 6 91. 7	104. 5 93. 8 89. 6 91. 7	104. 5 104. 2 93. 8 87. 5	111. 4 104. 2 102. 2 95. 8	114. 8 104. 2 109. 1 95. 8	114. 8 104. 2 111. 4 95. 8	48 48 48	48 54 48 48	48 54 48 48	48 48 48 48	48 48 48 48	44 48 48 48	44 48 48 48	44 48 48 48	44 48 48 48	44 48 48 48	44 48 46½ 48	44 48 44 48	4 4 4 4
San Francisco Scranton Seattle Washington	41.7	56. 3 41. 7 52. 1 52. 1	56.3 41.7 52.1 54.2	56. 3 43. 8 52. 1 56. 3	62. 5 43. 8 66. 7 58. 3	62. 5 50. 0 77. 8 58. 3	79. 2 75. 0 104. 5 93. 8	113. 6 90. 9 104. 5 102. 3	113. 6 90. 9 104. 5 90. 9	113. 6 90. 9	113. 6 97. 7 113. 6 102. 3	125. 0 97. 7 118. 2 102. 3	125. 0 102. 3 118. 2 113. 6	48 48 48 44	48 48 48 48	48 48 48 48	48 48 48 48	48 48 45 48	48 48 45 48	48 48 44 48	44 44 44 44	44 44 44 44	44 44 	44 44 44 44	44 44 44 44	4 4 4 4

## Electrotypers: Molders

Baltimore Birmingham Boston	43. 8 50. 0 50. 0	50. 0 50. 0 50. 0	50. 0 56. 3 50. 0	52. 1 50. 0 50. 0	52. 1 50. 0 52. 5	54. 2 50. 0 52. 5	83.3 72.9 78.1	83.3 89.8 90.6	89. 8 90. 6	96. 6 99. 0	96. 6 99. 0	87. 5 96. 6 99. 0	102.3 87.5 102.3 99.0 87.5	48 48 48	48 44 48	44	48	44 48	48	48 44 48						
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	Chicago Cincinnati Cleveland Dallas Denver	54. 2 47. 9 43. 8 43. 8 52. 1	56.3 50.0 52.1 41.7 52.1	56. 3 50. 0 52. 1 41. 7 52. 1	60. 4 50. 0 52. 1 41. 7 54. 2	60. 4 52. 1 56. 3 43. 8 54. 2	77. 1 52. 1 60. 4 65. 6 60. 4	104. 2 70. 8 83. 3 72. 9 69. 8	113. 7 87. 5 83. 3 72. 9 79. 5	108. 0 95. 5 75. 0	129, 5 85, 4 83, 3 79, 5	134. 1 89. 6 93. 8	138. 6 91. 7 93. 8 113. 6 90. 9	140. 9 91. 7 93. 8 113. 6 90. 9	48 48 48 48 48	48 48 48 48 48	48 48 48 48 48	48 48 48 48 48	48 48 48 48 48	48 48 48 48 48	48 48 48 48 48	44 48 48 48 44	44 44 48	44   48   48	44 48 48	44 48 48 44 44	44 48 48 44 44
	Detroit		47. 9 47. 9 46. 9 50. 0	52. 1 50. 1 46. 9 50. 0	52. 1 52. 3 50. 0 56. 3	56. 3 52. 3 50. 0 56. 3	56. 3 65. 9 62. 5 70. 8	93. 8 65. 9 90. 6 86. 4	102. 3 65. 9 95. 8 86. 4	102.3 85.2 95.8 86.4	107. 5 100. 0 95. 8 102. 3	113. 6 95. 5 100. 0 102. 3	113. 6 95. 5 104. 5 102. 3 73. 9	113.6 95.5 104.5 102.3 102.3	48 48 48 48	48 48 48 48	48 44 48 48	48 44 48 48	48 44 48 48	48 44 48 48	48 44 48 44	44 44 48 44	44 44 48 44	46½ 44 48 44	44 44 46 44	44 44 44 44 44	44 44 44 44 44
	Memphis Milwaukee Minneapolis Newark, N. J New Haven	45. 8 43. 8 36. 1	45. 8 43. 8 50. 0	45. 8 43. 8 52. 1 40. 7	45. 8 50. 0 56. 3	45. 8 50. 0 56. 3	62. 5 56. 3 59. 4 75. 0 46. 7	62. 5 75. 0 81. 3 109. 1 62. 5	68. 2 81. 3 91. 7 134. 1 75. 0	81. 3 91. 7 134. 1 75. 0	81. 3 87. 5 134. 1 79. 5	93. 8 95. 8 140. 9 79. 5	100. 0 93. 8 95. 8 140. 9 79. 5	102. 3 93. 8 95. 8 140. 9 79. 5	48 48 54	48 48 48 	48 48 48 54	48 48 48 53½	48 48 48 	48 48 48 44 53½	48 48 48 44 48	44 48 48 44 48	48 48 44 48	48 48 44 48	48 44 44 48	44 48 48 44 48	44 48 48 44 43
	New Orleans New York Omaha Philadelphia Pittsburgh	62. 5 43. 8 45. 8 50. 0	65, 6 43, 8 52, 1 50, 0	68. 8 43. 8 54. 2 50. 0	40. 0 68. 8 52. 1 56. 3 52. 1	40. 0 68. 8 52. 1 64. 2 53. 1	55. 0 75. 0 66. 7 70. 0 53. 1	88. 9 109. 0 113. 6 113. 1 87. 5	90. 9 134. 1 102. 3 113. 6 87. 5	90. 9 134. 1 102. 3 113. 6 79. 2	134. 1 102. 3 125. 0 87. 5	140. 9 102. 3 125. 0 91. 7	90. 9 140. 9 102. 3 114. 6 91. 7	102. 3 140. 9 102. 3 114. 6 91. 7	44 48 48 48	44 48 48 48	44 48 48 48	45 44 48 48 48	25 45 44 48 48 48	25 45 44 48 48 48	25 45 44 44 44 48	25 45 44 44 44 48	44 44 44 44 48	44 44 44 48	44 44 44 44 48	44 44 44 48 48	44 44 44 48 48
[557]	Portland, Oreg_Richmond, Va_St. LouisSt. Paul	50. 0 47. 9 50. 0	50. 0 46. 3 47. 9 50. 0	50. 0 46. 3 47. 9 52. 1	56. 3 52. 1 50. 0 56. 3	56. 3 57. 3 57. 3 56. 3	90. 9 60. 4 57. 3 59. 4	104. 5 78. 1 85. 4 81. 3	104. 5 93. 8 89. 6 91. 7	104. 5 93. 8 89. 6 91. 7	104. 5 104. 2 93. 8 87. 5	111. 4 104. 2 102. 2 95. 8	114. 8 104. 2 109. 1 95. 8	114. 8 104. 2 111. 4 95. 8	48 48 48	48 54 48 48	48 54 48 48	48 48 48 48	48 48 48 48	48 48 48 48	44 48 48 48	44 48 48 48	44 48 48 48	44 48 48 48	44 48 46½ 48	44 48 44 48	44 48 44 48
	San Francisco Scranton Seattle Washington	56. 3 47. 9 52. 1 50. 0	56. 3 47. 9 52. 1 52. 1	56. 3 47. 9 52. 1 54. 2	56. 3 50. 0 52. 1 56. 3	62. 5 50. 0 66. 7 58. 3	62. 5 56. 3 77. 8 58. 3	79. 2 75. 0 104. 5 93. 8	113. 6 90. 9 104. 5 102. 3	113. 6 90. 9 104. 5 90. 9	113. 6 90. 9 90. 9	113. 6 97. 7 113. 6 102. 3	125. 0 97. 7 118. 2 102. 3	125. 0 102. 3 118. 2 113. 6	48 48 48 44	48 48 48 48	48 48 48 48	48 48 48 48	48 48 45 48	48 48 45 48	48 48 44 48	44 44 44 44	44 44 44 44	44 44 44	44 44 44 44	44 44 44 44	44 44 44 44

#### Granite cutters, inside

	45.6 43.8	45. 6 50. 0	50. 0 52. 1	50.0 53.1	60.0	75. 0 75. 0	100. 0 100. 0	100.0	100.0	100 0	100.0 100 0		110. 0 106. 3	44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 40	44 44 44 40	44 44 44 44	44 44 34 44 44	44 44 34 44 44
Cleveland Dallas	50.0	50. 0 50. 0 57. 0	50. 0 50. 0 57. 0	50. 0 50. 0 57. 0	62. 5 62. 5 68. 8	81.3 81.3 85.0	100. 0 100. 0 100. 0	100.0	100. 0 100. 0 106. 3	106.3 100.0 106.3	100. 0 106. 3	115.6	115.6 106.3 112.5	44	44 44 44 44 44 <sub>2</sub>	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	40 40 44 44 44	44 44 44 44 44	34 44 34 44 44 44 44	34 44 34 44 44 44 44	34 44 34 44 34 44 44 44

<sup>Minimum; maximum, 8 hours per day.
Including bonus of \$6.50 per week.
Including bonus of \$7 per week.</sup> 

Nominal rate. All received more; \$45 to \$60 per week.
34 40 hours per week, November to March, inclusive.

# UNION SCALE OF WAGES AND HOURS OF LABOR IN SPECIFIED OCCUPATIONS, 1913 TO 1926, BY CITIES—Continued Granite cutters, inside—Continued

City						Rate	es per h	iour (ce	nts)										Hour	s per	week					
City	1913	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1913	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926
Fall River KansasCity,Mo_	43.0	43.0	50.0	50.0	62.5	75. 0	100.0	100.0	100.0	100.0	100.0	100.0	100. 0 106. 3	45	45	44	44	44	44	44	44	44	44	44	44	44
Louisville Manchester	45.0 40.6	47.5 40.6	50.0 50.0	50. 0 50. 0	60. 0 50. 0	75. 0 72. 5	100.0 100.0	100.0	100.0	100.0	100.0	100.0	100. 0	45 44	45 44	44 44	44 44	44 44	44 44	44 44	44 44	· 44 44	44 44	44 44	44 44 44	44 44 44
Newark, N. J New Haven New Orleans New York Philadelphia	45. 0 50. 0	50. 0 45. 5 45. 0 50. 0 56. 3	50. 0 50. 0 50. 0 50. 0 56. 3	50. 0 50. 0 50. 0 50. 0 56. 3	62. 5 60. 0 50. 0 68. 8 65. 0	79. 0 72. 5 75. 0 79. 0 80. 0	100. 0 87. 5 80. 0 100. 0 100. 0	112, 5 100, 0 100, 0 112, 5 100, 0	112. 5 100. 0 100. 0 112. 5 100. 0	112. 5 100. 0 100. 0 112. 5 112. 5	112, 5 100, 0 100, 0 112, 5 112, 5	112. 5 112. 5 100. 0 112. 5 112. 5	137. 5 112. 5 100. 0 137. 5 (a)	44 44 45 44 44	44 44 45 44 44	44 44 44 44 44	40 44 44 44 (a)									
Pittsburgh Providence Richmond, Va St. Louis	50. 0 40. 6 43. 8 50. 0	50. 0 40. 6 45. 0 50. 0	53. 1 50. 0 50. 0 50. 0	54.4 50.0 50.0 50.0	62. 5 60. 0 50. 0 60. 0	81.3 70.0 70.0 75.0	100. 0 70. 0 82. 5 100. 0	106.3 100.0 100.0 100.0	100. 0 100. 0 100. 0 100. 0	112. 5 100. 0 100. 0 100. 0	112. 5 100. 0 100. 0 112. 5	112. 5 100. 0 100. 0 112. 5	112. 5 110. 0 112. 5 112. 5	44 44 44 44	44	44 35 44 44 37 44	44 36 44 44 44	44 44 44 44								
Salt Lake City San Francisco Seattle Washington	62. 5 62. 5	62. 5 62. 5 62. 5 45. 0	62. 5 66. 3 62. 5 50. 0	62. 5 67. 5 62. 5 50. 0	75. 0 70. 0 75. 0 62. 5	81.3 87.5 87.5 87.5	100. 0 100. 0 100. 0 100. 0	100. 0 112. 5 112. 5 100. 0	112. 5 112. 5 112. 5 100. 0	112. 5 112. 5 112. 5 112. 5	112. 5 112. 5 112. 5 112. 5 112. 5	112. 5 112. 5 112. 5 112. 5	112. 5 118. 8 112. 5 125. 0	44 44 44 44	44 44 40 44	44 44 40 44	44 44 40 44	44 44 40 44	44 44 36 44 44	44 44 44 44						
•										Hoe	d carri	iers		1	1	1 1										
Baltimore Boston Chicago	31, 3 35, 0 40, 0	34. 4 35. 0 40. 0	34, 4 35, 0 42, 5	40. 0 40. 0 45. 0	56. 3 42. 5 50. 0	75. 0 50. 0 57. 5	87. 5 70. 0 100, 0	87. 5 70. 0 100. 0	75. 0 70. 0 72. 5	87. 5 18 70. 0 72. 5	100. 0 70. 0 72. 5	100. 0 70. 0 82. 5	100. 0 79. 0 87. 5	38 45 44 44	38 45 44 44	38 45 44 44	44 44 44									
Cincinnati	42.5	42.5	42.5	{42.5 45.0	}50.0	\$65.0 \57.5	} 85.0	85. 0	72.5	82.5	90.0	92. 5	95.0	45	45	45	45	45	45	45	45	45	45	45	45	45
Cleveland	31.3	(31. 3 135. 0	31. 3 35. 0	40. 0 45. 0	\$55.0	57.5	87. 5	87. 5	60.0	87.5	87, 5	87, 5	87. 5	48	10 44	10 44	44	44	44	44	44	44	44	44	44	44
Dallas	\$25.0 28.1	35.0			35. 0	35, 0	50.0	75.0				62. 5	62.5	44	44			48	48	44	44				44	44
Dontton	[37. 5	37.5	37. 5 40, 6	43.8	53. 1 56. 3	105 0	{ 75. 0   78. 1	75. 0 78. 1	75. 0 79. 1	75. 0 78. 1	81.3	81.3	81.3 84.4	} 44	44	44	44	44	44	44	44	44	44	44	44	44

]	Detroit	35, 0	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	35. 0 40. 0	40.0	<b>30.0</b>	65. 0	100.0	75.0	75. 0	75.0	75.0	75. 0	75. 0	48	491	491	44	13 44	44	44	44	44	491	493	44	44
	Indianapolis KansasCity,Mo.	{40. 0 42. 5 37. 5	40. 0 42, 5 45, 0	40.0 42.5 45.0	42. 5 45. 0 47. 5	47. 5 50. 0 50. 0	}55. 0 62. 5	{ 72. 5 75. 0 90. 0	67. 5 70. 0 90. 0	67. 5 70. 0 80. 0	72, 5 75, 0 90, 0	82. 5 87. 5 90. 0	82. 5 90. 0	82. 5 90. 0	44 44	44	44 44	44 44	44 44	44	44	44 44	44	44	44	44	44 44
	Louisville	{35. 0 (38. 0 30. 0	35. 0 38. 0 30. 0	35. 0 38. 0 30. 0		45. 0 50. 0	50. 0 50. 0	55, 0 75, 0	80. 0 62. 5	80. 0 62. 5	85. 0 62. 5	85. 0 75. 0	90. 0 62. 5	90. 0 62. 5	48	44	44	44	50	50	44	44	44	44	44	44	44
1	Newark, N. J New Haven New York	35. 0 28. 0 37. 5	35. 0	37. 5	45. 0	45. 0	50.0	87. 5	87. 5 87. 5	75. 0	87. 5 65. 0	100. 0 65. 0	100. 0 65. 0	112. 5 67. 5	44 44 44	44 44	44	44 44	44	44 44	44	44	44 44	44 44 44	44 44 44	44 44 44	44 44 44
	Philadelphia	35.0		(25.0	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	60. 0		100.0	85. 0	85. 0	100. 0	70. 0	100. 0	112. 5	44	44	44	44	44	44	44	44	44	44	44	44	44
	Pittsburgh Portland, Oreg	(40.0	25. 0 40. 0 50. 0	30. 0 45. 0 50. 0	45.0	45. 0 55. 0 62. 5	}60. 0 75. 0	90. 0 93. 8	100. 0	80. 0 90. 0	100. 0 100. 0	100. 0	100. 0	112, 5 100, 0	{ 44 49 48	} 44 48	44	44 48	44 48	44	44	44	44	44	44	44	44
		\$42, 5 \$45. 0	47. 5 50. 0	47. 5 50. 0	47. 5 50. 0	46. 9 55. 0	62, 5 65, 0	} 70.0	85. 0	85. 0	100.0	115. 0	115. 0	115. 0	44	44	44	44	44	44	44	44	44	44	44	44	44
	St. Paul Salt Lake City	(37. 5 ) 50. 0	37. 5 50. 0	37. 5 37. 5 50. 0	40. 6 43. 8 56. 3	40. 6 56. 3 62. 5	60. 0 62. 5 68. 8	80. 0 87. 5 93. 8	80. 0 75. 0 81. 3	75. 0 75. 0 81. 3	85, 0 87, 5 93, 8	85. 0 100. 0	85. 0 100. 0	85. 0 100. 0	44	44	48 44	44 44	44 44	44	44	44	44 44	44	44	44	44 44
T E	San Francisco Scranton	50. 0 30. 0	50. 0	50. 0 35. 0	50.0	62. 5 35. 0	75. 0 50. 0	93. 8 58. 5	100. 0 70. 0	71. 3 60. 0	77. 2 60, 0	77. 2 70. 0	87. 5 70. 0	87. 5 70. 0	44 48	44 14 44	44 14 44	44 14 44	44 14 44	44 44	44 44	44 44	46 <sup>1</sup> / <sub>3</sub> 44	$\frac{46\frac{1}{3}}{44}$	$\frac{46\frac{1}{3}}{44}$	44 44	44 44
107	Washington	{23. 1 {28. 1	}28. 1	28.1	31. 3	50. 0	62.5	75.0	75. 0	75. 0	75. 0	75. 0	75. 0	75. 0	17 45	17 45	17 45	17 45	17 45	17 45	44	44	44	44	44	44	44

#### Inside wiremen

Birmingham 62 Boston 55	3.8 4 2.5 5 5.0 6 5.0 5	0.0	43.8 50.0 62.5	50.0 50.0 65.0		75. 0 70. 0 80. 0 77. 5 70. 0	90. 0 92. 5 100. 0 100. 0 90. 0	100.0	100.0 85.0	100.0 105.0	112.5 110.0	131.3 112.5		48 44 44	48 44 44 148	48 44 44 148	44 44	48 40 48 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44
Cincinnati 50 Cleveland 57 Dallas 56	7.5 6 6.3 6	3.1 8.8 2.5	56.3 70.0 62.5	62. 5 75. 0 65. 0	68. 8 81. 3 80. 0	90.0 87.5	100.0 125.0 100.0	125.0 100.0 137.5 112.5 100.0	95.0 110.0 112.5	105.0 125.0 112.5	115.0 137.5 112.5	143.8 125.0	131.3 150.0 125.0	48	44 44 <sup>1</sup> / <sub>2</sub> 44 44 44	44 44½ 44 44 44		44 44 <sup>1</sup> / <sub>2</sub> 44 44 44	44 44 <sup>1</sup> / <sub>2</sub> 44 44 44 44	44 44½ 44 44 44	44 443 44 44 44	44 44½ 44 44 44	44 44 <sup>1</sup> / <sub>2</sub> 44 44 44	44 44½ 44 44 44	44 44½ 44 44 44	44 44½ 44 44 44

a Data not available.

144 hours per week, June to August, inclusive.

144 hours per week, September to April, inclusive.

144 hours per week, October to April, inclusive.

1548 hours per week, December to February, inclusive.

1548 hours per week, October to April, inclusive.

1744½ hours per week, October to April, inclusive.

18 Old scale; strike pending.
35 40 hours per week, November to April, inclusive.
36 40 hours per week, October to March, inclusive.
37 40 hours per week, Nov. 15 to Apr. 15.
38 44 hours per week, November to March, inclusive.
40 44 hours per week, August to December, inclusive.

UNION SCALE OF WAGES AND HOURS OF LABOR IN SPECIFIED OCCUPATIONS, 1913 TO 1926, BY CITIES—Continued

\*Inside wiremen\*\*—Continued\*\*

C:t						Rate	es per h	our (ce	nts)										Hour	rs per	week					
City	1913	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1913	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926
Detroit Fall River Indianapolis Jacksonville Kansas City, Mo	46. 9 37. 5 47. 5 45. 0 62. 5	53. 1 37. 5 47. 5 45. 0 68. 8	59. 4 41. 0 53. 0 45. 0 65. 0	66. 9 50. 0 57. 0 45. 0 68. 8	75. 0 60. 0 67. 5 65. 0 75. 0	93. 8 70. 0 72. 0 85. 0 87. 5	125. 0 85. 0 100. 0 100. 0 100. 0	100.0 90.0 100.0 100.0 100.0	100.0 85.0 100.0 85.0 100.0	100.0 95.0 110.0 85.0 106.3	125. 0 95. 0 115. 0 85. 0 125. 0	130. 0 95. 0 125. 0 100. 0 125. 0	140. 0 95. 0 125. 0 125. 0 125. 0	48 48 21 48 48 48	21 48 48 21 48 45 44	48 44 44 48 44	44 44 44 48 44	44 44 44 48 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	444444444
Little Rock Los Angeles Louisville Manchester Memphis	40.0	50. 0 50. 0 40. 0 34. 4 50. 0	50. 0 50. 0 40. 0 37. 5 50. 0	50. 0 50. 0 45. 0 42. 5 56. 3	55. 0 62. 5 50. 0 60. 0 62. 5	75. 0 80. 0 75. 0 75. 0 75. 0	87. 5 100. 0 75. 0 100. 0 100. 0	87. 5 100. 0 100. 0 100. 0 100. 0	87. 5 100. 0 90. 0 80. 0 87. 5	87. 5 112. 5 100. 0 100. 0 87. 5	87. 5 112. 5 100. 0 100. 0 87. 5	87. 5 112. 5 106. 3 100. 0 100. 0	87. 5 112. 5 106. 3 100. 0 100. 0	48 48 48 48 48	48 48 48 48 44	41 48 48 48 48 48 44	41 48 48 48 44 44	41 48 48 48 44 44	41 48 44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	4-
Milwaukee Minneapolis Newark, N. J New Haven New Orleans	50.0	50. 0 56. 3 62. 5	50. 0 56. 3 62. 5 44. 5 50. 0	56. 3 56. 3 62. 5 60. 0 50. 0	56. 3 68. 8 68. 8 60. 0 56. 3	75. 0 68. 8 75. 0 75. 0 70. 0	85. 0 81. 3 100. 0 82. 5 90. 0	100.0 100.0 112.5 93.8 100.0	100. 0 87. 5 112. 5 85. 0 100. 0	100.0 87.5 112.5 90.8 90.0	112. 5 100. 0 131. 3 100. 0 105. 0	112. 5 100. 0 131. 3 100. 0 110. 0	112. 5 100. 0 150. 0 100. 0 110. 0	44 48 44 48	44 44 44 48	44 44 44 44 48	44 44 44 44 48	44 44 44 44 48	44 44 44 44 48	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	4-
New York Omaha Philadelphia Pittsburgh	50.0	60. 0 50. 0 45. 0 57. 5	60. 0 57. 5 50. 0 62. 5	65. 0 57. 5 56. 3 62. 5	65. 0 70. 0 65. 0 68. 8	75. 0 87. 5 75. 0 75. 0	112.5 112.5 100.0 100.0	112. 5 112. 5 112. 5 125. 0	112. 5 100. 0 90. 0 112. 5	112.5 112.5 100.0 125.0	131.3 112.5 112.5 125.0	131.3 112.5 112.5 143.8	150.0 112.5 125.0 143.8	44 44 44 48	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 67 44 44
Portland, Oreg Providence St. Louis St. Paul	43.8	56.3 50.0 75.0 53.1	56.3 50.0 75.0 56.3	56.3 55.0 75.0 62.5	72. 2 60. 0 75. 0 68. 8	80. 0 70. 0 87. 5 68. 8	100.0 85.0 100.0 81.3	100.0 115.0 125.0 100.0	90. 0 90. 0 125. 0 80. 0	100. 0 90. 0 125. 0 80. 0	112. 5 100. 0 150. 0 100. 0	112. 5 100. 0 150. 0 87. 5	125.0 100.0 150.0 100.0	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	40 44 44 44
San Francisco Scranton Seattle Washington	62. 5 46. 9 62. 5 55. 0	62. 5 46. 9 62. 5 60. 0	62. 5 50. 0 62. 5 60. 0	75. 0 60. 0 75. 0 60. 0		87. 5 75. 0 100. 0 100. 0	112. 5 95. 0 112. 5 100. 0	125. 0 87. 5 112. 5 106. 3	100. 0 87. 5 100. 0 106. 3	100. 0 87. 5 106. 3 112. 5	100. 0 112. 5 112. 5 125. 0	100. 0 112. 5 112. 5 137. 5	106. 3 112. 5 125. 0 137. 5	44 48 44 44	44 48 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 40 44	.44 44 40 44	44 44 40 44	44 44 40 44	44 44 40 44	44 44 40 44	44 44 40 44	44 44 40 44
										P	'ainter	8														
Atlanta Baltimore Birmingham Boston BRASER	33. 3 37. 5 45. 0 50. 0 43. 8	33. 3 37. 5 45. 0 55. 0 46. 9	33.3 27.5 45.0 60.5 46.9	36. 1 43. 8 50. 0 62. 5 50. 0	50. 0 56. 3 62. 5 75. 0 56. 3	60. 0 68. 8 75. 0 82. 5 62. 5	60. 0 90. 0 87. 5 100. 0 87. 5	85. 0 90. 0 87. 5 100. 0 87. 5	75. 0 80. 0 75. 0 100. 0 87. 5	75. 0 80. 0 87. 5 105. 0 87. 5	75. 0 90. 0 87. 5 110. 0 87. 5	75. 0 100. 0 100. 0 110. 0 100. 0	80. 0 100. 0 100. 0 125. 0 100. 0	7 53 48 48 48 44 48	7 53 48 48 48 44 1 48	7 53 48 48 40 1 48	7 53 48 44 40 1 48	48 44 44 40 66 48	44 44 44 40 66 48	44 44 44 40 66 48	44 44 44 40 66 48	44 44 44 40 66 48	44 44 44 40 66 48	44 44 44 40 44	44 44 44 40 44	44 44 44 40 44

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deral Reserve Bank of St. Louis

Charleston, S.C. 25.0 Chicago	70. 0 50. 0 50. 0	25. 0 70. 0 55. 0 55. 0 50. 0	25. 0 72. 5 55. 0 55. 0 60. 0	\$31.3 \$50.0 75.0 60.0 67.5 70.0	50. 0 65. 0 87. 5 62. 5 75. 0 87. 5	65. 0 80. 0 125. 0 87. 5 112. 5 100. 0	65. 0 80. 0 125. 0 100. 0 112. 5 100. 0	50. 0 65. 0 110. 0 87. 5 100. 0 87. 5	55. 0 65. 0 125. 0 97. 5 112. 5 100. 0	\$55, 0 125, 0 107, 5 125, 0 100, 0	55. 0 150. 0 117. 5 125. 0 100. 0	55. 0 150. 0 125. 0 18125.0 112. 5	48 44 44 44 44	48 44 44 44 44	48   44   44   44   44   44	48 44 44 44 44	48   44   44   44   44   44	48 44 44 44 44	48   44   44   44   44   44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44
Denver 50.0 Detroit 45.0 Fall River 37.4 Indianapolis 47.4 Jacksonville 37.4	45. 0 5 37. 5 5 50. 0	55. 0 50. 0 41. 0 50. 0 37. 5	62. 5 60. 0 41. 0 55. 0 45. 0	68. 8 70. 0 55. 0 55. 0 50. 0	85. 0 80. 0 62. 5 70. 0 75. 0	100. 0 100. 0 100. 0 100. 0 87. 5	112, 5 100, 0 100, 0 100, 0 75, 0	100. 0 90. 0 75. 0 90. 0 75. 0	100. 0 100. 0 90. 0 97. 5 75. 0	112. 5 112. 5 90. 0 105. 0	117. 5 112. 5 90. 0 105. 0 75. 0	125. 0 125. 0 90. 0 110. 0 100. 0	44 48 44 44 48	44 48 44 44 48	44 44 44 44 48	44 44 44 44 48	44 44 44 44 48	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44	44 44 44 44 44	44 44 44 44 44
KansasCity,Mo. 60. 60. Cultitle Rock 50. Los Angeles 43. Louisville 45. 6	50. 0 8 43. 8 0 50. 0	60. 0 55. 0 43. 8 50. 0 37. 5	60. 0 55. 0 50. 0 50. 0 37. 5	70. 0 60. 0 56. 3 50. 0 50. 0	82. 5 80. 0 75. 0 62. 5 62. 5	100. 0 100. 0 87. 5 75. 0 80. 0	100. 0 100. 0 100. 0 87. 5 80. 0	100. 0 87. 5 100. 0 87. 5 70. 0	100. 0 87. 5 100. 0 100. 0 80. 0	112. 5 87. 5 100. 0 112. 5 90. 0	125. 0 100. 0 100. 0 112. 5 90. 0	125. 0 100. 0 100. 0 112. 5 90. 0	44 48 48 48	44 48 48 48 48	44 44 48 48 48	44 44 48 48 48	44 44 44 48 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44
Memphis	0 50.0 0 50.0 0 44.0	52. 5 50. 0 55. 0 46. 9 40. 9	60. 0 55. 0 55. 0 50. 0 45. 5	62. 5 60. 0 62. 5 62. 5 53. 1	75. 0 70. 0 70. 0 75. 0 62. 5	100. 0 85. 0 100. 0 100. 0 87. 5	100. 0 85. 0 100. 0 100. 0 100. 0	87. 5 85. 0 80. 0 100. 0 100. 0	87.5 100.0 90.0 112.5 90.0	100. 0 100. 0 90. 0 125. 0 100. 0	100. 0 100. 0 100. 0 125. 0 100. 0	100. 0 112. 5 90. 0 137. 5 100. 0	44 44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 67 44 44	44 44 44 40 44	44 44 44 40 44	44 44 44 40 44
New Orleans 40.  New York 50.  Omaha 50.  Philadelphia 42.  Pittsburgh 55.	0 50.0 0 50.0 5 42.5	40. 0 62. 5 55. 0 42. 5 58. 1	40. 0 62. 5 62. 5 45. 0 65. 0	50. 0 62. 5 62. 5 60. 0 67. 5	65. 0 75. 0 75. 0 75. 0 87. 5	75. 0 112. 5 100. 0 100. 0 112. 5	90. 0 112. 5 101. 3 100. 0 112. 5	80. 0 112. 5 90. 0 100. 0 100. 0	80. 0 112. 5 112. 5 100. 0 125. 0	85. 0 131. 3 100. 0 100. 0 137. 5	85. 0 131. 3 100. 0 100. 0 143. 8	85. 0 150. 0 100. 0 <sup>18</sup> 100. 0 150. 0	48 44 44 44 44 44	48 44 44 44 44	48 44 44 44 44	48 44 44 44 44	48 44 44 44 44 44	44 44 44 44 44	44 40 44 40 44	44 40 44 40 44	44 40 44 44 44	44 40 44 44 44	44 40 44 44 44	44 40 44 44 44	44 40 44 44 44
Portland, Oreg. 50. Providence. 45. Richmond, Va. 37. St. Louis. 57. St. Paul. 50.	5 45, 5 5 30, 6 0 62, 5	50. 0 45. 5 30. 6 62. 5 55. 0	50. 0 50. 0 37. 5 62. 5 55. 0	70. 0 62. 5 50. 0 75. 0 62. 5	90. 0 62. 5 60. 0 75. 0 70. 0	100. 0 90. 0 65. 0 100. 0 100. 0	90. 0 90. 0 75. 0 125. 0 100. 0	90. 0 80. 0 67. 5 100. 0 80. 0	100. 0 90. 0 80. 0 112. 5 90. 0	100. 0 100. 0 80. 0 130. 0 90. 0	100. 0 100. 0 80. 0 130. 0 90. 0	112. 5 106. 3 80. 0 135. 0 95. 0	48 44 48 44 44	44 44 54 44 44	44 44 54 44 44	44 44 48 44 44	44 44 48 44 44	44 44 48 44 44	44 44 48 44 44	44 44 48 44 44	44 44 48 44 44	44 44 48 44 44	44 44 48 44 44	40 44 48 44 44	40 44 48 44 44
Salt Lake City 56. San Francisco 56.		62. 5 62. 5	75. 0 62. 5	75. 0 75. 0	90. 0 87. 5	100. 0 106. 3	100.0 106.3	90.0	100.0 104.4	100.0 104.4	100.0 104.4	100.0 {100.0 104.4	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	44 44	44 44	44 44	44 44	44 44	44 44	44 44	44 44	44 44	44 44	44 44	44 44
Scranton 40. Seattle 56. Washington 50.	3 56.3	45. 0 56. 3 50. 0	50. 0 65. 0 56. 3	50. 0 75. 0 75. 0	65. 0 90. 0 75. 0	87. 5 100. 0 90. 0	87.5 93.8 100.0	87. 5 93. 8 100. 0	87. 5 100. 0 112. 5	100. 0 105. 0 112. 5	112. 5 112. 5 118. 8	112. 5 112. 5 118. 8	48 44 44	44 44 44	44 44 44	44 44 44	44 40 44	44 40 44	44 40 44	44 40 44	44 40 44	44 40 44	40 40 44	40 40 44	40 40 44

<sup>1 44</sup> hours per week, June to August, inclusive.
7 Work 53 hours, paid for 54.
18 Old scale; strike pending.
21 44 hours per week, Junet to September, inclusive.

<sup>&</sup>lt;sup>41</sup> 44 hours per week, July to September, inclusive. <sup>66</sup> 44 hours per week, July to March, inclusive. <sup>67</sup> 40 hours per week, June to August, inclusive.

UNION SCALE OF WAGES AND HOURS OF LABOR IN SPECIFIED OCCUPATIONS, 1913 TO 1926, BY CITIES—Continued Plasterers

City						Rate	es per h	our (ce	nts)					1					Hour	rs per	w'eek					
City	1913	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1913	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926
AtlantaBaltimoreBirminghamBostonBuffalo	45. 0 62. 5 62. 5 65. 0 60. 0	45. 0 62. 5 62. 5 65. 0 60. 0	45. 0 62. 5 62. 5 70. 0 60. 0	45. 0 68. 8 62. 5 70. 0 65. 0	50. 0 72. 0 62. 5 70. 0 70. 0	60. 0 87. 5 75. 0 80. 0 85. 0	100. 0 112. 5 75. 0 100. 0 100. 0	100. 0 125. 0 100. 0 125. 0 100. 0	100. 0 125. 0 100. 0 112. 5 100. 0	100. 0 150. 0 100. 0 112. 5 150. 0	100. 0 175. 0 125. 0 125. 0 150. 0	100. 0 175. 0 125. 0 125. 0 150. 0	125. 0 175. 0 125. 0 150. 0 150. 0	53 44 44 44 44 48	53 44 44 44 6 44	53 44 44 40 6 44	53 44 44 40 44	49½ 44 44 40 44	44 44 40	44 44 44 40 68 40	44 44 44 40 40	44 44 44 40 40	44 44 44 40 40	44 44 44 40 40	44 44 44 40 40	44 44 44 40 40
Charleston, S. C. Chicago.		40.0	40.0	40.0	50. 6	75. 0	100.0	85, 0	85. 0	100.0	100.0	100.0	100.0	7 53	7 53	7 53	7 53	48	48	48	48	48	{ 44 48	} 48	44	44
Cincinnati Cleveland Dallas		75. 0 75. 0 68. 8 87. 5	75. 0 75. 0 68. 8 87. 5	75. 0 75. 0 75. 0 87. 5	81. 3 75. 0 85. 0 100. 0	87. 5 87. 5 90. 0 112. 5	125. 0 100. 0 125. 0 112. 5	125. 0 112. 5 125. 0 150. 0	110. 0 112. 5 125. 0 137. 5	150. 0 125. 0 125. 0 150. 0	150. 0 150. 0 125. 0 162. 5	150. 0 150. 0 156. 3 162. 5	18150.0 150.0 162.5 162.5	44 44½ 44 44	44 44½ 44 44	44 44 <sup>1</sup> / <sub>2</sub> 44 44	44 44 <sup>1</sup> / <sub>2</sub> 44 44	44 44½ 44 44	44 44½ 44 44	44 44½ 44 44	44 44½ 44 44	44 44 <sup>1</sup> / <sub>2</sub> 44 44	44 44½ 44 44	44 44 <sup>1</sup> / <sub>2</sub> 44 44	44 44½ 44 44	44 44 44 44
Denver Detroit Fall River Indianapolis Jacksonville	75. 0 68. 8 55. 0 62. 5 56. 3	75. 0 68. 8 60. 0 68. 8 62. 5	75. 0 68. 8 60. 0 68. 8 56. 3	87. 5 75. 0 65. 0 72. 0 56. 3	87. 5 75. 0 75. 0 75. 0 68. 8	87. 5 87. 5 85. 0 87. 5 75. 0	125. 0 125. 0 115. 0 100. 0 87. 5	125. 0 125. 0 115. 0 112. 5 87. 5	125. 0 112. 5 95. 0 112. 5 87. 5	125. 0 150. 0 110. 0 131. 3 100. 0	150. 0 156. 3 110. 0 150. 0 125. 0	150. 0 156. 3 125. 0 150. 0 125. 0	150. 0 156. 3 125. 0 150. 0 175. 0	44 44 48 44½ 48	44 44 48 44½ 48	44 44 44 44 <sup>1</sup> / <sub>2</sub> 48	44 44 44 44 <sup>1</sup> / <sub>2</sub> 48	44 44 44 44 <sup>1</sup> / <sub>2</sub> 44	44 44 44 44 <sup>1</sup> 44 <sup>1</sup>	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44
Kansas City, Mo. Little Rock Los Angeles Louisville Manchester	75. 0 62. 5 75. 0 65. 0 50. 0	75. 0 62. 5 75. 0 65. 0 50. 0	75. 0 62. 5 75. 0 65. 0 60. 0	75. 0 75. 0 62. 5 65. 0 60. 0	87. 5 75. 0 75. 0 70. 0 75. 0	100. 0 87. 5 87. 5 75. 0 90. 0	120. 0 112. 5 112. 5 100. 0 112. 5	120. 0 112. 5 125. 0 112. 5 112. 5	112. 5 112. 5 125. 0 112. 5 112. 5	137. 5 112. 5 125. 0 150. 0 112. 5	150. 0 150. 0 150. 0 150. 0 150. 0	150. 0 150. 0 150. 0 150. 0 157. 5	150. 0 150. 0 150. 0 162. 5 137. 5	44 48 44 44 48	44 48 44 44 44	44 22 44 44 44 44	44 22 44 44 44 44	44 22 44 44 44 44	44 22 44 44 44 44	44 44 44 44 44	44 44 40 44 44	44 44 40 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44
Memphis Milwaukee Minneapolis Newark, N. J New Haven	75. 0 65. 0 70. 0 65. 0 60. 0	75. 0 65. 0 70. 0 65. 0 60. 0	75. 0 65. 0 70. 0 70. 0 60. 0	75. 0 65. 0 75. 0 75. 0 65. 0	87.5 70.0 75.0 75.0 70.0	87. 5 87. 5 90. 0 87. 5 82. 5	100. 0 87. 5 112. 5 125. 0 100. 0	112. 5 112. 5 125. 0 125. 0 100. 0	112. 5 112. 5 100. 0 125. 0 100. 0	112. 5 112. 5 112. 5 125. 0 112. 5	137. 5 125. 0 125. 0 150. 0 125. 0	156. 3 137. 5 125. 0 150. 0 125. 0	156. 3 137. 5 137. 5 162. 5 137. 5	44 44 44 44 44	44 44 44 44 44	44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44	44 44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44 44	44 44 44 44
New Orleans New York Omaha Philadelphia Pittsburgh	62. 5 68. 8 75. 0 62. 5 62. 5	50. 0 68. 8 75. 0 62. 5 71. 9	50. 0 75. 0 75. 0 65. 0 75. 0	62. 5 75. 0 75. 0 70. 0 75. 0	62. 5 75. 0 80. 0 75. 0 75. 0	75. 0 93. 8 87. 5 80. 0 85. 0	100. 0 110. 8 112. 5 125. 0 115. 0	100. 0 125. 0 125. 0 125. 0 125. 0	100. 0 125. 0 125. 0 125. 0 125. 0 112. 5	100. 0 125. 0 125. 0 125. 0 127. 5	125. 0 150. 0 137. 5 150. 0 156. 3	125. 0 150. 0 137. 5 150. 0 156. 3	125. 0 175. 0 137. 5 175. 0 166. 3	48 44 44 44 44	48 44 44 40 44	48 44 44 40 44	45 44 44 40 44	45 44 44 40 44	45 44 44 40 44	45 44 44 40 44	45 44 44 40 44	45 44 44 40 44	45 44 44 40 44	45 44 44 40 44	44 44 44 40 44	45 40 44 40 40
St. Louis	75. 0 62. 5 37. 5 75. 0 62. 5	75. 0 62. 5 75. 0 62. 5	75. 0 62. 5 75. 0 70. 0	75. 0 68. 8 75. 0 70. 0	80.0	110. 0 100. 0 62. 5 100. 0 90. 0	112. 5 115. 0 75. 0 125. 0 112. 5	112. 5 105. 0 87. 5 137. 5 100. 0	112. 5 105. 0 87. 5 137. 5 100. 0	125. 0 115. 0 125. 0 150. 0 112. 5	125. 0 125. 0 125. 0 175. 0 125. 0	137. 5 150. 0 125. 0 175. 0 125. 0	137. 5 150. 0 125. 0 175. 0 125. 0	44 44 48 44 44	44 44 44 44	44 44 44 44	44 40 44 44	44 40  44 41	44 40 44 44 44	44 40 44 44 44	44 40 44 44 44	44 40 44 44 44	44 40 44 44 44	44 40 44 44 44	44 40 44 44 44	40 40 44 44 44

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#### Plasterers' laborers

Boston	\$\begin{cases} \{40.0 \\ 41.5 \\ 48.0 \\ 45.0 \\ 35.0 \\ 43.8 \end{cases}\$	\\ \begin{pmatrix} 41.5 \\ 50.0 \\ 45.0 \\ 35.0 \\ 43.8 \end{pmatrix}	45. 0 50. 0 45. 0 35. 0 43. 8	45. 0 50. 0 45. 0 45. 0 43. 8	50. 0 56. 3 50. 0 55. 0 59. 4	60. 0 62. 5 65. 0 57. 5 68. 8	80. 0 106. 3 85. 0 87. 5 81. 3	80. 0 106. 3 85. 0 87. 5 81. 3	80. 0 78. 8 72. 5 60. 0 81. 3	95. 0 78. 8 82. 5 87. 5 81. 3	95. 0 78. 8 90. 0 87. 5 87. 5	95. 0 88. 8 92. 5 87. 5 87. 5	95. 0 93. 8 95. 0 87. 5 87. 5	44 44 45 48 44	44 44 45 44 44	40 44 45 44 44	40 44 45 44 44	40 44 45 44 44	40 44 45 44 44	40 44 45 44 44	40 44 45 44 44	40 44 45 44 44	40 44 45 44 44	40 44 45 44 44	40 44 45 44 44	40 44 45 44 44
Detroit Kansas City, Mo. Los Angeles Louisville Memphis	37. 5 37. 5 61. 4 38. 0 32. 5	43. 8 45. 0 56. 3 38. 0 37. 5	43. 8 45. 0 56. 3 38. 0	50. 0 50. 0 50. 0 45. 0	50. 0 55. 0 62. 5 45. 0 50. 0	75. 0 68. 8 75. 0 55. 0 50. 0	100. 0 90. 0 100. 0 55. 0 75. 0	75. 0 90. 0 112, 5 80. 0 62. 0	75. 0 80. 0 112. 5 80. 0 62. 5	100. 0 90. 0 112. 5 85. 0 62. 5	100. 0 90. 0 112. 5 85. 0 75. 0	87. 5 90. 0 112. 5 90. 0 75. 0	87. 5 90. 0 112. 5 90. 0 75. 0	44 44 44 44 44	44 44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44 44	44 44 44 44	44 44 44 44 44	44 44 44 40 44	44 44 44 40 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44
Milwaukee Minneapolis Newark, N. J New Orleans		37. 5 6945. 0 35. 0 22. 5	37. 5 6945. 0 37. 5 22. 5	42. 9 50. 0 45. 0 28. 3	50. 0 55. 0 45. 0 28, 3	55. 0 60. 0 50. 0 (35. 0 (45. 0	70. 0 85. 0 87. 5 50. 0 65. 0	85. 0 85. 0 87. 5 } 50. 0	75. 0 75. 0 75. 0 50. 0	75. 0 85. 0 87. 5 65. 0	85. 0 85. 0 100. 0 75. 0	90. 0 85. 0 100. 0 75. 0	90. 0 90. 0 112. 5 75. 0	48 48  48	48 44 44 48	48 44 44 48	48 44 44 45	48 44 44 45	12 44 44 44 45	44 44 44 45	44 44 44 45	44 44 44 45	44 44 44 45	44 44 44 45	44 44 44 45	44 44 44 45
Philadelphia Pittsburgh Portland, Oregst. Louis Salt Lake City	40. 0 6950. 0 7056. 3	44. 0 40. 0 <sup>69</sup> 50. 0	44. 0 45. 0		56. 3 50. 0 55. 0 62. 5 62. 5 68. 8	62. 5 62. 5 60. 0 75. 0 75. 0 75. 0	87. 5 110. 0 90. 0 93. 8 87. 5 100. 0	93. 8 110. 0 100. 0 90. 0 100. 0 87. 5	93. 8 100. 0 80. 0 90. 0 100. 0 87. 5	100. 0 100. 0 100. 0 100. 0 112. 5 100. 0	106, 3 112, 5 100, 0 100, 0 125, 0 125, 0	106. 3 112. 5 100. 0 100. 0 125. 0 125. 0	{121. 9 125. 0 112. 5 112. 5 112. 5 125. 0 125. 0	44 44 48 44 44	44 44 48 44 44	44 40 44 48 44 44	44 40 44 48 44 44	44 44 48 44 44	44 44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44 44	44 44 44 44 44	44 44 44 44	40 44 44 40 44 44
San Francisco Scranton Seattle Washington	62. 5 50. 0 31. 3	62. 5	62. 5 35. 0 50. 0 31. 3	62. 5 35. 0 62. 5 37. 5	68. 8 35. 0 75. 0 50. 0		106. 3 58. 5 87. 5 75. 0	112. 5 70. 0 87. 5 62. 5	95. 0 60. 0 87. 5 75. 0	83. 2 60. 0 93. 8 75. 0	83. 2 70. 0 100. 0 87. 5	100. 0 70. 0 100. 0 75. 0	100. 0 70. 0 100. 0 75. 0	44 44 44	44 44 44	44 44 44 44 44	44 44 44 44	44 44 44 44	44 44 40 44	40 44 40 44	40 44 40 44	46½ 44 40 44	46½ 44 40 44	46½ 44 40 44	44 44 40 44	44 44 40 44

<sup>6 48</sup> hours per week, Nov. 16 to Mar. 15.
7 Work 53 hours; paid for 54.
8 Nominal rate: All received more; average \$1.50 per hour.
12 48 hours per week, November to April, inclusive.
18 Old scale; strike pending.

<sup>&</sup>lt;sup>22</sup> 48 hours per week, October to March, inclusive. <sup>68</sup> 44 hours per week, Nov. 14, to May 14. <sup>69</sup> For tenders. <sup>70</sup> For helpers.

MONTHLY LABOR REVIEW

#### Plumbers

G:						Rates	s per ho	our (cer	its)										Hour	s per	week					
City	1913	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1913	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926
Atlanta 3altimore Birmingham Boston Buffalo	44, 4 50, 0 68, 8 60, 0 56, 3	44. 4 50. 0 75. 0 65. 0 56. 3	44. 4 50. 0 75. 0 65. 0 56. 3	44. 4 56. 3 75. 0 68. 8 62. 5	68. 8 68. 8 87. 5 75. 0 68. 8	75. 0 75. 0 112. 5 80. 0 75. 0	75. 0 87. 5 150. 0 100. 0 100. 0	75. 0 100. 0 150. 0 100. 0 100. 0	100. 0 93. 8 125. 0 100. 0 100. 0	100. 0 100. 0 150. 0 105. 0 100. 0	112. 5 118. 8 150. 0 112. 5 112. 5	112. 5 125. 0 150. 0 110. 0 118. 8	125. 0 125. 0 150. 0 125. 0 137. 5	7 53 48 44 44 48	7 53 48 44 44 1 48	7 53 48 44 44 1 48	7 53 44 44 44 44 1 48	44 44 44 44 44	4 4 4 4 4 4							
Charleston, S. C. Chicago Cincinnati Cleveland Dallas	75. 0 61. 8 62. 5 68. 8	43. 8 75. 0 61. 8 62. 5 75. 0	43. 8 75. 0 61. 8 68. 8 75. 0	50. 0 75. 0 65. 6 75. 0 81. 3	59. 0 75. 0 65. 5 81. 3 87. 5	75. 0 84. 4 75. 0 90. 0 100. 0	100. 0 125. 0 100. 0 100. 0 125. 0	100. 0 125. 0 100. 0 137. 5 137. 5	100. 0 110. 0 100. 0 110. 0 125. 0	100. 0 110. 0 112. 5 131. 3 125. 0	100. 0 125. 0 125. 0 137. 5 137. 5	100. 0 125. 0 125. 0 137. 5 137. 5	100. 0 150. 0 135. 0 150. 0 150. 0	44 44 <sup>1</sup> / <sub>2</sub> 44 44	48 44 44 <sup>1</sup> / <sub>2</sub> 44 44	48 44 44 44 44	48 44 44 44 44	48 44 44 44 44	48 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	4 4 4 4
Denver Detroit Fall River ndianapolis acksonville	62. 5 56. 3 43. 8 62. 5 62. 5	62. 5 60. 0 43. 8 62. 5 62. 5	62. 5 62. 5 50. 0 62. 5 62. 5	75. 0 68. 8 50. 0 67. 5 62. 5	87. 5 75. 0 56. 3 75. 0 75. 0	87. 5 90. 0 67. 5 87. 5 80. 0	100. 0 125. 0 100. 0 100. 0 93. 8	106. 3 100. 0 100. 0 125. 0 112. 5	106. 3 100. 0 85. 0 115. 0 100. 0	118, 8 125, 0 100, 0 122, 5 112, 5	118. 8 130. 0 100. 0 130. 0 125. 0	125. 0 130. 0 100. 0 135. 0 125. 0	137. 5 140. 0 100. 0 135. 0 150. 0	44 48 48 44 48	44 48 48 44 48	44 44 44 44 48	44 44 44 44 48	44 44 44 44 44	4							
Kansas City, Mo. Little Rock Los Angeles Louisville Manchester	E0 0	68. 8 62. 5 56. 3 60. 0 31. 3	75. 0 62. 5 56. 3 60. 0 47. 7	75. 0 68. 8 62. 5 60. 0 47. 7	87. 5 75. 0 68. 8 70. 0 50. 0	100. 0 87. 5 81. 3 70. 0 70. 0	100. 0 125. 0 112. 5 80. 0 100. 0	125. 0 112. 5 112. 5 100. 0 90. 0	112, 5 100, 0 112, 5 100, 0 80, 0	125. 0 100. 0 112. 5 112. 5 100. 0	137. 5 112. 5 112. 5 112. 5 100. 0	137. 5 112. 5 112. 5 137. 5 100. 0	137. 5 112. 5 112. 5 137. 5 100. 0	48 31 48 48 44 48	12 44 48 44 48	44 12 44 48 44 44	44 44 48 44 44	44 44 48 44 44	44 44 44 44 44							
MemphisMilwaukeeMinneapolisNewark, N. JNew Haven	62. 5 62. 5 56. 3 62. 5 50. 0	62. 5 62. 5 62. 5 62. 5 54. 5	62. 5 62. 5 62. 5 62. 5 54. 5	62. 5 62. 5 62. 5 62. 5 54. 5	81. 3 68. 8 68. 8 75. 0 62. 5	93. 8 75. 0 75. 0 87. 5 75. 0	125, 0 87, 5 100, 0 112, 5 87, 5	125. 0 100. 0 100. 0 112. 5 100. 0	112. 5 90. 0 87. 5 112. 5 87. 5	125. 0 100. 0 100. 0 112. 5 100. 0	125. 0 112. 5 100. 0 131. 3 106. 3	131. 3 112. 5 100. 0 137. 5 106. 3	135. 0 118. 8 112. 5 150. 0 112. 5	48 44 48 44 44	48 44 44 44 44	48 44 44 44 44	48 44 44 44 44	48 44 44 44 44	44 44 44 44 44							
New Orleans	56.3	56. 3	56. 3	56.3	68.8	80.0	90.0	100.0	90.0	90.0	105. 0	112. 5	125. 0	48	48	48	48	48	48	48	44	44	44	44	44	
New York	68.8	68. 8	68. 8	68.8	75.0	75. 0	112.5	112.5	112.5	125.0	137. 5	137. 5	$\begin{cases} 137.5 \\ 150.0 \end{cases}$	} 44	44	44	44	44	44	44	44	44	44	44	44	
Omaha	68.3 f43.8	68.3 43.8	68. 3 43. 8	75.0	75. 0	87.5	125.0	125.0	100.0	125.0	125.0	125. 0	125. 0	44	44	44	44	44	44	44	44	44	44	44	44	
	\$50.0 62.5	50.0	50. 0	\$56.3 75.0	62. 5 75. 0	80. 0 93. 8	90.0	115. 0 125. 0	90.0	115. 0 115. 6	115. 0	115. 0 143. 8	115.0	44	44	44	44	44	44	44	44	44	44	44	44	

Providence St. Louis St. Paul	75. 0 56. 3 66. 3 62. 5	75. 0 56. 3 75. 0 62. 5	75. 0 56. 3 75. 0 62. 5	75. 0 62. 5 75. 0 62. 5	81. 3 75. 0 81. 3 68. 8	100, 0 75, 0 100, 0 75, 0	112. 5 100. 0 125. 0 87. 5	112, 5 100, 0 125, 0 100, 0	106. 3 100. 0 125. 0 100. 0	112. 5 100. 0 125. 0 100. 0	125. 0 112. 5 150. 0 100. 0	125. 0 125. 0 150. 0 100. 0	125. 0 125. 0 150. 0 112, 5	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	40 44 44 44
Salt Lake City_ScrantonSeattleWashington	75. 0 50. 0 81. 3 50. 0	75. 0 53. 1 75. 0 56. 3	75. 0 53. 8 75. 0 56. 3	75. 0 53. 8 81. 3 56. 3	87. 5 62. 5 90. 0 75. 0	100. 0 75. 0 100. 0 87. 5	112. 5 87. 5 112. 5 100. 0	100. 0 87. 5 112. 5 100. 0	100. 0 87. 5 100. 0 106. 3	112. 5 93. 8 112. 5 125. 0	112. 5 112. 5 125. 0 125. 0	120. 0 112. 5 125. 0 131. 3	120. 0 118. 8 125. 0 137. 5	44 48 44 48	44 14 44 44 48	44 44 44 44	44 44 44 44	44 44 44 44	44 44 40 44	44 44 40 44	44 44 40 44	44 44 40 44	44 44 40 44	44 44 40 44	44 44 40 44	44 44 44 44 .
									٤	Sheet-r	netal v	worker	8									,				
Buffalo	45 0	40. 0 55. 0 55. 0 50 0 68. 8	40. 0 50. 0 60. 0 50. 0 70. 0	45. 8 50. 0 60. 0 50. 0 70. 0	62. 5 65. 0 70. 0 56. 3 70. 0	80. 0 75. 0 80. 0 62. 5 75. 0	80. 0 100. 0 100. 0 87. 5 125. 6	90. 0 100. 0 100. 0 87. 5 125. 0	90. 0 85. 0 100. 0 87. 5 110. 0	90. 0 85. 0 105. 0 100. 0 110. 0	100. 0 100. 0 110. 0 110. 0 125. 0	120. 0 100. 0 110. 0 110. 0 137. 5	120. 0 112. 5 125. 0 110 0 137. 5	48 44 44 48 44	48 44 44 1 48 44	48 44 44 1 48 44	48 44 44 1 48 44	44 44 44 1 48 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44
Denver	56.3	50. 0 50. 0 62. 5 56. 3 50. 0	50. 0 50. 0 62. 5 56. 3 50. 0	50. 0 60. 0 68. 8 62. 5 60. 0	52. 5 80. 0 75. 0 75. 0 70. 0	56. 0 85. 0 87. 5 87. 5 80. 0	70. 0 125. 0 100. 0 100. 0 125. 0	80. 0 125. 0 160. 0 100. 0 100. 0	80. 0 104. 0 100. 0 100. 0 100. 0	90. 0 125. 0 112. 5 112. 5 112. 5	100. 0 125. 0 115. 6 112. 5 112. 5	110. 0 125. 0 125. 0 125. 0 125. 0 112. 5	116. 3 125. 0 125. 0 125. 0 125. 0	44 48 48 44 44	44 48 44 44 48	44 44 44 44 48	48 44 44 44 44	48 44 44 44 44	48 44 44 44 44	48 44 44 44 44	48 44 44 44 44	48 44 44 44 44	48 44 44 44 44	48 44 44 44 44	48 44 44 44 44	48 44 44 44 44
Kansas Čity, Mo- Little Rock	57. 5 50. 0	55. 0 62. 5 52. 5 56. 3	55. 0 62. 5 52. 5 56. 3	57. 0 62. 5 60. 0 56. 3	60. 0 67. 5 65. 0 68. 5	60. 0 70. 0 80. 0 68. 5	100. 0 100. 0 100. 0 100. 0	100. 0 100. 0	92. 5 100. 0 90. 0 112. 5	97. 5 160. 0 90. 0 112. 5	105. 0 112. 5 100. 0 112. 5	105. 0 112. 5 90. 0 112. 5	107. 5 112. 5 90. 0 112. 5	48 44 48 44	44 44 48 44	44 44 48 44	44 44 48 44	44 44 48 44	44 44 41 48 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44
Manchester Memphis Milwaukee	34. 4 45. 0 42. 5	45. 0 34. 4 50. 0 47. 5 50. 0	45. 0 34. 4 50. 0 47. 5 50. 0	47. 5 34. 4 53. 1 52. 5 50. 0	50. 0 37. 5 62. 5 60. 0 56. 3	65. 0 44. 3 75. 0 60. 0 70. 0	80. 0 100. 0 100. 0 67. 5 100. 0	80. 0 90. 0 100. 0 100. 0 100. 0	80. 0 80. 0 87. 5 85. 0 90. 0	90. 0 90. 0 87. 5 85. 6 90. 0	100. 0 90. 0 105. 0 100. 0 90. 0	100. 0 100. 0 112. 5 100. 0 90. 0	100. 0 100. 0 112. 5 100. 0 100. 0	48 48 48 48 48	44 48 48 71 48 48	44 48 48 71 48 48	44 48 48 1 48 48	44 44 48 1 48 44	44 44 44 1 48 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44
New Haven New Orleans New York	47. 7 59. 4	40. 0 62. 5	60. 0 50. 0 40. 0 62. 5 42. 5	62. 5 54. 5 45. 0 62. 5 50. 0	75. 0 59. 1 68. 8 70. 0 68. 0	87. 5 75. 0 80. 0 75. 0 75. 0	100. 0 87. 5 100. 0 112. 5 112. 5	100. 0 100. 0 112. 5	112. 5 87. 5 90. 0 112. 5 100. 0	112. 5 100. 0 90. 0 112. 5 100. 0	131. 3 106. 3 90. 0 131. 3 100. 0	137. 5 106. 3 90. 0 131. 3 100. 0	150. 0 112. 5 90. 0 150. 0 100. 0	44 44 44 44	44 44 48 44 44	44 44 48 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44
Providence St. Louis	55. 0 46. 0 60. 0		50. 0 60. 0 50. 0 60. 0 50. 0	56. 3 60. 0 52. 0 62. 5 50. 0	70. 0 70. 0 57. 0 65. 0 56. 3	75. 0 80. 0 65. 0 75. 0 70. 0	110. 0 90. 0 100. 0 85. 0 100. 0	100. 0 125. 0	90. 0 100. 0 87. 5 100. 0 90. 0	100. 0 117. 5 95. 0 125. 0 90. 0	112. 5 131. 3 100. 0 137. 5 90. 0	112. 5 143. 8 110. 0 137. 5 90. 0	(a) 150. 0 110. 0 137. 5 100. 0	44 44 44 44 48	44 44 44 44 48	44 44 44 44 48	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	(a) 44 44 44 44
	St. Paul.  Salt Lake City_Scranton. Seattle. Washington  Baltimore_Birmingham_Boston. Buffalo. Chicago.  Cincinnati_Cleveland_Dallas. Denver. Detroit.  Indianapolis_Kansas City, MoLittle Rock_Los Angeles. Louisville_Manchester_Memphis_Milwaukee_Minneapolis_New Haven_New Orleans_New Orleans_New York_Omaha.  Philadelphia_Pittsburgh_Providence_St. Louis.	St. Paul	St. Paul.	St. Paul	St. Paul	St. Paul	St. Paul	St. Paul.	St. Paul.	St. Paul.	St. Paul	St. Paul	St. Paul	St. Lake City. 75.0 75.0 75.0 75.0 75.0 75.0 75.0 87.5 100.0 110.0 100.0 100.0 100.0 110.0 110.0 112.5 112.5 120.0 120.0 Scranton. 50.0 31 1 53.8 53.8 62.5 75.0 87.5 87.5 87.5 87.5 13.8 112.5 112.5 112.5 120.0 120.0 Washington 50.0 50.0 50.0 50.0 50.0 50.0 50.0 50.	St. Paul	St. Paul. 62.5 62.5 62.5 62.5 62.5 68.8 75.0 87.5 100.0 100.	St. Paul. 62.5 62.5 62.5 62.5 62.5 68.8 75.0 87.5 100.0 100.0 100.0 100.0 100.0 100.0 100.0 112.5 44 44 44 44 44 44 44 44 44 44 44 44 44	St. Paul. 62.5 62.5 62.5 62.5 62.5 68.8 75.0 87.5 100.0 100.0 100.0 100.0 100.0 100.0 112.5 44 44 44 44 44 44 44 44 44 44 44 44 44	St. Paul. 62.5 62.5 62.5 62.5 68.8 75.0 87.5 100.0 100.0 100.0 100.0 100.0 112.5 44 44 44 44 44 44 44 44 44 44 44 44 44	St. Paul	St. Paul. 62.5 62.5 62.5 62.5 68.8 75.0 87.5 100.0 100	St. Paul. 62.5 62.5 62.5 62.5 68.8 75.0 87.5 100.0 100.0 100.0 100.0 100.0 102.5 44 44 44 44 44 44 44 44 44 44 44 44 44				

<sup>&</sup>lt;sup>a</sup> Data not available. <sup>1</sup> 44 hours per week, June to August, inclusive. <sup>7</sup> Work 53 hours, paid for 54. <sup>12</sup> 48 hours per week, November to April, inclusive.

<sup>14 48</sup> hours per week, October to April, inclusive.
21 44 hours per week, June to September, inclusive.
41 44 hours per week, July to September, inclusive.
71 44 hours per week, June 15 to Sept. 15.

# UNION SCALE OF WAGES AND HOURS OF LABOR IN SPECIFIED OCCUPATIONS, 1913 TO 1926, BY CITIES—Continued Sheet-metal workers—Continued

						Rate	es per h	our (ce	nts)										Hour	s per	week					
City	1913	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1913	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926
Salt Lake City San Francisco Scranton Washington	43.8	62. 5 68. 8 46. 9 50. 0	62. 5 68. 8 46. 9 50. 0	62. 5 75. 0 50. 3 56. 3	62. 5 82. 5 56. 3 70. 0	87. 5 100. 0 75. 0 75. 0	100. 0 112. 5 87. 5 92. 5	90. 0 125. 0 87. 5 100. 0	90. 0 106. 3 87. 5 100. 0	100.0 106.3 93.8 106.3	100.0 106.3 112.5 120.0	100.0 106.3 112.5 125.0	100.0 106.3 118.8 131.3	44 44 48 44	44 44 44 44 <sup>1</sup> / <sub>2</sub>	44 44 44 44 44 <sup>1</sup> / <sub>2</sub>	44 44 44 44 44 2	44 44 44 44	44 44 44 44							
										St	onecut	ters														
Baltimore	50.0	50.0	56.3	56.3	56.3	75.0	100.0	100.0	90.0	100.0	112.5	125.0 100.0	125.0 100.0	441/2	441	44	44	44	44	44	44	44	44	44	44	44
Boston Buffalo Chicago	56.3 56.3 62.5	56.3 56.3 62.5	56.3 56.3 62.5	62. 5 62. 5 70. 0	70.0 62.5 70.0	70.0 75.0 81.3	100.0 100.0 125.0	100.0 100.0 125.0	100.0 100.0 102.5	110.0 100.0 102.5	110.0 120.0 125.0	110.0 125.0 137.5	125. 0 125. 0 150. 0	44 48 44	44 48 44	44 44 44	44 44 44	44 44 44	44 44 44	44 44 44	44 44 44	44 44 44	44 44 44	44 44 44	44 44 44 44	44 44 44
Cincinnati Cleveland Dallas Denver Detroit	56. 3 60. 0 62. 5 62. 5 62. 5	60. 0 62. 5 62. 5 62. 5 62. 5	62. 5 62. 5 62. 5 62. 5 65. 0	65. 0 70. 0 75. 0 62. 5 70. 0	70.0 77.5 75.0 75.0 70.0	77.5 80.0 87.5 87.5 80.0	115. 0 112. 5 100. 0 100. 0 125. 0	125.0 125.0 125.0 112.5 112.5	125. 0 110. 0 125. 0 100. 0 112. 5	125. 0 125. 0 125. 0 112. 5 125. 0	125. 0 125. 0 125. 0 112. 5 125. 0	125.0 135.0 137.5 125.0 137.5	132. 5 135. 0 137. 5 125. 0 137. 5	44 <sup>1</sup> / <sub>2</sub> 44 44 44 44 44	44 <sup>1</sup> / <sub>2</sub> 44 44 44 44	44 <sup>1</sup> / <sub>2</sub> 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44
Indianapolis Kansas City, Mo_ Louisville_ Memphis Milwaukee	56.3 56.3 56.3 56.0 50.0	56.3 62.5 56.3 65.0 56.3	56.3 62.5 56.3 65.0 56.3	62. 5 62. 5 60. 0 65. 0 62. 5	62. 5 62. 5 60. 0 75. 0	75.0 75.0 75.0 75.0	100. 0 100. 0 100. 0 100. 0 100. 0	100.0 100.0 100.0 112.5 90.0	100.0 100.0 100.0 112.5 90.0	100.0 100.0 100.0 125.0 106.3	100.0 100.0 112.5 125.0 112.5	112.5 100.0 112.5 125.0 112.5	125. 0 100. 0 112. 5 137. 5 125. 0	44 44 48 44 44	44 44 48 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44
Minneapolis Newark, N.J New Orleans	56.3 68.8	62. 5 68. 8	62. 5 68. 8	62. 5 68. 8	62. 5 68. 8	75.0 84.4	87. 5 112. 5	112.5 112.5 125.0	100.0 112.5 125.0	112.5 125.0 125.0	112.5 131.3 125.0	125.0 137.5 125.0	125.0 150.0 125.0	44 44	44 44	44 44	44 44	44 44	44 44	44 44	44 44 44	44 44 44	44 44 44	44 44 44	44 44 44	44 44 44
New York	68.8	68.8	68.8	68. 8	68.8	84.4	100.0	112.5	112.5	{125.0 112.5	}131.3	137.5	150.0	44	44	44	44	44	44	44	44	44	44	44	44	44
Omaha Philadelphia Richmond, Va St. Louis	58.8 50.0 54.5 56.3	58. 8 56. 3 54. 5 62. 5	58. 8 56. 3 54. 5 62. 5	62. 5 65. 0 54. 5 62. 5	67. 5 65. 0 62. 5 70. 0	75. 0 82. 5 75. 0 85. 0	100. 0 135. 0 87. 5 100. 0	112.5 135.0 100.0 100.0	100.0 100.0 100.0 100.0	112.5 112.5 100.0 112.5	112. 5 125. 0 112. 5 125. 0	112.5 125.0 112.5 125.0	112.5 (a) 112.5 125.0	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44	44 44 44 44	44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 (a) 44 44
St. Paul	56.3	60.0	60.0	62. 5	62.5	75.0	87. 5	112.5	100.0	112.5	112.5	125.0 112.5	125. 0 112. 5	44	44	44	44	44	44	44	44	44	44	44	44 44	44
Scranton Seattle	50.0	50.0	50.0	50.0	56.3 87.5	60.0	90.0	100.0 125.0	100.0 112.5	100.0 112.5	112.5 112.5	125.0 106.3	125.0 125.0	48	44 44	44 44	44 44	44 44	44	44	44 44	44 44	44 44	44 44	44 44	44

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	AtlantaBaltimoreBirminghamBostonBuffaloBuffalo	62. 5 56. 3 62. 5 62. 5 60. 0	62. 5 56. 3 62. 5 62. 5 62. 5	62. 5 62. 5 62. 5 62. 5 62. 5	62. 5 62. 5 62. 5 68. 8 62. 5	75. 0 75. 0 75. 0 80. 0 70. 0	80. 0 100. 0 80. 0 80. 0 85. 0	95. 0 125. 0 100. 0 100. 0 100. 0	95. 0 125. 0 100. 0 125. 0	112. 5 100. 0 100. 0	80. 0 112. 5 105. 0 105. 0 100. 0	100. 0 125. 0 112. 5 110. 0 112. 5	112. 5 137. 5 112. 5 110. 0 125. 0	125. 0 137. 5 112. 5 125. 0 125. 0	44 44 44 44 48	44 44 44 44 21 48	44 44 44 44 21 48	44 44 44 44 21 48	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 	44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	
	Chicago Cincinnati Cleveland Dallas Denver	68. 0 62. 5 65. 0 62. 5 56. 3	68. 0 62. 5 70. 0 67. 5 62. 5	68. 0 62. 5 70. 0 67. 5 62. 5	69. 0 65. 0 80. 0 67. 5 70. 0	70. 0 75. 0 90. 0 75. 0 75. 0	87. 5 75. 0 100. 0 75. 0 87. 5	125. 0 100. 0 125. 0 100. 0 100. 0	125. 0 90. 0 125. 0 100. 0 103. 1	105. 0 95. 0 110. 0 100. 0 103. 1	105. 0 105. 0 137. 5 100. 0 115. 0	125. 0 115. 0 150. 0 100. 0 115. 6	125. 0 125. 0 150. 0 125. 0 125. 0	137. 5 131. 3 150. 0 125. 0 125. 0	44 44½ 14 44 44 44	72 44 44½ 73 44 44 44	72 44 44 2 44 44 44 44	72 44 44 44 44 44	72 44 44 44 44 44 44	44 44 44 44 44								
	Detroit Indianapolis KansasCity, Mo. Little Rock Los Angeles	60. 0 65. 0 62. 5	65. 0 70. 0 68. 8	65. 0 70. 0 68. 8	65. 0 75. 0 68. 8	80. 0 75. 0 75. 0	90. 0 85. 0 90. 0 87. 5 75. 0	125. 0 125. 0 110. 0 100. 0 87. 5	125. 0 125. 0 110. 0	100. 0 112. 5 107. 5 75. 0 100. 0	112. 5 125. 0 107. 5 87. 5 100. 0	125. 0 125. 0 125. 0 112. 5 100. 0	125. 0 125. 0 125. 0 112. 5 100. 0	137. 5 135. 0 125. 0 112. 5 112. 5	21 48 44 44 	48 44 44 	44 44 44 	44 44 44 	44 44 44 	44 44 44 44 44	44 44 44 44 44	44 44 44 	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	
[567	Louisville Memphis Milwaukee Minneapolis Newark, N. J	50. 0 62. 5 56. 3 56. 3 62. 5	50. 0 65. 0 62. 5 62. 5 62. 5	50. 0 65. 0 62. 5 62. 5 68. 8	60. 0 65. 0 62. 5 62. 5 72. 5	70. 0 75. 0 70. 0 68. 8 75. 0	80. 0 87. 5 80. 0 87. 5 87. 5	100. 0 100. 0 100. 0 87. 5 112. 5	100. 0 100. 0 100. 0 112. 5	100. 0 100. 0 90. 0 100. 0 112. 5	125. 0 100. 0 100. 0 100. 0 125. 0	125. 0 100. 0 112. 5 100. 0 150. 0	125. 0 112. 5 112. 5 100. 0 150. 0	125. 0 112. 5 112. 5 100. 0 150. 0	48 44 12 44 48 44	44 44 12 44 10 44 44	44 44 12 44 10 44 44	44 44 1244 44 44	44 44 72 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	
=	New Haven New Orleans New York Omaha	62. 5 62. 5 62. 5 58. 8	62. 5 62. 5 62. 5 62. 5	62. 5 62. 5 66. 3 65. 0	62. 5 62. 5 68. 8 68. 8	80. 0 75. 0 80. 0 75. 0	92. 5 75. 0 87. 5 90. 0	106.3 100.0 112.5 115.0	106.3 100.0 112.5 112.5	100. 0 100. 0 112. 5 100. 0	106.3 100.0 112.5 112.5	125. 0 106. 3 150. 0 112. 5	125. 0 112. 5 150. 0 112. 5	125. 0 125. 0 150. 0 112. 5	44 44 44 48	44 44 44 12 44	44 44 44 12 44	44 44 44 12 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	
	Philadelphia Pittsburgh Portland, Oreg Providence	60. 0 62. 5 62. 5 56. 3	60. 0 62. 5 62. 5 62. 5	60. 0 62. 5 62. 5 62. 5	70. 0 70. 0 70. 0 68. 8	92. 5 87. 5 87. 5 80. 0	92. 5 100. 0 100. 0 92. 5	112. 5 100. 0 112. 5 100. 0	112. 5 125. 0 101. 3 100. 0	100. 0 100. 0 101. 3 92. 5	112. 5 125. 0 112. 5 100. 0	125. 0 137. 5 112. 5 112. 5	125. 0 143. 8 112. 5 112. 5	150. 0 150. 0 112. 5 125. 0	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	
	Richmond, Va. St. Louis St. Paul Salt Lake City	56. 3 65. 0 56. 3 62. 5	62. 5 65. 0 62. 5 62. 5	62. 5 67. 5 62. 5 62. 5	62. 5 70. 0 62. 5 68. 8	80. 0 80. 0 68. 8 81. 3	92, 5 92, 5 80, 0 100, 0	100. 0 125. 0 100. 0 112. 5	100. 0 125. 0 100. 0 100. 0	100. 0 106. 3 100. 0 90. 0	100. 0 125. 0 100. 0 100. 0	100. 0 150. 0 100. 0 112. 5	125. 0 150. 0 100. 0 112. 5	125. 0 150. 0 100. 0 112. 5	44 44 48 44	44 44 21 48 44	44 44 21 48 44	44 44 21 48 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	
	San Francisco Scranton Seattle Washington	75. 0 56. 3 62. 5 56. 3	75. 0 56. 3 62. 5 62. 5	75. 0 62. 5 62. 5 62. 5	75. 0 62. 5 75. 0 70. 0	87. 5 68. 8 87. 5 80. 0	100. 0 87. 5 100. 0 92. 5	112. 5 100. 0 112. 5 98. 0	125. 0 112. 5 112. 5 125. 0	112. 5 100. 0 100. 0 125. 0	112. 5 100. 0 112. 5 125. 0	125. 0 112. 5 112. 5 150. 0	125. 0 112. 5 112. 5 150. 0	125. 0 137. 5 112. 5 150. 0	44 48 44 44	44 48 44 44	44 21 48 44 44	44 21 48 44 44	44 21 48 44 44	44 44 40 44	44 44 44 44							

<sup>&</sup>lt;sup>6</sup> Data not available. <sup>10</sup> 48 hours per week, September to April, inclusive. <sup>12</sup> 48 hours per week, November to April, inclusive.

<sup>&</sup>lt;sup>14</sup> 48 hours per week, October to April, inclusive. <sup>21</sup> 44 hours per week, June to September, inclusive.

<sup>48</sup> hours per week, December to March, inclusive.48 hours per week, October to March, inclusive.

MONTHLY LABOR REVIEW

Typesetting-machine operators: Book and job

G''						Rate	es per h	our (ce	nts)										Hour	rs per	week					
City	1913	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1913	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926
AtlantaBaltimoreBirminghamBostonBuffaloBuffalo		46. 9 46. 9 54. 5 47. 9 50. 0	46. 9 46. 9 54. 5 47. 9 50. 0	46. 9 50. 0 57. 3 50. 0 53. 1	46. 9 50. 0 57. 3 54. 2 59. 4	46. 9 60. 4 57. 3 59. 4 59. 4	57. 5 81. 3 78. 1 77. 1 71. 9	1875. 0 83. 3 80. 0 91. 5 95. 5	80. 0 83. 3 80. 0 91. 5 95. 5	80. 0 90. 9 80. 0 91. 5 95. 5	80. 0 90. 9 80. 0 96. 5 104. 5	80. 0 90. 9 85. 2 96. 5 109. 1	80. 0 90. 9 92. 5 96. 5 111. 4	48 48 48 48 48	48 48 44 44 44	44 48 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44						
Charleston, S. C. Chicago	50. 0 49. 0 53. 8 4212.5	37. 5 50. 0 52. 1 53. 8 4212.5	37. 5 50. 0 52. 1 53. 8 4212.5	50. 0 50. 0 54. 2 62. 5 4212.0	50. 0 60. 2 54. 2 62. 5 4212.0	50. 0 77. 9 58. 3 68. 8 4212.0	50. 0 98. 8 81. 3 87. 5 42 15. 0	103. 4 109. 2 104. 5 93. 8 42 15. 0	103. 4 109. 2 104. 5 93. 8 42 15. 0	95. 5 113. 2 104. 5 93. 8 42 15. 0	88. 6 119. 1 109. 1 100. 0 42 15. 0	<sup>b</sup> 95. 5 119. 1 109. 1 109. 1 <sup>42</sup> 15. 0	88. 6 119. 1 109. 1 111. 4 42 16. 0	48 48 48 48 48	48 48 48 48 48	48 48 48 48 48	48 48 48 48 48	48 48 48 48 48	48 48 48 48 48	48 48 44 48 48	44 44 44 48 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	4-4-4-4-4-
Denver Detroit Fall River Indianapolis Jacksonville	54. 2 55. 0 50. 0 43. 8	54. 2 55. 0 50. 0 52. 1	54. 2 55. 0 50. 0 52. 1	54. 2 60. 5 45. 8 56. 3 53. 1	59. 4 60. 5 46. 9 56. 3 53. 1	65. 6 85. 0 46. 9 60. 4 58. 3	81. 3 100. 0 62. 5 81. 3 75. 0	81. 3 100. 0 72. 7 100. 0 102. 3	95. 5 100. 0 72. 7 92. 7 102. 3	95. 5 105. 0 72. 7 95. 5 81. 8	95. 5 105. 0 81. 8 95. 5 81. 8	102. 3 105. 0 81. 8 98. 0 <sup>b</sup> 88. 6	102. 3 120. 0 81. 8 100. 0 98. 9	48 48  48 48	48 48 48 48	48 48 48 48	48 48 48 48 48	48 48 48 48 48	48 48 48 48 48	48 48 48 48 48	48 48 44 44 44	44 48 44 44 44	44 44 44 44 44	44 44 44 44 44	44 48 44 44 44	4 4 4 4 4
Kansas City, Mo. Little Rock Los Angeles Manchester Milwaukee	56. 0 58. 3 35. 4	57. 3 50. 0 60. 4 35. 4 52. 1	57. 3 50. 0 60. 4 35. 4 52. 1	57. 3 50. 0 60. 4 37. 5 54. 2	62. 5 50. 0 62. 5 39. 6 54. 2	69. 8 50. 0 70. 8 41. 7 60. 4	78. 1 72. 9 81. 3 66. 7 75. 0	89. 6 72. 9 104. 5 77. 3 87. 5	89. 6 70. 0 104. 5 79. 5 95. 5	94. 3 104. 5 79. 5 95. 5	97. 2 110. 2 79. 5 95. 5	99. 4 85. 2 110. 2 79. 5 95. 5	101. 7 96. 6 116. 6 79. 5 95. 5	48 48 48 48 48	48 48 44 44 44	48 44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44 44	4- 4- 4- 4- 4-						
Minneapolis Newark, N. J New Haven New Orleans	50. 0 47. 9 45. 8	50. 0 47. 9 45. 8 53. 3	50. 0 50. 0 45. 8 53. 3	52. 1 50. 0 45. 8 53. 3	52. 1 56. 3 45. 8 53. 3	61. 5 72. 9 45. 8 53. 3	87. 5 91. 7 58. 3 76. 7	87. 5 111. 4 58. 3 76. 7	95. 5 102. 3 86. 4 78. 4	95. 5 109. 1 86. 4 78. 4	95. 5 115. 9 86. 4 78. 4	95. 5 115. 9 86. 4 78. 4	95. 5 118. 2 86. 4 78. 4	48 48 48	48 48 48 45	48 48 48 45	48 48 48 45	48 48 48 45	48 48 48 45	48 48 48 45	48 44 48 45	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	4: 4: 4: 4:
Omaha	54. 2 50. 0 43. 8 47. 9 65. 6	54. 2 53. 1 45. 8 50. 0 65. 6	54. 2 53. 1 45. 8 52. 1 65. 6	54. 2 53. 1 47. 9 52. 1 65. 6	58. 3 53. 1 54. 2 56. 3 68. 8	75. 0 68. 8 64. 6 68. 8 100. 0	93. 8 87. 5 93. 8 87. 5 100. 0	113. 6 93. 2 93. 8 106. 8 110. 0	113. 6 93. 2 94. 1 106. 8 110. 0	113. 6 93. 2 94. 1 106. 8 104. 5	120. 5 93. 2 94. 1 106. 8 104. 5	120. 5 93. 2 94. 1 106. 8 111. 4	122. 7 93. 2 94. 1 166. 8 111. 4	48 48 48 48 48	44 44 48 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44 44	44 44 44 44						
Providence Richmond, Va_ St. Louis St. Paul	47. 9 41. 7 50. 0 50. 0	47. 9 45. 8 50. 0 50. 0	47. 9 45. 8 52. 1 50. 0	47. 9 45. 8 54. 2 52. 1	52. 1 45. 8 59. 6 52. 1	54. 2 54. 2 63. 8 61. 5	72. 9 62. 5 87. 5 83. 3	79. 2 62. 5 101. 0 87. 5	86. 4 81. 8 101. 0 95. 5	86. 4 81. 8 101. 0 90. 9	97. 7 81. 8 106. 0 95. 5	97. 7 81. 8 106. 0 95. 5	97. 7 103. 4 106. 0 95. 5	48 48 48 48	48 48 44 48	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44	44 44 44 44						

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deral Reserve Bank of St. Louis

San Francisco Scranton Seattle	64. 4 45. 8	64. 4 45. 8	65. 0 45. 8	65. 0 50. 0	68. 8 50. 0	68. 8 54. 2	81.3 81.3	104. 5 85. 4	104. 5 85. 2	104. 5 90. 9	104. 5 90. 9	115. 9 100. 0	115.9 100.0 93.8	45 48	45 48	48 48	48 48	48 48	48 48	48 48	44 48	44 44	44 44	44 44	44 j	44 44 44
Washington	50.0	50.0	50.0	56.3	56. 3	75.0	87. 5	95. 5	95. 5	95.5	95. 5	95. 5	95. 5	48	48	48	48	48	24 48	24 48	44	44	44	44	44	44

#### Typesetting-machine operators, daywork: Newspaper

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	nore ngham n	42 8. 5 53. 6 52. 5 63. 0 50. 0	42 8. 5 59. 5 54. 5 63. 0 50. 0	42 8. 5 59. 5 55. 5 63. 0 50. 0	42 8. 5 61. 9 56. 5 68. 0 53. 1	42 8. 5 61. 9 57. 7 68. 0 59. 4	42 8. 5 65. 5 67. 5 83. 0 65. 6	42 9. 0 93. 3 67. 5 95. 0 71. 9	42 10. 5 93. 3 67. 5 95. 0 87. 5	42 10. 0 95. 5 82. 5 107. 0 87. 5	42 10. 0 95. 5 82. 5 107. 0 87. 5	106.8	° 12. 0 106. 8 42 12. 0 117. 0 95. 8			48 42 25 42 26 42 48	48 42 25 42 26 42 48				45 25 42	45	44	44	29 48 44 25 42 44 48	29 48 44 25 42 44 48	48 44 42 25 44 48
Chica Cincin Cleve	land	4750.0 52.1 53.8	1000000	4750.0 56.3 53.8	4750.0 56.3 62.5	\$53.0 56.3 62.5	1964.0 87.5 68.8	107.3 87.5	107.3	94. 8 115. 0 50 96. 0 107. 3 96. 9 42 15. 0	87. 5 115. 0 50 96. 0 113. 3 103. 1 42 15. 0	113.3 107.3	113. 8 107. 3	129. 0 51113.0	} 48 28 473 48	45	45 48 48	25 39 45 48 48 52 39	45 48 48	25 45 48 48	25 45 45 48	48 48 45 48 52 39	48 48 45 48 25 36	45 48	48 45 29 45 45 48 25 36	48 48 29 45 45 45 48 25 36	48 45 45 45 45 25 36
	it	63. 3 55. 0 45. 8 50. 0 42 9. 0	63. 3 55. 0 45. 8 50. 0 52. 1	63. 3 55. 0 45. 8 50. 0 52. 1	63. 3 60. 5 45. 8 56. 3 52. 1	72. 7 60. 5 36. 9 56. 3 55. 2	72. 7 74. 5 50. 0 60. 4 58. 3	97. 8 87. 0 75. 0 81. 3 83. 3	97. 8 97. 0 79. 2 93. 8 83. 3	93. 3 97. 0 79. 2 89. 6 83. 3	93.3 104.5 79.2 100.0 83.3	103. 3 113. 0 87. 5 100. 0 83. 3	103. 3 113. 0 87. 5 100. 0 89. 6	103. 3 120. 0 87. 5 104. 2 100. 0	48 48	29 48 48 48	45 29 48 48 48 48 29 48	45 29 48 48 48 48	45 29 48 48 48 48 48	45 29 48 48 48 48	45 29 48 48 48 48	45 29 48 48 48 48 48	45 29 48 48 48 48 48	45 29 48 48 48 48	45 29 48 48 48 48 48	45 29 48 48 48 48	45 29 48 48 48 48 48
Little Los A Louis	as City,Mo. Rock ngeles ville chester	62. 2 49. 0	59. 4 65. 0 64. 4 50. 0 35. 4	59. 4 65. 0 64. 4 50. 0 35. 4	59. 4 65. 0 66. 7 54. 2 37. 5	59. 4 65. 0 66. 7 54. 5 39. 6	68. 8 78. 6 75. 6 62. 5 41. 7	90. 6 90. 5 86. 7 87. 5 66. 7	90. 6 90. 5 86. 7 82. 9 70. 8	90. 6 102. 4 101. 1 87. 5 72. 9	90. 6 102. 4 101. 1 87. 5 72. 9	90. 6 102. 4 107. 8 93. 8 80. 2	95. 8 107. 1 107. 8 93. 8 82. 3	102. 1 103. 6 114. 0 93. 8 83. 3	48 42 45 48 48	48 42 45 48 48	48 42 45 48 48	48 42 45 48 48	48 42 45 48 48	48 42 45 48 48	48 42 45 48 48	48 42 45 48 48	48 42 45 48 48	48 42 45 48 48	48 42 45 48 48	48 42 45 48 48	48 42 45 48 48
Milw: Minn Newa	rk, N. J	45.8	50. 0 4210.0 60. 9	50. 0 4210. 0 60. 9	54.2	56. 3 4210.0 69. 6	56. 3 4210.0 76. 1	77.1	93.8	93. 8 42 12. 5 110. 9	93. 8 42 12. 5 110. 9	42 12. 5 97. 9 42 12. 5 110. 9 85. 4	42 12. 5 102. 5 42 12. 0 119. 6 85. 4	42 12. 5 102. 5 42 12. 0 121. 7 87. 5	25 45 48 48 46 46 48	48	25 45 48 48 46 46 48	25 45 48 48 46 46 48	25 45 48 48 46 46 48	25 45 48 48 46 46 48	25 45 48 48 46 46 48	48	48	48	25 45 48 25 36 46 48	45 48 48 46 46 48	45 48 48 46 46 48

<sup>b</sup> Machinist operators.

e Per 1,000 ems minion.

18 Old scale; strike pending.
14 44 hours per week, for 3 months, between June 1 and Sept. 30.
15 Minimum; maximum, 8 hours per day.
16 Actual hours worked; minimum, 6; maximum, 8 hours per day.

28 Work 47% hours, paid for 48.
20 Maximum; minimum, 7 hours per day.

42 Per 1,600 ems nonpareil.
47 For 3,500 ems per hour; for 4,500 ems per hour, 55 cents and 1 cent bonus for each additional 100 ems per hour.

48 For 3,500 ems per hour; for 4,500 ems per hour, 58 cents and 1 cent bonus for each additional 100 ems per hour.

49 For 3,500 ems per hour; for 4,500 ems per hour, 70 cents and 1 cent bonus for each additional 100 ems per hour.

50 For 4,000 ems per hour; for 4,500 ems per hour, \$1.06 and 1 cent bonus for each additional 100 ems per hour.
51 For 4,500 ems per hour; 1 cent bonus for each additional 100 ems per hour.

52 Maximum; minimum, 5½ hours per day. 53 Per 1,000 ems nonpareil and 45 cents per day bonus.

#### UNION SCALE OF WAGES AND HOURS OF LABOR IN SPECIFIED OCCUPATIONS, 1913 TO 1926, BY CITIES-Continued

#### Typesetting-machine operators, daywork: Newspaper-Continued

C14-						Rate	s per h	our (ce	nts)										Hou	rs per	week					
City	1913	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1913	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926
New York Omaha Philadelphia Pittsburgh Portland, Oreg	66. 7 50. 0 45. 8 55. 0 68. 3	66. 7 53. 1 45. 8 60. 0 68. 3		45. 8 61. 0	71. 1 53. 1 52. 1 65. 0 72. 7	96. 7 68. 8 66. 7 77. 0 100. 0	122. 2 87. 5 81. 3 87. 5 106. 7	122. 2 87. 5 45 79. 2 111. 8 106. 7	122. 2 87. 5 45 79. 2 111. 8 106. 7		90.6	133. 3 90. 6 87. 5 121. 1 106. 7	133. 3 90. 6 87, 5 125. 6 106. 7	45 48 48 48 45	45 48 48 25 45 45	45 48 48 48 25 45 45	45 48 48 48 25 45 45	45 48 48 48 25 45 45	45 - 48 - 48 - 48 - 25 - 45 - 45	45 48 48 48 45	45 48 48 46½ 45	45 48 48 46½ 45	45 48 48 45 45	. 45 48 48 45 45	45 48 48 45 45	45 48 48 45 45
Providence Richmond, Va. St. Louis St. Paul Salt Lake City.	54.5	<sup>42</sup> 11.0 54.5	45. 8 4211.0 54. 5	54.5	4211.5 63.0	4211.5 63.0	87. 5 55 56. 3 42 15. 0 94. 0 58 11. 0	88. 8	89.8	87. 5 42 15. 0 89. 8	87. 5 42 17. 0 93. 8	87. 5 42 17. 5 101. 3	101.3	48 56 39 48	48 48 56 39 48 60 48	48 48 56 39 48 60 48	48	57 48			48 48 46 57 48 60 46½				45 48 46 57 48 29 43½	48 48 46 48 43
San Francisco Scranton Seattle Washington	64. 4 47. 9 75. 0 60. 7	69. 0 47. 9 75. 0 60. 7	47.9	78.6	68. 9 52. 1 80. 1 69. 8	75. 6 60. 4 100. 0 92. 9	93. 8 81. 3 114. 3 104. 0	107. 8 87. 5 114. 3 104. 0	107. 8 87. 5 114. 3 104. 0	107. 8 95. 8 114. 3 104. 0	107. 8 95. 8 121. 4 110. 0	115. 6 104. 2 121. 4 110. 0		48 42	42 48 42 42	42 48 42 42	42 48 42 42	45 48 42 42	45 48 42 42	45 48 42 42	45 48 42 42	45 48 42 42	45 48 42 42	45 48 42 42	45 48 42 42	45 48 42 42

<sup>Minimum; maximum, 8 hours per day.
Maximum; minimum, 7 hours per day.
Per 1,000 ems nonpareil.
Nominal rate. All received more; \$41 to \$47 per week.
Nominal rate. All received more; \$4 to \$49 per week.
Nominal rate. All received more; \$40 to \$47 per week.
Nominal rate. All received more; \$40 to \$45 per week.</sup> 

<sup>Minimum; maximum, 7% hours per day
Maximum; minimum, 7½ hours per day.
Per 1,000 ems nonparell and \$1 per day bonus.
Per 1,000 ems nonparell and \$1.25 per day bonus.
Maximum; minimum, 6½ hours per day.
Maximum; minimum, 40½ hours per week.</sup> 

# Wages of Farm Labor as Compared With Cost of Living, 1906 to 1925

N PREVIOUS articles in the Labor Review, index numbers of hourly wage rates from 1906 to 1924, and index numbers of the purchasing power of such wage rates, have been presented for organized labor as a whole and for certain important industries. The table below attempts a similar presentation of money wages and real wages of agricultural workers in the United States from 1906 to 1925.

The striking feature of the table is that farm wages have not kept pace with the cost of living. In other words, as regards purchasing power of his wages, the average farm laborer was 7.2 per cent worse off in 1925 than in 1913. Only in the years 1919 and 1920 was his purchasing power higher than in 1913 and even then it was less than it

had been in 1906.

The indexes of money wages used in the table are derived from a combination of the daily wage rates and monthly wage rates (both without board) as regularly reported by the United States Department of Agriculture. The combination has been made by multiplying the daily rates by 20, and weighing the results according to the proportion of workers on a daily basis compared with those on a

monthly basis.1

The cost-of-living indexes used are those compiled by the Bureau of Labor Statistics for various dates since 1913; those prior to 1913, however, are based solely on retail food prices. The bureau's cost-of-living studies cover 32 cities in various parts of the United States. There are no similar data for rural communities and in the present study, therefore, it is necessarily assumed that the changes in living costs have been the same in rural as in urban communities.

# COMPARISON OF CHANGES IN WAGES (WITHOUT BOARD) OF FARM LABORERS, AND IN COST OF LIVING, 1906 TO 1925

#### [1913=100]

	Index n	umbers		hasing of wages		Index n			nasing of wages
Year	Wages of farm laborers (with- out board)	Cost of living	Index num- bers meas- ured in cost of living	Per cent of change as com- pared with 1913	Year	Wages of farm laborers (with- out board)	Cost of living	Index num- bers meas- ured in cost of living	Per cent of change as com- pared with 1913
1906	88 91 94 94 97 100 98 99	78. 7 88. 7 93. 0 92. 0 97. 6 100. 0 103. 0 105. 1 118. 3	111. 8 102. 6 101. 1 102. 2 99. 4 100. 0 95. 1 94. 2 91. 3	+11. 8 +2. 6 +1. 1 +2. 2 -0. 6 -4. 9 -5. 8 -8. 7	1917. 1918. 1919. 1920. 1921. 1922. 1923. 1924. 1924.	134 169 199 228 145 142 160 162 163	142. 4 174. 4 188. 3 208. 5 177. 3 167. 3 171. 0 170. 7 175. 7	94. 1 96. 9 105. 7 109. 4 81. 8 84. 9 93. 6 94. 9 92. 8	-5. 9 -3. 1 +5. 0 +9. 4 -18. 9 -15. 1 -6. 4 -5. 1 -7. 9

<sup>&</sup>lt;sup>1</sup> United States. Department of Agriculture. Statistical abstract, 1924. Washington, 1925, p. 583.

# Wages in Tennessee, 1925

THE following statistics on wages in Tennessee are taken from the third annual report of the department of labor of that State for the calendar year 1925:

AVERAGE WEEKLY WAGES IN CERTAIN INDUSTRIES IN TENNESSEE 1

. Industry	Number of estab-	Numbe	r of em- yees	Weekly	wages
Anadot y	lishments	Male	Female	Male	Female
Auto sales and garage Builders' supplies Hotel and restaurant Loundry Newspaper and periodical Packing house, refining and cold storage Bag, cioth, and paper Bakery Boiler and tank Boot and shoe Bottling Box, paper and wood Brick, lime, cement, and sewer pipe Candy Chemical and fertilizer Cigar, tobacco and snuff. Clothing Cotton goods and hosiery Cotton-seed products Food and food products	15 67 76 15 34 13 43 8 8 3 49 25 28 20 16 23 64 70 27	619 651 1, 359 950 950 703 1, 199 1, 074 1, 030 1, 216 397 506 1, 822 1, 462 1, 477 700 3, 865 2, 359 982 2, 982	51 16 1,115 2,080 96 686 824 486 15 323 21 520 50 50 827 133 2,175 7,732 9,572	\$25. 31 20. 22 14. 42 21. 13 30. 24 20. 24 17. 25 23. 63 20. 63 18. 70 14. 96 17. 80 21. 50 17. 76 20. 37 16. 72 16. 81 16. 07	\$22.7: 18.61 9.22 10.45 16.44 18.99 11.75 12.67 12.67 14.33 16.33 12.21 15.55 12.55 13.12 11.48 11.55
Foundry. Furnace Furniture Hardware and stove lee Lumber Lumber products Metal and metal products Paper, pulp and fiber	33 6 44 14 61 94 180 27	3, 440 918 3, 068 1, 771 1, 237 3, 253 8, 020 729 690	128 61 7 466 38 40 53 585 78 65	18. 73 21. 21 19. 07 16. 82 24. 79 16. 71 15. 76 11. 20 21. 49 20. 30	10. 20 17. 60 20. 00 11. 32 19. 40 16. 92 15. 72 12. 33 21. 34
Pharmáceutical and drug. Printing and engraving Quarrying stone and marble Silk, and silk hosiery. Spring and mattress. Tanning and extract. Telephone and telegraph Wagon, vehicle, auto, and parts. Water, light, and power. Wool and wool extracts.	19 82 19 6 22 12 28 26 22 6	279 1,585 866 142 510 520 754 3,648 1,374	439 621 16 380 120 81 1,531 48 88	12. 42 16. 64 19. 78 10. 54 14. 51 15. 10 16. 45 22. 15 19. 32 12. 26	12. 5 16. 7 19. 8 10. 2 14. 2 15. 1 16. 0 21. 2 19. 3 12. 3
Miscellaneous Clothing Department store Five-and-ten-cent store	75 31	2,349 552 1,186 104	380 1,135 2,688 603	15. 72 17. 20 8. 33 10. 24	15. 6. 17. 40 9. 2 10. 1

<sup>&</sup>lt;sup>1</sup>Industries listed as employing less than 500 persons are not included in the table.

# Earnings in the Silk Industry at Krefeld, Germany, 1913-14 and 1925

RECENT issue of the Arbeitgeber, the journal of the Union of German Employers' Federations, contains wage statistics of the silk industry at Krefeld showing the relative increase of money and real wages in October, 1925, over pre-war wages. From these statistics the following table has been compiled showing for representative occupations the average hourly and weekly earnings in 1913–14 and in October, 1925:

<sup>&</sup>lt;sup>1</sup> Vereinigung der Deutschen Arbeitgeberverbände. Der Arbeitgeber. Berlin, Mar. 15, 1926.

# AVERAGE WEEKLY AND HOURLY EARNINGS OF WORKERS IN THE KREFELD SILK INDUSTRY, 1913-14, AND OCTOBER, 1925

[Mark at par=23.8 cents; exchange value was about par in 1925]

		1913-14			Octob	er, 1925	
Occupation					ngs per our		ngs per 54 hours
	Earn- ings per week	Hours per week	Earn- ings per hour		Per cent of increase over 1913-14	Amount	Per cent of increase over 1913-14
Piece workers: Cloth weavers, two looms, male Cloth weavers, two looms, female Ribbon weavers, male Cloth printers, male	Marks 24, 50 22, 00 34, 10 38, 26	58 58 58–60 58–60	Marks 0. 422 . 379 . 578 . 648	Marks 10.7654 .7361 1.9392 11.2080	81. 4 94. 2 62. 5 86. 4	Marks 2 41. 69 39. 75	70. 2 80. 7
Time workers: Dyers, black, male Dyers, colors, male Forewomen and female packers.	25. 50 29. 50 16. 00	58-60 58-60 58-60	. 432 . 500 . 271	1.6650 1.8505 .4750	53. 9 70. 1 75. 3	\$ 46. 43	57. 4

The hourly and weekly earnings shown in the preceding table are weighted average earnings, and cover all silk mills in Krefeld. rates of October, 1925, have undergone very little change and may be

assumed to be still effective at the present date.

The data show that the hourly earnings of silk-mill workers in October, 1925, were from 54 to 94 per cent higher than the pre-war earnings and that the weekly earnings were 57 to 80 per cent higher. In October, 1925, the German cost of living index (1913–14=100) stood at 143.5. The real wages of male silk weavers were therefore stood at 143.5. at that time more than 25 per cent higher than those of pre-war times.

It is stated that the labor costs of Krefeld silk manufacturers have increased 80 to 100 per cent, as compared with pre-war times, the cost of cotton yarn 90 to 100 per cent, of raw silk 60 to 70 per cent, and of rayon 20 per cent. In addition taxes, freights, interest, social burdens, etc. are also much higher while prices of silk goods have advanced only 60 per cent over pre-war prices.

## Earnings and Hours in the English Pottery, Brick, Glass, and Other Industries

IN THE Labor Review for August, 1926 (pp. 120-123) data were given concerning an investigation into the English textile industries, results of which were published in the Ministry of Labor Gazette (London), for June. The July issue of that periodical contains a report upon the findings of the investigation in regard to the pottery, brick, glass, cement, chemical, and other industries, presented in the same form as the preceding report. The investigation, it will be remembered, dealt with the position in 1924. ployers were asked to furnish data covering four weeks, ending respectively on January 19, April 12, July 12, and October 18, 1924. Replies

Inclusive of 0.02 mark family allowance.
 Inclusive of family allowance for wife and two children.
 Inclusive of family allowance for wife and two children and 10 per cent production bonus.

were received covering 4,764 establishments, with an average force for the four weeks of 276,014 workpeople. For the separate weeks, the workers varied from 267,904 in the first to 280,187 in the third. The number employed in the week ending October 18, and the proportion of male and female workers as shown by the average of the four weeks, were as follows:

TABLE 1 .- NUMBER OF WORKERS COVERED AND DISTRIBUTION, BY SEX

	T. Jankers	Number employed	Per cent, a four wee	
	Industry	in week ending Oct. 18, 1924	Males	Females
Chemical Cement Explosives Paint, color and va Soap, candle, oil, a	arnish nd tallow .te	57, 512 53, 132 31, 571 56, 937 9, 392 7, 774 12, 251 28, 835 21, 505	56. 6 93. 3 84. 3 82. 7 97. 3 49. 6 84. 5 70. 6 61. 8	43, 4 6, 7 15, 7 17, 3 2, 7 50, 4 15, 8 29, 4
Total		 278, 909	78.9	21.1

It will be seen that in most of these industries, men far outnumber the women. In explosives, it is true, female workers form half, in pottery over two-fifths, and in other chemicals slightly under two-fifths of the total number, but taking the industries as a whole, they form only a little over one-fifth of the working force. This dominance of male workers of course affects the level of wages and earnings. The "chemical" industries in the above table, it may be mentioned, include the manufacture of heavy chemicals, fine chemicals, drugs, dyes, etc., while the "other chemicals" include fertilizers, starch, blue and polish, salt, printing ink, glue, matches, etc.

# Average Weekly Earnings

THE following table shows the weekly earnings, averaged for the four weeks, by sex of worker and also for the whole group, regardless of sex. Some of the employers replying were not able to give wages of men and women separately, so that the data relating to the sexes separately and those relating to the whole group do not exactly correspond.

TABLE 2.—AVERAGE WEEKLY EARNINGS FOR FOUR WEEKS ENDING JANUARY 19 APRIL 12, JULY 12, AND OCTOBER 18, 1924, BY INDUSTRY AND SEX

[Shilling at par=24.33 cents, penny=2.03 cents; exchange rate about par]

	Male		Female			Both sexes			
Industry	Number of workers	A ver week earni	cly	Number of workers	A ver week earni	tly	Number of workers	Aver week earni	dy
Pottery Brick, tile, etc Glass Chemical Cement Explosives. Paint, color and varnish. Soap, candle, oil, and tallow. Other chemicals, etc	13, 852 41, 819 25, 421 42, 595 8, 506 3, 611 9, 812 15, 504 10, 582	8. 55 51 56 59 59 54 56 60 58	d. 6 10 1 7 0 10 3 5 7	10, 601 3, 015 4, 721 8, 892 237 3, 673 1, 796 6, 451 6, 528	8. 22 23 23 24 29 28 24 26 26	d. 3 4 8 5 6 1 7 1 10	56, 283 51, 243 32, 452 56, 711 9, 243 7, 403 12, 244 28, 569 21, 866	8. 38 49 50 52 58 41 51 50 45	d. 8 9 10 111 7 6 9 5 5
Total	171, 702	56	6	45, 914	24	8	276, 014	48	2

The earnings shown here for the group as a whole range higher than in the textile industries-48s. 2d. against 37s. 9d.-but the difference is found wholly in the wages paid to men. In textiles the male workers averaged 51s. 6d. against 56s. 6d. in these industries, but the female workers averaged 27s. 11d. against the 24s. 8d. shown above. Considering the male workers only, the highest weekly earnings are found among those employed in the soap, candle, oil, and tallow group, who averaged 60s. 5d., but these are closely approached by the much larger group employed in the chemical industries, who earned 59s. 7d., and the comparatively small group of workers in cement, who averaged 59s. The lowest earnings, 51s. 10d., are found among the workers in brick, tile, etc. For women the highest earnings were received by the very small group, numbering only 237, who were employed in the cement industry with average earnings of 29s. 6d. a week. Next in order came those employed in the manufacture of explosives, who earned 28s. 1d., while the lowest average was received by the largest group, those employed in the pottery industry, who earned 22s. 3d. a week.

### Normal Weekly Hours of Labor

THE following table shows the proportion of the workpeople covered whose normal working hours, exclusive of meal times, fell within the specified limits in the week of October 18, 1924, and the average normal hours.

TABLE 3.-NORMAL WEEKLY HOURS OF LABOR, BY INDUSTRY

Industry	Number of workers	Percenta whose nor	Average weekly		
		Under 48	48	Over 48	normal hours
Pottery	57, 333 52, 898 31, 454 56, 470 9, 389 7, 770 12, 221 28, 823 21, 470	88. 2 20. 2 84. 7 61. 2 14. 7 93. 2 80. 4 50. 9 70. 9	10. 4 58. 2 7. 8 22. 6 59. 9 3. 3 10. 2 38. 2 20. 0	1. 4 21. 6 7. 5 16. 2 25. 4 3. 5 9. 4 10. 9 9. 1	46. 9 48. 5 45. 2 48. 1 49. 2 46. 9 47. 2 46. 8
Total	277, 828	61. 4	26. 8	11.8	47. 4

This shows that over three-fifths of the workers have a normal week of less than 48 hours, but there is considerable variation in the length of this shorter week. In the pottery industry 73 per cent of the workers have a week of 47 hours, while in the glass industry 30.5 per cent have one of 44 hours or less, 22.1 per cent one of over 44 but under 47, and 31.4 per cent one of 47 hours. In the manufacture of explosives, 82.4 per cent work 47 hours per week, while in paint, etc., 22 per cent work less than that number. It will be noticed that in three groups of industries, brick and tile, chemical, and cement, the average weekly hours were over 48, and that two of these were industries employing large numbers of workers, but that nevertheless, the average hours for the whole 277,828 workers considered fell below 48 a week.

In some of the industries included in the study, a considerable number of workers were employed on the shift system. The number in each industry, and the number working under the 3-shift and the 2-shift system were as follows:

TABLE 4.—EXTENT OF 2-SHIFT AND 3-SHIFT SYSTEMS, BY INDUSTRY

Industry	Number of shift	Number of shift workers working on—		
Thuustiy	workers	3-shift	2-shift	
	covered	system	system	
Glass	10, 749	9, 299	1, 450	
Chemical_	8, 250	8, 034	216	
Cement_	1, 668	1, 623	43	
Soap, candle, oil, and tallow	2, 855	2, 822	33	
Total	23, 522	21, 778	1, 74	

The overwhelming majority of the shift workers—77.4 per cent in the glass industry, 94.9 per cent in the chemical industry, and 100 per cent in each of the other groups—worked in 8-hour shifts. In the glass industry 3 per cent, and in the chemical industry 2 per cent, were in 12-hour shifts, while the others were in shifts ranging from 6 hours up to 11½. The average weekly normal hours for the shift workers were 41.5 in the glass, 53.6 in the chemical, 54.8 in the cement, and 49.6 in the soap, candle, oil, and tallow industries.

## Hours Actually Worked and Average Hourly Earnings

THE following table shows the average number of hours actually worked in the four weeks by the 167,179 workpeople whose employers were able to supply data on this subject, and their average hourly earnings.

Table 5.—HOURS ACTUALLY WORKED AND AVERAGE HOURLY EARNINGS
[Penny, at par=2.03 cents; exchange rate about par]

Industry	Number of workers	Average hours worked in the four weeks	Average hourly earnings in the four weeks
Pottery_Brick, tile, etc Glass	17, 591 28, 616 20, 891 41, 415 4, 132 5, 140 9, 640 22, 494 17, 260	44. 1 47. 4 44. 2 47. 9 49. 9 46. 2 46. 9 45. 3 44. 6	d. 10. 7 12. 5 14. 1 13. 6 14. 3 11. 6 13. 3 13. 0 12. 4
Total	167, 179	46. 2	12. 9

Some of the employers who reported on weekly earnings were unable to give data as to the actual hours and hourly earnings, so that the figures given here do not correspond exactly with those in Tables 2 and 3. In general, it will be observed, a low rate of hourly earnings is found where the proportion of woman workers is high,

and vice versa. The brick, tile, etc., industries present an exception to this, since only the cement industries have fewer female workers, while five industries surpass them in the rate of hourly earnings.

#### Extent of Short Time

THE following table shows the average number of workers during the four weeks for whom reports on short time were made, the proportion who, in the week ending October 18, 1924, worked short time, and the average number of hours lost in that week by those on short time. Those who were wholly unemployed were omitted from the table.

Table 6.-Proportion working short Time and Hours Lost Per Worker, Week ended october 18, 1924

Industry	Number of workers	Per cent on short- time week ended Oct. 18	Average hours lost by those on short time
Pottery Brick, tile, etc Glass Chemical Cement Explosives Paint, color, and varnish Soap, candle, oll, and tallow Other chemicals, etc	30, 817 55, 573 8, 808 7, 395 12, 111 27, 563		13.0 11.0 15.6 8.4 18.0 9.3 6.4 9.6 7.1
Total	256, 166	8.3	10.0

It will be observed that the pottery industry suffered more than any of the other industries in which the report covered large numbers of workers, since a substantial percentage of its employees were on short time and the average time lost was considerable. In the glass and the cement industries the average time lost was greater, but the proportion of persons working short time was much smaller.

# Eight-Hour Act for the English Coal-Mining Industry

HE act amending the mining regulations concerning hours, which passed both houses of Parliament and received the royal assent on July 8, 1926, permits the lengthening of the working-day underground to eight hours throughout Great Britain. In noting the fact, the Ministry of Labor Gazette for July, 1926, points out that the coal mines regulation act of 1908 established an eight-hour day underground, but permitted an extension of one hour a day for not more than 60 days in any calendar year. In 1919 an act was passed which reduced the day to seven hours, but made no change in the provision relating to extension. The present bill provides that the section of the 1908 act dealing with hours shall have effect as if the words "on not more than 60 days in any calendar year" were omitted. In other words, the eight-hour day, "without restriction," is hereafter

entirely legal. The hours underground, the Gazette explains, in the case of men working on shift, are reckoned from the time the last member of the shift is down until the first one reaches the surface again. This extra period is known as "winding time." "The average winding time for Great Britain as a whole," said the Royal Commission in its recent report on the coal industry, "has usually been estimated in the past at 37 or 39 minutes. \* \* \* For all practical purposes the estimate of half an hour, as the average time spent underground on account of winding time, is sufficiently accurate." The new act, therefore, practically authorizes a day of eight and a half hours underground.

The act was strenuously resisted by the labor members of Parliament, and is strongly opposed by the unions and workers generally.

# Trend of Salaries and Wages in Sweden, 1913 to 1925

HE May issue of Sociala Meddelanden (Stockholm), the journal of the Swedish Department of Social Welfare, contains provisional results for 1925 of the annual official investigation into salaries and wages in various industries in Sweden. The data shown below are based, as in previous investigations, on information supplied by employers and relate to two groups of workers: (a) Nonmanual workers or salaried employees, such as technical or office staff and shop clerks; and (b) manual workers in manufacturing industries, transport, communication, and commerce.

Table 1, based on returns in 1925 for 45,296 nonmanual workers, shows the average annual salaries paid in 1913, 1921 (in which year salaries reached their highest level), and 1925, and the increase in percent as compared with 1913.

TABLE 1.—TREND OF ANNUAL SALARIES OF NONMANUAL WORKERS IN SWEDEN,

Group	Aver	age annual s	Increase as compared with 1913		
	1913	1921	1925	1921	1925
Technical staff:	Kronor a	Kronor b	Kronor a	Per cent	Per cent
Men	3, 131	6,716	5, 622	115	80
Women	1, 204	2, 981	2,770	148	130
Both sexes	3, 025	6, 584	5, 535	118	88
Office staff: Men	0.000		1 100		
	2, 309	5, 417	4, 489	135	94
Women Both sexes	1, 257 2, 064	3, 300	2, 719	163	116
Shop clerks:	2,004	4, 807	3, 934	133	93
Men	1, 314	3, 495	2, 952	166	128
Women	881	2, 455	2, 053	179	132
Both sexes	1, 163	2, 937	2, 438	153	110
General average:			-,		-
Men	2, 346	5, 625	4, 671	140	99
Women	1, 135	3,085	2, 523	172	122
Both sexes	2, 049	4, 950	4,039	142	97

<sup>&</sup>lt;sup>a</sup> In 1913 and 1925 the krona was quoted at about par-26.8 cents.

<sup>&</sup>lt;sup>b</sup> In 1921 exchange rate of the krona varied between 21.04 and 24.53 cents.

<sup>&</sup>lt;sup>1</sup> Great Britain. Royal Commission on the Coal Industry (1925). Roport. Vol. 1, London, 1926. [Cmd. 2600.]

From the preceding table it will be seen that in 1921 the average salaries of nonmanual workers were 142 per cent higher than in 1913. Subsequent to 1921 salaries decreased steadily and in 1925 they were on an average only 97 per cent higher than in 1913. A noteworthy fact is that in postwar times the relative increase in women's salaries was considerably greater than that in men's salaries. Shop clerks, who are the lowest paid nonmanual workers, received the highest relative increases in postwar times and technical employees, who are the highest paid intellectual workers, received the smallest relative increases.

Table 2 shows the average annual and hourly earnings of manual workers in 1925 as compared with 1913, based on returns covering

234,854 workers:

Table 2.—AVERAGE YEARLY AND HOURLY EARNINGS OF MANUAL WORKERS IN SWEDEN, 1913 AND 1925

n 1913 and 1925 was quoted at	about par—26.8 cents]
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	Averag	e yearly e	arnings	Average hourly earnings			
Group	1913	1925	Increase, 1925 over 1913	1913	1925	Increase, 1925 over 1913	
Men over 18 years of age Women over 18 years of age Juvenile workers	Kronor 1, 241 651 485	Kronor 2, 637 1, 545 1, 054	Per cent 112 137 117	Kronor 0. 45 . 24 . 18	Kronor 1.17 .71 .49	Per cent 160 196 172	
Total	1,093	2,367	117	. 40	1.06	165	
Sex not stated	1,079 1,091	1,780 2,362	65 116	.30	. 82 1. 06	173 168	

It thus appears that the average yearly earnings of manual workers in 1925 increased 116 per cent as compared with 1913, while their average hourly earnings increased 165 per cent. The disparity in the percentage increases between yearly and hourly earnings is stated to be due to the decreased number of working hours per year, the result chiefly of the introduction of the eight-hour day and the working of short time owing to industrial depression.

The figures in Tables 1 and 2 relate to the changes in the level of money salaries and wages only. When allowance is made for the rise in the cost of living, which was 76 per cent higher in 1925 than in 1913, it is found that real salaries of nonmanual workers were 12 per cent higher in 1925 than 1913, and that real hourly wages of manual workers increased 50 per cent and their real yearly earnings

23 per cent, as compared with 1913.

## TREND OF EMPLOYMENT

# Employment in Selected Industries in July, 1926

MPLOYMENT in manufacturing industries decreased 1.6 per cent in July as compared with June, and pay-roll totals decreased 4.5 per cent. The usual July closing for inventory taking and repairs and the vacation season were largely responsible for these decreases.

Employment in July, nevertheless, was 0.6 per cent greater than in the same month of 1925, and pay-roll totals were 1.8 per cent greater.

The Bureau of Labor Statistics' weighted index of employment for July is 89.8 as compared with 91.3 for June, 1926, and 89.3 for July, 1925; the index for pay-roll totals for July is 91.2 as compared with 95.5 for June, 1926, and 89.6 for July, 1925.

This report is based on returns from 10,128 establishments in 54 industries, having in July 2,975,690 employees, whose combined

earnings in one week were \$76,919,002.

Comparison of Employment and Pay-Roll Totals in June and July, 1926

THE volume of employment increased in July, as compared with June, only in the two South Central divisions of the nine geographic divisions, both increases being very small. The largest decrease in employment was 4.8 per cent, in the New England division. Pay-roll totals decreased in every division, the decreases in the New England, East North Central, and Mountain divisions, each being 6 per cent or over. The Middle Atlantic and West North Central divisions show declines of about 4 per cent each, and the Pacific division fell off over 5 per cent.

The leather group of industries in July showed increases of considerable size both in employment and pay-roll totals, while the remaining 11 groups showed decreases in both items, with one exception—a small increase of employment in the food group. The most noticeable falling off in employment appeared in the textile, tobacco,

and stone, clay, and glass groups.

Fifteen separate industries made employment gains in July, the pronounced gains being in the carriage, flour, structural ironwork, boot and shoe, and cast-iron pipe industries. The greatest decreases in employment appeared in the rubber boot and shoe, agricultural implement, pottery, women's clothing, stove, cotton, piano, glass, and hosiery industries, these being largely seasonal changes, although the women's clothing industry suffered from the effect of a strike, in certain sections. Employees' earnings decreased in 46 of the 54 industries, the effect of inventory taking, repairs, and vacations being felt in addition to seasonal declines.

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

the foot of Table 1 and Table 3.

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TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL ESTABLISHMENTS DURING ONE WEEK EACH IN JUNE AND JULY, 1926

Industry	Industry Estab-		cent		cent		
industry	ments	June, 1926	July, 1926	of change	June, 1926	July, 1926	of change
Food and kindred products Slaughtering and meat packing Confectionery Lee cream Flour Baking Sugar refining, cane	1, 460 182 259 196 332 476 15	205, 698 81, 953 28, 839 10, 678 14, 076 58, 843 11, 309	206, 535 82, 707 28, 549 10, 832 14, 849 58, 752 10, 846	(1) +0.9 -1.0 +1.4 +5.5 -0.2 -4.1	\$5, 326, 646 2, 129, 288 545, 629 353, 328 367, 333 1, 591, 034 339, 434	\$5, 293, 434 2, 124, 775 520, 280 365, 261 388, 771 1, 576, 904 317, 443	(1) -0.5 -4.6 +3.6 +5.8 -0.9
Cottines and their products Cotton goods. Hosiery and knit goods. Silk goods. Woolen and worsted goods. Carpets and rugs. Dyeing and finishing textiles. Clothing, men's. Shirts and collars. Clothing, women's. Millinery and lace goods.	1, 858 500 249 198 189 29 86 274 81 180 72	572, 372 224, 014 80, 808 53, 023 58, 635 21, 289 28, 719 59, 104 20, 116 16, 541 10, 123	546, 560 209, 454 75, 948 52, 482 58, 478 20, 667 27, 473 57, 577 19, 679 15, 118 9, 684	(1) -6. 5 -6. 0 -1. 0 -0. 3 -2. 9 -4. 3 -2. 6 -2. 2 -8. 6 -4. 3	10, 866, 294 3, 427, 507 1, 511, 383 1, 094, 477 1, 299, 191 553, 841 664, 366 1, 403, 534 322, 605 370, 050 219, 340	10, 179, 086 3, 052, 866 1, 374, 367 1, 077, 165 1, 295, 125 522, 174 628, 313 1, 388, 550 301, 361 329, 572 209, 593	(1) -10.9 -1.6 -0.3 -5.7 -5.4 -1 -6.6 -10.9
Iron and steel and their products Iron and steel Cast-iron pipe Structural ironwork Foundry and machine-shop products.	1,815 207 50 149	697, 014 284, 171 14, 411 24, 143	688, 471 279, 678 14, 891 25, 418	(1) -1.6 +3.3 +5.3	20, 758, 188 8, 674, 934 352, 175 710, 678	19, 628, 516 8, 156, 891 356, 671 709, 052	(1) -6. +1. -0.
products Hardware Machine tools Steam fittings and steam and	980 64 162	250, 413 34, 540 31, 394	247, 900 33, 923 31, 342	-1.0 -1.8 -0.2	7, 525, 036 860, 621 959, 266	7, 127, 683 814, 818 937, 682	-5. -5. -2.
hot-water heating apparatus Stoves	111 92	42, 345 15, 597	40, 923 14, 396	-3.4 $-7.7$	1, 255, 616 419, 862	1, 165, 547 360, 172	-7. -14.
Lumber and its products Lumber, sawmills Lumber, millwork Furniture	1,048 430 234 384	210, 690 122, 874 31, 247 56, 569	209, 582 122, 179 31, 175 56, 228	(1) -0. 6 -0. 2 -0. 6	4, 648, 938 2, 527, 446 771, 261 1, 350, 231	4, 437, 386 2, 417, 483 738, 508 1, 281, 395	(1) -4. -4. -5.
Leather and its products Leather Boots and shoes	368 127 241	115, 435 27, 005 88, 430	119, 790 27, 522 92, 268	(1) +1.9 +4.3	2,641,789 681,852 1,959,937	2, 782, 730 680, 064 2, 102, 666	(1) -0. +7.
Paper and printing Paper and pulp Paper boxes Printing, book and job Printing, newspaper	880 204 173 294 209	164, 919 54, 959 18, 271 44, 027 47, 662	164, 157 54, 401 18, 535 43, 922 47, 299	$ \begin{array}{c} (1) \\ -1.0 \\ +1.4 \\ -0.2 \\ -0.8 \end{array} $	5, 348, 120 1, 480, 484 403, 596 1, 532, 100 1, 931, 940	5, 229, 887 1, 413, 540 406, 289 1, 509, 940 1, 900, 118	(1) -4. +0. -1.
Chemicals and allied products Chemicals Fertilizers Petroleum refining	277 118 103 56	87, 549 29, 055 6, 143 52, 351	87, 459 28, 551 6, 099 52, 809	$ \begin{array}{c} (1) \\ -1.7 \\ -0.7 \\ +0.9 \end{array} $	2,643,394 794,260 127,696 1,721,438	2, 551, 893 769, 867 129, 337 1, 652, 689	(1) -3. +1. -4.
Stone, ciay, and glass prod- ucts. Cement. Brick, tile, and terra cotta Pottery. Glass.	638 93 361 57 127	115, 284 26, 902 34, 205 13, 149 41, 028	112, 084 27, 185 34, 516 11, 866 38, 517	$\begin{array}{c} (1) \\ +1.1 \\ +0.9 \\ -9.8 \\ -6.1 \end{array}$	3, 697, 880 816, 561 911, 332 343, 363 1, 026, 624	2, 884, 205 786, 467 881, 470 292, 714 923, 554	(1) -3. -3. -14. -10.
Mctal products, other than iron and steel Stamped and enameled ware Brass, bronze, and copper prod-	206 62	50, 604 18, 382	<b>49, 578</b> 18, 028	(1) -1,9	1, 354, 109 443, 872	1, 269, 894 402, 691	(1) -9.
uctsTobacco products	144 199	32, 222 44, 634	31, 550 43, 256	-2.1 (1)	910, 237 795, 470	867, 203 <b>765, 996</b>	-4. (1)
Chewing and smoking tobacco and snuff Cigars and cigarettes	30 169	8, 673 35, 961	8, 753 34, 503	+0.9 -4.1	140, 021 655, 449	139, 532 626, 464	-0. -4.
Vehicles for land transporta- tion	971 207 66	490, 745 317, 553 1, 838	483, 843 312, 068 2, 138	$\begin{pmatrix} (1) \\ -1.7 \\ +16.3 \end{pmatrix}$	15, 328, 822 10, 144, 058 43, 404	14, 309, 577 9, 454, 145 45, 789	(1) -6. +5.
Car building and repairing, electric-railroad	206	17, 947	17, 980	+0.2	541, 249	524, 281	-3.

<sup>&</sup>lt;sup>1</sup> The per cent of change has not been computed for the reason that the figures in the preceding columns are unweighted and refer only to the establishments reporting; for the weighted per cent of change, wherein proper allowance is made for the relative importance of the several industries, so that the figures may represent all establishments of the country, in the industries here represented, see Table 2.

# Table 1.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL ESTABLISHMENTS DURING ONE WEEK EACH IN JUNE AND JULY, 1926—Con.

Est	Estab-	Number on pay roll		Per	Amount of pay roll		Per
Industry	lish- ments	June, 1926	July, 1926	cent of change	June, 1926	July, 1926	cent of change
Miscellaneous industries  Agricultural implements Electrical machinery, appa-	408 91	273, 657 42, 971	264, 375 38, 117	(1) -11, 3	\$8, <b>045</b> , <b>357</b> 1, 303, 672	\$7,586,398 1,129,814	(1) -13, 8
ratus, and supplies Pianos and organs Rubber boots and shoes Automobile tires	166 38 10 62	122, 166 7, 741 17, 531 54, 962	121, 794 7, 249 13, 041 55, 910	$ \begin{array}{r} -0.3 \\ -6.4 \\ -25.6 \\ +1.7 \end{array} $	3, 609, 347 225, 479 402, 028 1, 673, 310	3, 426, 286 201, 038 311, 273 1, 701, 075	-5.1 -10.8 -22.6 +1.7
Shipbuilding, steel	10, 128	28, 286 3, 028, 601	28, 264	(1)	831, 521	76, 919, 002	(1)

#### Recapitulation by Geographic Divisions

#### Employment on Class I Railroads

	91, 922 16, 818	<sup>2</sup> \$239, 058, 065 <sup>2</sup> 241, 574, 062	+1.1
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<sup>&</sup>lt;sup>1</sup> The per cent of change has not been computed for the reason that the figures in the preceding columns are unweighted and refer only to the establishments reporting; for the weighted per cent of change, wherein proper allowance is made for the relative importance of the several industries, so that the figures may represent all establishments of the country, in the industries here represented, see Table 2.

<sup>2</sup> Amount of pay roll for 1 month.

# Table 2.—PER CENTS OF CHANGE, JUNE TO JULY, 1926, IN 12 GROUPS OF INDUSTRIES AND IN THE TOTAL FOR ALL INDUSTRIES

[Computed from the index numbers of each group, which are obtained by weighting the index numbers of the several industries of the group, by the number of employees, or wages paid, in the industries]

Group -	Per cent of change, June to July, 1926		Group	Per cent of char June to July, 19	
Group	Employ- ment	Pay-roll totals	Group	Employ- ment	Pay-roll totals
Food and kindred products.  Textiles and their products.  Iron and steel and their products.  Lumber and its products.  Leather and its products.  Paper and printing.	+0. 6 -4. 5 -1. 3 -0. 5 +3. 8	-0. 4 -6. 4 -5. 5 -4. 6 +5. 0	Metal products, other than iron and steel. Tobacco products. Vehicles for land transportation. Miscellaneous industries.	-2.1 -3.5 -1.0 -1.8	-7.5 -3.8 -6.5 -3.6
Chemicals and allied prod- ucts. Stone, clay, and glass prod- ucts.	-0. 4 -0. 5 -3. 1	-2.1 -3.1 -7.5	All industries	-1.6	-4.6

Comparison of Employment and Pay-Roll Totals in July, 1925, and July, 1926

EMPLOYMENT in manufacturing industries in July, 1926, was 0.6 per cent greater than in July, 1925, and employees' earn-

ings were 1.8 per cent greater.

The most pronounced gains in employment in this 12-month period were in the South Atlantic and West South Central geographic divisions—4.9 per cent and 3.9 per cent, respectively—while gains ranging from 2 per cent to 1.4 per cent were made by the East North Central, Pacific, and East South Central divisions. The New England division, largely owing to textile-industry conditions, shows a decrease of 3.1 per cent.

One-half of the 12 groups of industries show considerable improvement in employment over July, 1925, and one group, leather, shows no change. The outstanding gain, 7.2 per cent, was in the iron and steel group, while the chemical, and stone, clay, and glass groups each gained approximately 5 per cent. The textile group shows a pronounced falling off both in employment and pay-roll totals, the percentages being 6.4 and 10.2, respectively. The tobacco group

also shows decidedly less satisfactory conditions.

Thirty of the 54 separate industries show greater prosperity than they did in July, 1925, pottery showing gains of approximately 25 per cent in employment and employees' earnings, while carriages, machine tools, electrical machinery, stoves, fertilizers, structural iron, and foundry and machine-shop products all show very marked improvement over 1925.

Industries showing decidedly less satisfactory conditions, after the year's interval, are the 10 textile industries, and also rubber

boots, sugar, automobile tires, and cigars and cigarettes.

Table 3.—Comparison of employment and pay-roll totals—July, 1926, compared with July, 1925

[The per cents of change for each of the 12 groups of industries, and for the total of all industries, are weighted in the same manner as are the per cents of change in Table 2]

Industry	chang 1926, co	ent of e July, empared aly, 1925	Industry	Per cent of change July, 1926, compared with July, 1925		
•	Num- ber on pay roll	Amount of pay roll		Num- ber on pay roll	Amount of pay roll	
Food and kindred products. Slaughtering and meat packing. Confectionery. Lee cream. Flour. Baking. Sugar refining, cane.	-0.2 -3.6 +5.4 -2.9 -2.7 +3.1 -9.6	+0.8 -2.0 +7.9 -1.9 -2.5 +4.9 -9.3	Iron and steel and their products. Iron and steel. Structuralironwork. Foundry and machine-shop products. Hardware. Machine tools. Steam fittings and steam and	+7.2 +3.9 +9.7 +9.5 -2.6 +17.1	+9.8 +8.7 +8.4 +11.4 -0.6 +17.5	
Textiles and their products_ Cotton goods_ Hosiery and knit goods_ Silk goods_ Woolen and worsted goods_ Carpets and rugs_ Dyeing and finishing textiles_ Clothing, men's_ Shirts and collars_ Clothing, women's_	$\begin{array}{c} -6.7 \\ -1.5 \\ -5.0 \\ -9.1 \\ -11.2 \\ -2.1 \\ -4.4 \\ -6.1 \\ -6.5 \\ -13.4 \end{array}$	-10.2 -6.4 -0.6 -9.9 -10.5 -3.9 -5.4 -9.7 -10.0 -24.1	hot-water heating apparatus. Stoves  Lumber and its products Lumber, sammils Lumber, millwork Furniture  Leather and its products Leather Boots and shoes	+0.7 +11.0 -1.3 -1.9 -3.2 +1.7 (1) +2.1 -0.7	+4.7 +8.6 -1.2 -2.3 -4.5 +5.4 +1.9 +5.7 +0.5	

<sup>1</sup> No change

TABLE 3.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS—JULY, 1926, COMPARED WITH JULY, 1925—Continued

Industry	chang 1926, co	ent of e July, empared aly, 1925	Industry	Per cent of change July, 1926, compared with July, 1925		
	Num- ber on payroll	Amount of pay roll		Num- ber on pay roll	Amount of pay roll	
Paper and printing Paper and pulp	+2.7 +0.7	+7.0 +2.9	Tobacco products Chewing and smoking tobacco	-7.7	-6.	
Paper boxes Printing, book and job Printing, newspapers	+3. 4 +3. 1 +3. 8	+5. 8 +9. 6 +8. 2	and snuffCigars and cigarettes	+3.3 -9.2	+3.9 -7.8	
Chemicals and allied prod-			Vehicles for land transporta-	+1.4	-1.5	
ucts	+4.8	+5.8	Automobiles	+0.8	-8.3	
Chemicals	+2.9 +9.9	+6.3 +11.4	Carriages and wagons	+21.6	+19, (	
Petroleum refining	+5.7	+4.1	electric-railroad	+0.5	-1.	
Stone, clay, and glass prod-			Car building and repairing, steam-railroad	+1.4	+3.3	
ucts	+4.5	+4.9	broam ramoud	71.1	70.	
Cement	-4.5	-4.9	Miscellaneous industries	+2.4		
Brick, tile, and terra cotta	+2.5	+1.4	Agricultural implements	+2.0	+5.	
Pottery	+24. 2 +3. 8	+28.3 +6.2	Electrical machinery, appara- tus, and supplies	+11.4	+9.	
CAMOS	10.0	70.2	Pianos and organs	+3, 3	+4.	
Metal products, other than			Rubber boots and shoes	-19.8	-18.	
iron and steel	-1.2	-2.3	Automobile tires	-8.7	-7.	
Stamped and enameled ware Brass, bronze, and copper	+1.9	+0.1	Shipbuilding, steel	+4.1	+12.	
products	-2.4	-3.1	All industries	+0.6	+1.	

#### Recapitulation by Geographic Divisions

GEOGRAPHIC DIVISION  New England	-3.1	-4.1 +3.0	GEOGRAPHIC DIVISION—contd.  West South Central.	+3.9	+5.8 -6.2
East North Central West North Central	+2.0	-0.1 $-0.6$	Pacific	+1.5	+0.7
South Atlantic East South Central	+4.9 +1.4	+7. 9 +4. 8	All divisions	+0.6	+1.8

#### Employment on Class I Railroads

Month and year	Number on pay roll	Per cent of change	Amount of pay roll	Per cent of change
June 15, 1925 June 15, 1926	1, 765, 260 1, 816, 818	+2.9	<sup>2</sup> \$232, 787, 616 <sup>2</sup> 241, 574, 062	+3.8

<sup>1</sup> No change.

### Per Capita Earnings

PER CAPITA earnings in July were 2.9 per cent lower than in June, 1926, and 1.3 per cent higher than in July 1925

June, 1926, and 1.3 per cent higher than in July, 1925. Six of the 54 separate industries show increased per capita earnings in July as compared with June, these being both rubber and leather boots and shoes, fertilizers, ice cream, men's clothing, and flour. The decreases in the remaining 48 industries ranged from less

<sup>&</sup>lt;sup>2</sup> Amount of pay roll for one month.

then one-tenth of 1 per cent in the automobile tire industry to 9.3

per cent in the carriage industry.

Increased per capita earnings were shown in July, 1926, as compared with July, 1925, in 32 industries, the greatest increase being 7.7 per cent in steel shipbuilding. The greatest decrease shown in this yearly comparison is 12.5 per cent in the women's clothing industry—a result of the strike condition existing in certain sections.

TABLE 4.—COMPARISON OF PER CAPITA EARNINGS, JULY, 1926, WITH JUNE, 1926, AND JULY, 1925

Industry	chang 1926,	ent of e July, com- with—	Industry	Per cent of change July 1926, com- pared with—	
	June, 1926	July, 1925		June, 1926	July, 1925
Rubber boots and shoes Boots and shoes Fertilizers Lee cream Clothing, men's Flour Automobile tires Woolen and worsted goods Millinery and lace goods Cigars and cigarettes Silk goods Baking Paper boxes Printing, newspaper Dyeing and finishing textiles Slaughtering and meat packing Chewing and smoking tobacco and snuff Printing, book and job Chemicals Shipbuilding, steel Cast-iron pipe Leather Machine tools Agricultural implements Clothing, women's Sugar refining, cane Brass, bronze, and copper products Carpets and rugs Hosiery and knit goods	+2.8 +2.0 +1.9 +1.6 +0.3 -(2) -0.1 -0.4 -0.6 -0.7 -0.8 -0.9 -1.1 -1.1 -1.2 -1.2 -1.2 -1.2 -1.2 -1.2	+1.5 +1.3 +1.1 -3.7 (1) +1.0 +1.1 +1.5 +1.6 -0.9 +1.7 +2.2 +1.8 +0.5 +6.6 +3.2 +7.7 (3) +3.3 +0.5 +3.6	Car building and repairing, electric- railroad. Hardware. Paper and pulp. Confectionery. Lumber, sawmills. Steam fittings and steam and hot- water heating apparatus. Lumber, millwork. Brick, tile and terra cotta. Glass. Foundry and machine-shop products. Furniture. Iron and steel. Shirts and collars. Cement. Cotton goods. Electrical machinery, apparatus, and supplies. Petroleum refining. Pianos and organs. Automobiles. Structural ironwork. Pottery. Car building and repairing, steam- railroad. Stoves. Stamped and enameled ware. Carriages and wagons.	-3.6 -3.6 -3.8 -3.8 -4.0 -4.1 -4.2 -4.3 -4.5 -4.5 -4.7 -4.7 -4.8 -4.8 -5.1 -5.2 -5.5 -5.8	-1.4 4.1.9 +1.8 +1.8 +2.3 -0.4 +4.4 -0.8 +2.2 2 -1.4 +3.3 +4.6 -0.2 -3.8 +3.1 -1.3 +0.9 9 -1.2 2 -1.6 -2.0

<sup>1</sup> No change.

## Wage Changes

EIGHTY-EIGHT establishments in 23 industries reported wagerate increases for the month ending July 15. These increases, averaging 6.3 per cent, affected 5,203 employees, being 30 per cent of the total employees in the establishments concerned. More than one-third of the establishments, and one-quarter of the employees affected, were in the iron and steel group of industries.

Wage-rate decreases were reported by 8 establishments in 4 industries. These decreases averaged 7.7 per cent and affected 1,759 employees, or 54 per cent of the employees in the establishments

concerned.

<sup>2</sup> Less than one-tenth of 1 per cent.

<sup>3</sup> Data not yet available

TABLE 5.-WAGE ADJUSTMENT OCCURRING BETWEEN JUNE 15 AND JULY 15, 1926

	Establ	ishments		ofincrease erease in ites	En	ployees affe	cted	
						Per cent of employees		
Industry	Total number report- ing	Number reporting increase or de- crease in wage rates	Range	Average	Total number	In estab- lishments reporting increase or decrease in wage rates	In all establishments reporting	
			Incr	eases				
Slaughtering and meat packing. Flour Baking Clothing, women's Structural ironwork	182 332 476 180 149	3 4 4 1 5	5-10 9-12. 5 5-10 5 5-20	6. 5 9. 7 6. 0 5. 0 9. 5	119 83 68 42 45	93	(1) (1) (1) (1)	1
Foundry and machine-shop products	980 162	26 3	1. 4-27 . 3-10	5. 7 1. 7	1, 147 123	19 12	(1) (1)	
Steam fittings and steam and hot-water heating apparatus. Lumber, millwork. Furniture. Paper boxes. Printing, book and job. Petroleum refining. Brick, tile and terra cotta. Brass, bronze, and copper prod-	384 173	3 4 3 2 7 2 4	5-10 5-10 2-6 5-6 1-29. 5 6. 2 6. 7-20	6. 2 6. 2 3. 5 5. 0 10. 6 6. 2 14. 8	29 41 42 175 70 61 37	13 7 9 84 8 77 15	(1) (1) (1) (1) (1) (1)	1
uets Cigars and cigarettes Automobiles Carriages and wagons	144 169 207 66	2 3 2 1	5-8 4-15 2. 5-5 5	5. 6 7. 9 4. 9 5. 0	856 1,627 39 20	88 98 14 13	(1)	3 5
Car building and repairing, electric-railroad Car building and repairing,	206	2	5	5. 0	132	100		1
steam-railroad Agricultural implements Electrical machinery, appara-	492 91	2	1.4-4	1. 9 8. 0	275 5	90 38	(1) (1)	
tus, and suppliesShipbuilding, steel	166 41	2 2	1-5 9. 5-10	2. 8 9. 8	127 40	7 20	(1) (1)	
			Deci	reases				
Cotton goods Woolen and worsted goods Clothing, men's_ Leather	500 189 274 127	3 1 2 2	5-20 8 5 25	6. 5 8. 0 5. 0 25. 0	945 693 59 62	43 100 52 24	(1) (1) (1)	1

<sup>1</sup> Less than one-half of 1 per cent.

Indexes of Employment and Pay-Roll Totals in Manufacturing Industries

INDEX numbers for July, 1926, and for June, 1926, and July, 1925, showing relatively the variation in number of persons employed and in pay-roll totals, in each of the 53 " industries surveyed by the Bureau of Labor Statistics, together with general indexes for the combined 12 groups of industries, appear in Table 7, following.

The general index of employment for July, 1926, is 89.8, this number being 1.6 per cent lower than the index for June, 1926, and

<sup>&</sup>quot;The total number is 54, but data for computing indexes for cast-iron pipe are not yet all available.

0.6 per cent higher than the index for July, 1925. The general index of pay-roll totals for July, 1926, is 91.2, this number being 4.5 per cent lower than the index for June, 1926, and 1.8 per cent higher

than the index for July, 1925.

In computing the general index and the group indexes of employment the index numbers of employment of separate industries are weighted by the number of employees in the several industries, as reported in the Census of Manufactures, 1919. The general index and the group indexes of pay-roll totals, likewise, are obtained by weighting the index numbers of pay-roll totals of the separate industries by the wages paid in the several industries during the year 1919, as reported in the Census of Manufactures. The figures for the year 1919 were chosen for these computations as showing the latest complete data available at the time these indexes were first computed.

The weights used in each industry for employment and for payroll indexes are given in Table 6, following. The industry titles in the main correspond with those used by the Bureau of the Census, although in a few instances two or more branches of an industry, which the Bureau of the Census has segregated, have here been

combined.

The number of industries considered in this volume of employment study has been increased from time to time, and always is subject to change, either through the addition of an industry heretofore entirely omitted or through the segregation of one branch of an industry already included. The weights presented below also are not to be considered immutable, as more recent figures may be substituted whenever it is deemed advisable.

TABLE 6.—AVERAGE NUMBER OF WAGE EARNERS AND TOTAL WAGES PAID, IN 1919, AS RECORDED IN THE CENSUS OF MANUFACTURES

		used in ting index rs for—		Weights used in computing index numbers for—		
Industry	Employ- ment (000 omitted)	Pay-roll totals (000,000 omitted)	Industry	Employ- ment (000 omitted)	totals (000,000	
Food and kindred prod- ucts: Slaughtering and meat packing. Confectionery. Ice cream Flour. Baking. Sugar refining, cane.	19	209 54 22 51 158 23	Iron and steel and their products: Iron and steel Structural ironwork Foundry and machine-shop products. Hardware Machine tools Steam fittings, and steam and hot-water heating apparatus	417 44 632 43 53	711 60 818 45 66	
Textiles and their prod- ucts: Cotton goods	127	355 125 108	Stoves Lumber and its products: Lumber, sawmils Lumber, millwork Furniture	43 481 87 138	489 92 141	
Woolen and worsted goods_ Carpets and rugs_ Dyeing and finishing tex- tiles_ Clothing, men's_	167 23 56	168 24 57 198	Leather and its products: Leather Boots and shoes Paper and printing: Paper and pulp	72 221	88 220	
Shirts and collars	51 166	33 195 50	Paper boxes Printing, book and job Printing, newspapers	56 123 120	43 141 144	

TABLE 6.—AVERAGE NUMBER OF WAGE EARNERS AND TOTAL WAGES PAID, IN 1919, AS RECORDED IN THE CENSUS OF MANUFACTURES—Continued

		used in ting index rs for—	4	Weights used in computing index numbers for—		
Industry	Employ- ment (000 omitted)	Pay-roll totals (000,000 omitted)	Industry	Employ- ment (000 omitted)	Pay-roll totals (000,000 omitted)	
Chemicals and allied prod- ucts:			Tobacco products: Chewing and smoking to-			
Chemicals Fertilizers Petroleum	80 26 59	98 25 90	bacco and snuff Cigars and cigarettes Vehicles for land trans- portation:	18 139	13 111	
Stone, clay, and glass prod- uets:			Automobiles Carriages and wagons Car building and repairing,	343 18	491 19	
Cement Brick, tile, and terra cotta	26 77	33 78	electric-railroad Car building and repairing,	34	43	
PotteryGlass	28 78	30 88	steam-railroad	537	766	
Metal products, other than iron and steel:			Agricultural implements Electrical machinery, ap-	54	67	
AR 0 38 60301 00 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7			paratus, and supplies	212 25	238	
Stamped and enameled ware	34	35	Pianos and organs Rubber boots and shoes	33	27 31	
Brass, bronze, and copper	9.4	00	Automobile tires	120	157	
products	75	95	Shipbuilding, steel	344	538	

Table 7.—INDEXES OF EMPLOYMENT AND OF PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES, JULY, 1925, AND JUNE AND JULY, 1926

[Monthly average, 1923=100]

	E	mploymen	t	Pay-roll totals			
Industry	July, 1925	June, 1926	July, 1926	July, 1925	June, 1926	July, 1926	
General index	89.3	91. 3	89.8	89. 6	95, 5	91. 2	
Food and kindred products	89. 4	88. 7	89.2	92.8	93. 9	93, 5	
Slaughtering and meat packing	83. 4	79.7	80.4	85, 2	83. 6	83. 5	
Confectionery	71.8	76. 5	75. 7	75. 5	85. 4	81. 5	
Ice cream	118. 5	113. 6	115. 1	128. 5	121.9	126, 1	
Flour	89.3	82. 3	86. 9	92.1	84.9	89. 8	
Baking	99.9	103. 2	103. 0	102.7	108.7	107. 7	
Sugar refining, cane	103. 1	97. 2	93. 2	102. 5	99. 5	93. (	
Textiles and their products	86. 0	84, 0	80. 2	84.9	81.4	76. 2	
Cotton goods	77. 6	81. 7	76. 4	73.7	77.4	69. (	
Cotton goods Hosiery and knit goods	96. 0	97. 1	91. 2	98.7	108. 0	98. 1	
Cilly goods	104. 0	95. 4	94. 5	108.1	99. 0	97. 4	
Silk goods Woolen and worsted goods	85. 8	76. 4	76. 2	83. 1	74. 7	74. 4	
Carpets	89. 0	89. 7	87. 1	83. 8	85. 4	80. 5	
Dyeing and finishing textiles	96. 0	95. 9	91.8	94. 2	94. 2	89. 1	
	87. 4	84. 3	82. 1	85. 3	77.8	77. (	
Clothing, men's	86. 4	82. 6	80, 8	86. 2	83. 0	77.	
Shirts and collars				83. 3	70. 9	63.	
Clothing, women's		75. 6	69. 1		66.3	63.	
Millinery and lace goods		67.3	64. 4	79.1	98. 2	92.	
Iron and steel and their products	85.3	92.6	91.4	84. 5	102.0	95. 9	
Iron and steel	92. 1	97. 2	95. 7	88. 2			
Structural ironwork	95. 8	99.8	105. 1	100.7	109. 4	109.	
Foundry and machine-shop products.	80. 3	88.8	87. 9	79. 6	93. 6	88.7	
Hardware	87.4	86. 6	85.1	90.81	95. 4	90. 8	
Machine toolsSteam fittings and steam and hot-	86. 5	101. 5.	101. 3	93. 2	112.1	109. 8	
water heating apparatus	94. 1	98. 1	94.8	93. 8	105. 8	98. 2	
Stoves	71.0	85. 4	78.8	67. 6	85. 6	73.	
Lumber and its products	92.8	92.1	91.6	96.6	100.0	95.4	
Lumber, sawmills	91. 5	90. 3	89.8	96. 8	99.0	94. (	
Lumber, millwork	101.8	98. 7	98. 5	107. 1	106. 8	102.	
Furniture	91. 9	94. 0	93. 5	89. 1	98.9	93.	
Leather and its products	88. 5	85, 3	88.5	85. 2		86. 8	
Leather	86. 5	86. 7	88. 3	83. 9	89. 0	88.7	
Boots and shoes	89.1	84.8	88. 5	85. 7	80.2	86.	

TABLE 7.—INDEXES OF EMPLOYMENT AND OF PAY-ROLL TOTALS IN MANUFACTUR-ING INDUSTRIES, JULY, 1925, AND JUNE AND JULY, 1926—Continued

	Е	mploymen	t	Pay-roll totals			
Industry	July, 1925	June, 1926	July, 1926	July, 1925	June, 1926	July, 1926	
Paper and printing	99, 4	102. 5	102, 1	101.4	110.8	108.	
Paper and pulp	94. 2	95. 9	94. 9	95, 5	102.9	98.	
Poper hoves	95. 7	97. 7	99. 0	99. 9	104. 9	105.	
Paper boxes.  Printing, book and job	99. 5	102.8	102. 6	101. 9	113. 3	111.	
Printing, newspaper	105. 8	110. 7	102. 0	107. 0	117. 7	115. 8	
Chemicals and allied products	88. 9	93. 7	93. 2	91.6	100.0	96.	
Chemicals.	90. 4	94. 6	93. 0	94. 7	103. 9	100.	
Fertilizers	67. 6	74.8	74. 3	75. 5	83. 0	84.	
Petroleum refining	96. 3	100. 9	101.8	92.6	100.4	96.	
Stone, clay, and glass products	96.5	104. 0	100.8	99.1	112.4	104.	
Cement.	101. 3	95. 6	96. 7	105. 0	103. 8	99.	
Brick, tile, and terra cotta	106. 8	108. 5	109. 5	111.0	116. 5	112.	
Pottery	78. 8	108. 6	97. 9	78. 4	118.1	100.	
Glass	91. 1	100. 8	94.6	93. 3	110. 1	99. 1	
Metal products, other than iron and	31. 1	100.0	54.0	30, 0	110. 1	00.1	
steel	95.4	96.3	94.3	94.1	97.5	91.9	
Stamped and enameled ware	89. 8	93. 3	91. 5	80. 5	88. 9	80.	
Brass, bronze and copper products	98. 0	97. 7	95, 6	99. 1	100.7	96. (	
Tobacco products	90. 7	86. 7	83. 7	90. 9	88.6	85.	
Chewing and smoking tobacco and	00. 1	00, 1	00. 1	00.0	00, 0	00.7	
snuff	91.7	93. 9	94.7	97.6	101.7	101.4	
Cigars and cigarettes	90. 6	85, 8	82.3	90. 1	87. 1	83. 3	
Vehicles for land transportation	89. 9	92.1	91. 2	90. 2	94.7	88.	
Automobiles	105. 9	108. 5	106. 7	110. 2	108. 5	101.	
Carriages and wagons	83. 7	87. 5	101.8	80. 5	90.8	95. 8	
Car building and repairing, electric-	00, 1	01.0	101.0	00.0	00.0	00.0	
railroad	87.7	87.9	88. 1	89. 5	91.3	88. 5	
Car building and repairing, steam-	01.1	01.0	00.1	00.0	01.0	00.0	
railroad.	80.0	82.0	81, 1	77. 7	86, 2	80. 3	
Miscellaneous industries	96, 9	94. 8	93. 1	91. 2	100.3	96. 7	
Agricultural implements	85. 4	98. 2	87.1	91. 7	111.8	96. 9	
Electrical machinery, apparatus, and					200.0	20.	
supplies	86, 5	96. 7	96, 4	89, 6	103. 2	97.9	
Pianos and organs	85. 0	93. 8	87.8	86. 0	100.6	89.7	
Rubber boots and shoes	79. 9	86, 2	64. 1	85. 2	89. 5	69. 3	
Automobile tires	119.0	106, 8	108.6	121.5	110, 0	111. 9	
Shipbuilding, steel	86. 2	89.8	89.7	83. 6	95, 3	93. 6	

The following tables show the general index of employment in manufacturing industries from June, 1914, to July, 1926, and the general index of pay-roll totals from November, 1915, to July, 1926:

Table 8.—GENERAL INDEX OF EMPLOYMENT AND OF PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES

Employment (June, 1914, to July, 1926)

[Monthly average, 1923=100]

Month	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926
January February March April May June July August September October November	98, 9 95, 9 92, 9 94, 9 94, 9 93, 9 92, 9	91, 9 92, 9 93, 9 93, 9 94, 9 95, 9 94, 9 95, 9 98, 9 108, 8 103, 8 105, 9	104. 6 107. 4 109. 6 109. 0 109. 5 110. 0 110. 3 110. 0 111. 4 112. 9 114. 5 115. 1	117. 0 117. 5 117. 4 115. 0 115. 1 114. 8 114. 2 112. 7 110. 7 113. 2 115. 6 117. 2	115. 5 114. 7 116. 5 115. 0 114. 0 113. 4 114. 6 114. 5 114. 5 111. 5 113. 4 113. 5	110. 1 103. 2 104. 0 103. 6 106. 3 108. 7 110. 7 109. 9 112. 1 106. 8 110. 0 113. 2	116. 1 115. 6 116. 9 117. 1 117. 4 117. 9 110. 0 109. 7 107. 0 102. 5 97. 3 91. 1	76. 8 82. 3 83. 9 83. 0 84. 5 84. 9 84. 5 85. 6 87. 0 88. 4 89. 4 89. 9	87. 0 87. 7 83. 2 82. 4 84. 3 87. 1 86. 8 88. 0 90. 6 92. 6 94. 5 96. 6	98. 0 99. 6 101. 8 101. 8 101. 8 101. 9 100. 4 99. 7 99. 8 99. 3 98. 7 96. 9	95. 4 96. 6 96. 4 94. 5 90. 8 87. 9 84. 8 85. 0 86. 7 87. 9 87. 8 89. 4	90. 0 91. 6 92. 3 92. 1 90. 9 90. 1 89. 3 89. 9 90. 9 92. 3 92. 5 92. 6	93. 3 94. 3 93. 7 92. 8 91. 7 91. 3 89. 8
Average.	1 94, 9	97. 0	110.4	115.0	114.2	108. 2	169, 9	85.1	88.4	100.0	90.3	91. 2	1 92. 4

<sup>&</sup>lt;sup>1</sup> Average for 7 months.

TABLE 8.—GENERAL INDEX OF EMPLOYMENT AND OF PAY-ROLL TOTALS IN MAN-UFACTURING INDUSTRIES—Continued

Pay-roll totals (November, 1915, to July, 1926)

Month	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926
anuary		52. 1	69. 8	79. 6	104. 2	126. 6	80. 6	71. 5	91. 8	94. 5	90.0	94.
ebruary		57. 8	70.5	79. 8 88. 2	95. 0 95. 4	124. 8 133. 0	82. 4 83. 3	76. 7 74. 2	95. 2 100. 3	99. 4	95. 1 96. 6	98.
Aarch		60. 0 59. 7	73, 6 69, 4	88. 8	94. 5	130. 6	82.8	72. 6	101. 3	96. 9	94. 2	97
lay		62. 1	75. 8	94. 5	96. 7	135. 7	81.8	76. 9	104. 8	92. 4	94. 4	95
une		62. 5	76. 1	94. 3	100. 2	138. 0	81.0	82. 0	104.7	87.0	91.7	95.
uly		58. 7	73. 1	97. 5	102. 5	124. 9	76.0	74.1	99. 9	80.8	89.6	91.
ugust		60.9	75. 0	105. 3	105. 3	132. 2	79.0	79.3	99. 3	83. 5	91.4	
eptember		92. 9	74. 4	106.6	111.6	128. 2	77.8	82. 7	100.0	86. 0	90.4	
october		65. 5	82. 2	110.3	105. 5	123. 0	76.8	86. 0	102.3	88. 5	96. 2	
lovember	53.8	69. 2 71. 0	87. 4 87. 8	104. 1	111.3	111. 3 102. 4	77. 2 81. 5	89. 8 92. 9	101. 0 98. 9	87. 6 91. 7	96. 2 97. 3	
weinoer	56.0	71.0	01.0	111. 2	121, 0	102. 4	01.0	94. 9	20. 9	91. 1	91.3	
Average	2 54.9	61.9	76.3	96. 7	103.6	125. 9	80. 0	79.9	160.0	90, 6	93. 6	1 96,

<sup>&</sup>lt;sup>1</sup> A verage for 7 months.

Proportion of Time Worked and Force Employed in Manufacturing Industries in July, 1926

REPORTS from 7,421 establishments indicate that the plants in operation in July were employing an average of 86 per cent of a normal full force of employees, who were working an average of 96 per cent of full time.

Two per cent of the reporting establishments were idle, 78 per cent were operating on a full-time schedule, and 20 per cent on a part-time schedule; 45 per cent had a normal full force of employees and 53 per cent were operating with reduced force.

TABLE 9.—ESTABLISHMENTS WORKING FULL AND PART TIME AND EMPLOYING FULL AND PART WORKING FORCE IN JULY, 1926

Industry	Establish- ments reporting		Per cent of establish- ments operating—		A verage per cent of full time operated	Per cent of establishments operating with—		Average per cent of normal full force
and the second	Total num- ber	Per cent idle	Full	Part	in estab- lishments oper- ating	Full normal force	Part normal force	employed by estab- lishments operating
Food and kindred products  Slaughtering and meat packing Confectionery Hee cream Flour Baking Sugar refining, cane Textiles and their products Cotton goods Hosiery and knit goods Silk goods Woolen and worsted goods Carpets and rugs Dyeing and finishing textiles Clothing, men's Shirts and collars Clothing, women's Millinery and lace goods	1,079 147 160 111 254 398 1,273 398 148 132 162 188 2 155 42 100 36	1 2 (t) 4 2 2 2 1 1 5 5 20	78 80 61 98 61 90 67 62 58 60 57 67 67 56 43 79 79	21 20 38 2 38 10 33 34 40 38 41 32 42 44 56 16 21	95 97 93 100 88 98 91 92 90 92 94 93 91 89 96 96	58 51 20 82 57 71 44 39 54 37 28 29 50 0 27 42 42 48	\$1 49 79 18 41 41 28 56 57 44 61 70 70 50 72 53 52	90 91 69 96 88 97 75 83 87 81 85 81 82 84

<sup>1</sup> Less than one-half of 1 per cent.

<sup>&</sup>lt;sup>2</sup> Average for 2 months.

TABLE 9.—ESTABLISHMENTS WORKING FULL AND PART TIME AND EMPLOYING FULL AND PART WORKING FORCE IN JULY, 1925—Continued

Industry	Establish- ments reporting		Per cent of establish- ments operating—		A verage per cent of full time operated	Per cent of establishments operating with—		Average per cent of normal full force
	Total num- ber	Per cent idle	Full	Part	in estab- lishments oper- ating	Full normal force	Part normal force	employed by estab- lishments operating
Iron and steet and their products	1, 525	1	81	18	97	34	66	81
Iron and steel	124	3	76	21	94	31	66	82
Cast-iron pipe	52	10	46	44	90	46	44	92
Structuraliron work	231		92	8	99	40	60	84
Foundry and machine-shop prod-	700	(1)	00	10	07	0.4	00	0/
uets Hardware	792 53	(1)	82	18 34	97 93	34 17	66 83	80
Machine tools	133		92	8	99	26	74	72
Steam fittings and steam and hot-	100		021		00 1	20	12	4.0
water heating apparatus	71		83	17	98	46	54	88
StovesLumber and its products	69	3	59	38	87	19	78	72
Lumber and its products	817	1	79	20	97	56	42	91
Lumber, sawmills	356	1	87	12	98	75	24	98
Lumber, millwork	166 295	2	87	11	99	58	40	95
Furniture Leather and its products	260	1 3	66	34 25	94 93	33	66 66	88
Leather	92	4	83	13	97	32	64	78
Boots and shoes.	168	2	67	31	91	32	67	83
Paner and printing	524	(1)	82	18	97	61	39	95
Paper and pulp	95		76	2/4	95	69	31	94
Paper boxes	109		62	38	94	30	70	84
Printing, book and job	196	1	86	14	98	51	49	91
Printing, newspaper	124	2	99	1	100	97	3	100
Chemicals and allied products	162 56	70	86 95	12	98 101	31 45	67 55	32
Fertilizers	75	4	73	23	95	4	92	49
Petroleum refining	31		100	20	100	71	29	97
Stone, clay, and glass products	503	5	84	11	98	47	49	9)
Cement	69	3	93	4	98	43	54	98
Brick, tile, and terra cotta	295	5	86	9	98	48	47	98
Pottery	42	2	79	19	97	33	64	82
Glass Metal products, other than iron	97	8	74	18	97	49	42	86
and steel	162	1	76	23	96	43	57	82
Stamped and enameled ware	38		68	32	94	29	71	82
Brass, bronze, and copper products.	124	1	78	21	96	47	52	88
Tobacco products	96	1	82	17	96	40	59	88
Chewing and smoking tobacco								
and snuff	18		67	33	96	33	67	88
Cigars and cigarettes	78 716	(1)	86 89	13	97 98	41	58 51	88
Automobiles	145	(1)	72	28	95	23	77	84
Carriages and wagons	53	2	77	21	97	40	58	76
Car building and repairing, elec-	00	-		2.1	0.	10	1	
tric-railroad	149		95	5	99	68	32	95
Car building and repairing, steam-								
railroad	369		95	5	100	53	47	90
viscenaneous moustres	304	3	33	19	97	39	58	85
Agricultural implements.	69	3	77	20	97	29	68	80
Electrical machinery, apparatus, and supplies	127	2	82	17	97	-51	47	89
Pianos and organs	24	4	63	33	95	46	50	89
Rubber boots and shoes	9	44	44	11	98		56	78
Automobile tires	47	2	68	30	93	26	72	87
Shipbuilding, steel	28		96	4	100	36	64	71
	m 4000	-	100		-	-	**	
All industries	7, 421	2	78	20	96	45	53	86

<sup>1</sup> Less than one-half of 1 per cent.

Employment and Earnings of Railroad Employees, June, 1925, and May and June, 1926

THE following table shows the number of employees and the earnings in various occupations among railroad employees in June, 1925, and in May and June, 1926.

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

EMPLOYMENT AND EARNINGS OF RAILROAD EMPLOYEES—JUNE, 1925, AND MAY AND JUNE, 1926

[From monthly reports of Interstate Commerce Commission. As data for only the more important occupations are shown separately, the group totals are not the sum of the items under the respective groups; for the grand totals see pp. 126 and 128]

	Number	of empl	oyees at	Total earnings				
Occupation	June, 1925	May, 1926	June, 1926	June, 1925	May, 1926	June, 1926		
Professional, clerical, and general	281, 810	284, 083	285, 376	\$38, 143, 053	\$38, 854, 648	\$39, 067, 056		
Clerks	166, 624	166, 790	167, 554	21, 349, 132	21, 591, 825	21, 697, 276		
Stenographers and typists	25, 056	25, 422	25, 482	3, 057, 142	3, 104, 449	3, 136, 833		
Maintenance of way and structures	422, 373	436, 542	458, 306	39, 420, 020	40, 171, 828	42, 955, 373		
Laborers, extra gang and work train	68, 340	73, 169	80, 843	5, 463, 393	5, 841, 736	6, 663, 632		
Laborers, track and roadway section	220, 576	225, 937	235, 624	16, 641, 714	16, 603, 470	17, 790, 825		
Maintenance of equipment and stores. Carmen. Machinists. Skilled trades helpers. Laborers (shops, engine houses, power plants, and stores). Common laborers (shops, engine houses, power plants, and stores).	518, 003	516, 392	516, 753	66, 228, 792	67, 014, 934	67, 119, 075		
	114, 546	111, 985	112, 092	16, 389, 134	16, 394, 762	16, 441, 246		
	60, 878	60, 694	60, 723	9, 367, 350	9, 511, 866	9, 509, 989		
	112, 637	113, 600	113, 791	12, 111, 938	12, 407, 083	12, 454, 154		
	42, 712	42, 450	42, 196	3, 992, 391	4, 060, 149	3, 960, 663		
	58, 789	60, 085	60, 565	4, 750, 198	4, 857, 801	4, 958, 741		
Transportation, other than train, engine, and yard. Station agents. Telegraphers, telephoners, and towermen. Truckers (stations, warehouses, and platforms). Crossing and bridge flagmen and gatemen.	208, 262	207, 414	209, 525	24, 989, 914	25, 398, 249	25, 523, 339		
	31, 050	30, 675	30, 655	4, 714, 502	4, 746, 761	4, 737, 393		
	25, 935	25, 615	25, 479	3, 763, 083	3, 881, 068	3, 775, 045		
	38, 579	38, 559	38, 878	3, 553, 183	3, 575, 159	3, 603, 498		
	22, 854	22, 340	22, 485	1, 716, 856	1, 684, 452	1, 695, 329		
Transportation (yardmasters, switch tenders, and hostlers)	23, 757	24, 014	24, 028	4, 339, 828	4, 490, 318	4, 444, 910		
Transportation, train and engine Road conductors Road brakemen and flagmen Yard brakemen and yard helpers Road engineers and motormen Road firemen and helpers	311, 055	323, 567	322, 830	59, 666, 009	63, 128, 088	62, 464, 309		
	35, 674	36, 757	36, 751	8, 172, 794	8, 513, 154	8, 452, 846		
	72, 023	73, 998	73, 777	12, 052, 070	12, 531, 404	12, 444, 503		
	50, 604	53, 979	53, 447	8, 281, 777	9, 004, 698	8, 872, 773		
	42, 228	43, 504	43, 639	10, 901, 342	11, 434, 782	11, 322, 373		
	43, 862	45, 003	44, 829	8, 121, 146	8, 493, 369	8, 416, 119		

# State Reports on Employment

#### California

THE following data, taken from the July, 1926, Labor Market Bulletin, issued by the Bureau of Labor Statistics of California, shows changes in volume of employment and pay roll from May to June, 1926, in 738 establishments in that State:

PER CENT OF CHANGE IN NUMBER OF EMPLOYEES AND IN TOTAL AMOUNT OF WEEKLY PAY ROLL IN 738 CALIFORNIA ESTABLISHMENTS BETWEEN MAY AND JUNE, 1926

		Emp	loyees	Weekly	pay roll
Industry	Number of firms reporting	Number in June, 1926	Per cent of increase (+) or decrease (-) as compared with May, 1926	Amount in June, 1926	Per cent of increase (+) or decrease (-) as compared with May, 1926
Stone, clay, and glass products: Miscellaneous stone and mineral products. Lime, cement, plaster. Brick, tile, pottery. Glass.	10 8 23 5	1, 594 2, 245 3, 731 879	+5.9 +5.8 +15.2 +1.4	\$50, 870 69, 650 92, 067 28, 505	+2. ! +5. 4 +8. (1)
Total	46	8, 449	+9.3	241, 092	+5.5
Metals, machinery, and conveyances: Agricultural implements. Automobiles, including bodies and parts. Brass, bronze, and copper products. Engines, pumps, boilers, and tanks. Iron and steel forgings, bolts, nuts, etc. Structural and ornamental steel. Ship and boat building and naval repairs. Tin cans. Other iron foundry and machine-shop products. Other sheet-metal products. Cars, locomotives, and railway repair shops.	5 14 8 11 8 15 6 3 71 23 17	1, 592 3, 204 1, 112 1, 169 3, 013 4, 904 4, 974 2, 398 7, 804 1, 697 8, 671	-6.9 -7.5 +11.3 -9.5 -7.4 +2.2 +3.5 +1.5 +1.5 -4 +2.7 +1.1	44, 145 96, 924 28, 846 44, 126 100, 820 154, 444 168, 810 65, 966 244, 670 51, 594 261, 888	-8. -7. +. -2. +6. +6. +2. -5.
Total	181	40, 538	(1)	1, 262, 233	+.:
Wood manufactures: Sawmills and logging. Planing mills, sash and door factories, etc Other wood manufactures	22 46 44	11, 735 9, 667 4, 828	+5.6 -3.1 -2.9	343, 225 288, 848 137, 553	+5.0 +.1 +.1
Total	112	26, 230	+.7	769, 626	+2.
Leather and rubber goods: Tanning. Finished leather products. Rubber products.	7 6 8	508 533 2, 566	-5. 4 +5. 1 -6. 0	14, 552 11, 339 68, 858	-3. ( +6. 9 -5.
Total	21	3, 607	-4.4	94, 749	-3.
Chemicals, oils, paints, etc.: Explosives Mineral oil refining Paints, dyes, and colors. Miscellaneous chemical products.	4 10 7 12	534 14, 965 657 1, 995	+1.5 +2.0 -2.1 +4.7	16, 329 565, 786 16, 995 50, 803	+7. +7. +. -3.
Total	33	18, 151	+2.1	649, 913	+6.
Printing and paper goods: Paper boxes, bags, cartons, etc	9 55 15 10	1, 823 2, 391 3, 412 1, 101	+. 9 -3. 9 -2. 5 -1. 6	45, 477 84, 777 127, 530 26, 929	-5. -5. -3. +.
Total	89	8, 727	-2.1	284, 713	-3.
Textiles: Knit goods Other textile products	13 7	1, 149 1, 562	+6.9 -1.1	21, 204 33, 306	+1. -5.
Total	20	2, 711	+2.2	54, 510	-2.
Clothing, millinery, and laundrying:  Men's clothing.  Women's clothing.  Millinery.  Laundries, cleaning, and dyeing.	22 11 7 23	2,710 1,005 424 3,484	-6. 6 +5. 4 -34. 3 +1. 0	60, 186 18, 669 7, 793 80, 864	-3. -1. -37. +2.
Total	63	7, 623	-4.1	167, 512	-3.

<sup>&</sup>lt;sup>1</sup> Increase of less than one-tenth of 1 per cent.

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PER CENT OF CHANGE IN NUMBER OF EMPLOYEES AND IN TOTAL AMOUNT OF WEEKLY PAY ROLL IN 738 CALIFORNIA ESTABLISHMENTS BETWEEN MAY AND JUNE, 1926—Continued

		Emp	loyees	Weekly	pay roll
Industry	Number of firms reporting	Number in June, 1926	Per cent of increase (+) or decrease (-) as compared with May, 1926	Amount in June, 1926	Per cent of increase (+) or decrease (-) as compared with May, 1926
Foods, beverages, and tobacco: Canning, preserving of fruits and vegetables Canning, packing of fish Confectionery and tice cream. Groceries, not elsewhere specified. Bread and bakery products. Sugar Slaughtering and meat products Cigars and other tobacco products Beverages Dairy products Flour and grist mills Lice manufactures Other food products.	24 8 30 5 22 6 15 5 4 10 9 6	14, 824 465 1, 912 537 3, 669 2, 964 2, 657 1, 021 468 2, 560 1, 137 1, 050 696	+53.8 +41.3 +7.6 +2.3 -3.9 -2.1 -3.9 -2.1 +7 +.5 +5.1 +7.6 -3.7	\$255, 167 5, 260 48, 235 12, 047 107, 082 83, 224 78, 317 18, 723 13, 108 84, 405 30, 918 35, 317 17, 225	+44. 2 +16. 2 +5. 4 -6 -3. 3 -7 -3. 7 +1. 8 +1. 7 -1. 6 +7. 2 -3. 7
Total	156-	33, 960	+18.8	789, 028	+11.2
Water, light, and power Miscellaneous	5 12	9, 362 2, 099	+2.8 -4.8	283, 818 50, 959	+2.9 -3.7
Grand total, all industries	738	161, 457	+4.0	4, 648, 153	+3.1

#### Illinois

THE July, 1926, issue of the Labor Bulletin, published by the Illinois Department of Labor, contains the following statistics showing the changes in employment and earnings in Illinois State factories in June, 1926, as compared with May, 1926.

CHANGES IN EMPLOYMENT AND EARNINGS IN ILLINOIS STATE FACTORIES FROM MAY TO JUNE, 1926

	Per cent	Per cent of increase (+) or decrease (-) May to June, 1926					
Industry	1	Employment					
	Male	Female	Total em- ployees	Total earnings			
Stone, clay, and glass products:  Miscellaneous stone and mineral products. Lime, cement, and plaster Brick, tile, and pottery. Glass.  Total.	-1. 4 +5. 6 6 +7. 8	+1. 5 +44. 4 +1. 1 +20. 9		+1. 1 -5. 7 -1. 4 +9. 0			
Metals, machinery, conveyances: Iron and steel Sheet-metal work and hardware Tools and cutlery Cooking, heating, ventilating apparatus Brass, copper, zinc, babbitt metal Cars and locomotives Automobiles and accessories Machinery. Electrical apparatus Agricultural implements Instruments and appliances Watches, watch cases, clocks, and jewelry	-1.3	+16.0 +2.5 -3.5 -21.7 -4.5 -2.2 -2.7 -11.2 -3.8 -1.4 -4.7 -7.8 -7.1	+3.0  -2.4 -2.3 -6.2 -9 -1.8 -1.1 -1.1 -1.1 -1.5 -3	-3.0 -2.2 -6.1 -3.7 -4.7 +7.5 -6.9 -1.2 -2.4 -5.8 +.7			
Total	-2.0	-3.0	-1. 2	-2.4			

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## CHANGES IN EMPLOYMENT AND EARNINGS IN ILLINOIS STATE FACTORIES FROM MAY TO JUNE, 1928—Continued

•	Per cent of increase (+) or decrease (-) May to June, 1926						
Industry	E						
	Male	Female	Total em- ployees	Total earnings			
Vood products: Sawmill and planing-mill products Furniture and cabinet work Pianos, organs, and other musical instruments Miscellaneous wood products Household furnishings	+0.8 -7.7 8 +1.1 -10.2	+15.8 +4.5 -9.8 -5.7 +25.6	+1. 1 -7. 5 -1. 7 +: 4 0. 0	+0. -6. -1. -4.			
Total	-3.6	+0.8	-3.3	-2.			
Furs and leather goods: Leather Furs and fur goods Boots and shoes Miscellaneous leather goods	-3. 5 +11. 4 +1. 4 +. 6	-1.8 -4.2 +1.3 +3.6	-3.3 +5.1 +4.5 3	+1. -4. +10. -1.			
Total	4	1	+3.0	+7.			
Chemicals, oils, paints, etc: Drugs and chemicals Paints, dyes, and colors Mineral and vegetable oil Miscellaneous chemical products	-1, 1 +2, 6 -, 9 -1, 3	$\begin{array}{c} -2.8 \\ +4.1 \\ -10.1 \\ +3.4 \end{array}$	-2.0 +3.9 -1.5 7				
Total	6	-1.8	3	+.			
Printing and paper goods: Paper boxes, bags, and tubes Miscellaneous paper goods Job printing Newspapers and periodicals Edition bookbinding	-3.8 -,5. -5.0 -4.0 +3.1	+5. 5 -3. 8 -1. 9 -6. 2 +14. 8	-1. 0 -2. 0 +3. 4 -4. 2 +6. 3				
Total	+.9	+1.3	+1.0	+1.			
Fextiles: Cotton and woolen goods Knit goods, cotton and woolen hosiery_ Thread and twine_	+1. 4 +3. 2 -2. 1	-2. 2 -2. 2 +5. 5	+. 4 +1. 8 -5. 4	+2. +3. -7.			
Total	+1.4	2	+.6	+1.			
Clothing, millinery, laundering:  Men's clothing  Men's shirts and furnishings.  Overalls and work clothing  Men's hats and caps.  Women's clothing  Women's underwear  Women's hats  Laundering, cleaning, and dyeing	-10.3	+9. 0 -12. 2 +6. 6 +28. 0 -12. 2 -2. 0 -24. 6 -2. 6	+5.4 -8.6 +7.5 +10.5 -10.0 -3.0 -22.7 -2.0	+24. +1. +9. +43. -15. +1. -27.			
Total	+4.3	+.8	+.6	+11.			
Food, beverages, and tobacco: Flour, feed and other cereal products Fruit and vegetable canning and preserving Miscellaneous groceries. Slaughtering and meat packing Dairy products Bread and other bakery products Confectionery. Beverages. Cigars and other tobacco products Manufactured ice Ice cream	-1. 4 +1. 8 +4. 0 +5. 7 +1. 4 +5. 2 +6. 8	-19. 0 +49. 3 +6. 7 +3. 5 -2. 4 -4. 0 +. 2 +5. 1 -1. 9	+8.1 +31.9 -3.1 +2.0 +3.6 +2.5 -0.0 +1.6 +1.8 +15.0 +10.8	+1. +12. -2. +2. +7. +1. +6. +. +2. +20.			
Total	+3. 2	+2.0	+2.3				
	10.2	12.0	15/0	10			

CHANGES IN EMPLOYMENT AND EARNINGS IN ILLINOIS STATE FACTORIES FROM MAY TO JUNE, 1926—Continued

	Per cent of increase (+) or decrease (-) May to June, 1926					
Indmstry	E					
•	Male	Female	Total em- ployees	Total earnings		
Trade—Wholesale and retail: Department stores. Wholesale dry goods. Wholesale groceries. Mail-order houses.	+0.5 -13.9 +1.0 -1.5	$ \begin{array}{r} -0.4 \\ +2.1 \\ +.5 \\ -2.7 \end{array} $	-0.1 -5.8 +.9 -2.4	+1. 4 -2. 4 3 +3. 4		
Total	-1.3	-1.7	-1.9	+2.7		
Public utilities: Water, light, and power Telephone. Street railways Railway car repair shops	+8.0 6 +.3	-1. 1 +. 2 +7. 0 -3. 4	+2.9 0 +.4 5	+4.5 +1.8 +1.3 -1.1		
Total	+.9	3	+.6	+1.8		
Coal mining	-8.6		-8.6	+5.5		
Building and contracting: Building construction Road construction Miscellaneous contracting	+2.3 +6.0 -23.8		+2. 3 +6. 0 -23. 8	-4. 0 +. 3 -17. 6		
Total	-3.3		-3.3	-6.6		
Grand total, all industries	8	1	4	+.6		

#### Iowa

THE Bureau of Labor of Iowa, in its publication, the Iowa Employment Survey, for July, 1926, gives the following statistics showing the per cent of changes in the number of employees in specified industries in that State in July, 1926, as compared with the previous month:

CHANGES IN VOLUME OF EMPLOYMENT IN IOWA, JUNE TO JULY, 1926

		Employees on pay roll July, 1926				Employees on pay roll July, 1926	
Industry	Number of firms re- port- ing	Num- ber	Per cent of in- crease (+) or de- crease (-) as com- pared with June, 1926	Industry	Number of firms reporting	Num- ber	Per cent of in- crease (+) or de- crease (-) as com- pared with June, 1926
Food and kindred prod- ucts:  Meat packing	8 2 4 7 6	6, 702 251 116 834 170	+2.0 -11.3 0.0 -2.5 -1.2	Textiles: Clothing, men's Millinery. Clothing, women's and woolen goods Hosiery, awnings, etc. Buttons, pearl	8 2 3 5 6	836 136 563 669 259	-1.8 +8.1 +.5 +8.4 -15.4
ter, etc	7	942	+6.3	Total	24	2, 463	+. 2
Sugar, starch, syrup, glucose, etc Other food products,	3	852	+3.4	Iron and steel works: Foundry and machine		-	
coffee, etc	7	185	-4.6	shops	27	2, 183	7
Total	44	10, 052	+1.6	Brass, bronze prod- ucts, plumbers' sup- plies	6	547	-7.1

CHANGES IN VOLUME OF EMPLOYMENT IN IOWA, JUNE TO JULY, 1926-Continued

	Num-		loyees on roll July, 1926	oll July,		Employees on pay roll July, 1926	
Industry	ber of Per cent		Number of firms re- port- ing	Num- ber	Per cent of in- crease (+) or de- crease (-) as com- pared with June, 1926		
Iron and steel works—Con. Autos, tractors and engines————— Furnaces	5 6	2, 598 408	-3.3 -3.3	Paper products, printing and publishing: Paper products Printing and publish-	3	185	-4. 6
PumpsAgricultural imple-	4	422	+1.4	ing	16	2, 789	+2. 6
Agricultural 1mple-	7	694	-2.8	Total	19	2,974	+2.2
Washing machines	8	2, 256	+5. 2	Patent medicines and compounds	8	372	-8.4
Total	63	9, 108	+.6	Stone and clay products:	=	- 012	0, 2
Lumber products:  Mill work, interiors, etc Furniture, desks, etc	16	2, 976 737	+2. 2 -4. 5	Cement, plaster, gyp- sum	7 11	2, 072 832	+. 6 -10. 7
Refrigerators	2	148	+1.4	ed rock and stone	2	64	+3.
Coffins, undertakers'	5	150	0.4	Total	20	2,968	-2.8
suppliesCarriages, wagons,		170	-3.4	Tobacco and cigars Railway-car shops	4 4	290 1, 784	-3. ( -3. )
truck bodies	4	149	+7.4	Various industries:		1, 101	0
Total	34	4, 180	+.9	Brooms and brushes	4	141	+6.
Leather products: Shoes Saddlery and harness Fur goods and tan- ning	2 6 5	239 194 127	+2.5 +4.6 +8.7	Laundries Mercantile Public service Wholesale houses Commission houses Other industries	5 7 3 24 6 14	235 2, 463 1, 325 1, 251 185 906	+. -1. +. -2. -15.
Gloves and mittens	3	261	-5.8	Total	63	6, 506	-2.
Total	16	821	+1.3	Grand total	299	41, 518	

## Massachusetts

THE Department of Labor and Industries of Massachusetts press release shows the following changes in volume of employment in various industries in that State from May to June, 1926:

NUMBER OF EMPLOYEES IN 979 MANUFACTURING ESTABLISHMENTS IN MASSA-CHUSETTS, WEEK INCLUDING OR ENDING NEAREST TO MAY 15 AND JUNE 15, 1926

	Number of estab- lish- ments re- porting	Number of wage earners employed					
Industry		May,	June, 1926				
		1926	Full time	Part time	Total		
Automobiles, including bodies and parts	17 15	<b>4,</b> 171 971	1, 297 796	2, 384 177	3, 681 973		
Bookbinding Boot and shoe cut stock and findings	45	1,896	694	1, 135	1, 829		
Boots and shoes	67	20, 515	8, 687	11, 288	19, 975		
Boxes, paper	27	2, 019	748	1, 273	2, 021		
Boxes, wooden packing	13	1, 154	1, 028	126	1, 154		
Bread and other bakery products	51	4, 102	3, 906	294	4, 200		
Carpets and rugs	5	3, 752	1, 327	2, 144	3, 471		
steam railroads	4	2, 884	2, 224	667	2, 891		
Clothing, men's	29	3, 845	2,945	873	3, 818		

NUMBER OF EMPLOYEES IN 979 MANUFACTURING ESTABLISHMENTS IN MASSA-CHUSETTS, WEEK INCLUDING OR ENDING NEAREST TO MAY 15 AND JUNE 15, 1926—Continued

	Number	Number of wage earners employed					
Industry	of estab- lish- ments re-			June, 1926	1926		
	porting	1926	Full time	Part time	Total		
Clothing, women's Confectionery Copper, tin, sheet iron, etc. Cotton goods Cutlery and tools Dyeing and finishing textiles Electrical machinery, apparatus, and supplies Foundry products Furniture Gas:and by-products Hosiery and knit goods Jewelry Leather, tanned, curried, and finished Machine-shop products Machine-shop products Machine tools Musical instruments Paper and wood pulp Printing and publishing, book and job Printing and publishing, newspaper Rubber footwear Rubber footwear Rubber goods Silk goods Silk goods Slaughtering and meat packing Stationery goods Steamfittings and steam and hot-water heating apparatus Stoves and stove linings Textile machinery and parts Tobacco Woolen and worsted goods All other industries	54 24 8 13 27 32 13 12 34 44 22 13 39 17 39	1, 667 2, 920 430 39, 769 5, 281 6, 733 11, 949 2, 975 3, 420 1, 176 5, 025 2, 813 3, 820 8, 379 1, 973 1, 973 1, 32 1, 99 9, 998 2, 434 4, 076 1, 698 4, 842 2, 189 1, 698 4, 842 2, 19, 19, 19, 19, 19, 19, 19, 19, 19, 19	1, 199 1, 460 430 16, 866 4, 481 916 9, 756 2, 088 2, 165 1, 147 2, 014 2, 356 7, 633 1, 514 756 4, 557 2, 002 2, 104 8, 238 1, 51 4, 028 265 1, 482 1, 161 529 199 199 769 6, 385 14, 672	367 1, 474 11 20, 759 583 5, 689 1, 328 974 1, 091 2, 907 765 1, 368 457 491 1, 348 1, 314 1, 308 1, 12 60 1, 279	1, 566 2, 934 441 37, 625 5, 004 6, 605 11, 034 3, 062 3, 266 3, 724 4, 921 2, 806 3, 724 8, 215 8, 215 1, 971 1, 277 5, 905 3, 316 2, 104 9, 546 2, 203 4, 088 1, 544 1, 482 1, 689 4, 456 1, 689 4, 753 17, 719 28, 811 7, 719		
Total, all industries	979	232, 273	128, 046	96, 999	225, 045		

#### New York

THE New York State Department of Labor has furnished the following tabulation of changes in employment and pay rolls in New York State factories in June, 1926. The table is based on returns from a fixed list of approximately 1,700 factories, whose weekly pay roll for the middle week of June was \$14,390,165.

CHANGES IN EMPLOYMENT AND PAY ROLL IN NEW YORK STATE FACTORIES FROM JUNE, 1925, AND MAY, 1926, TO JUNE, 1926

	Per cent of increase (+) or decrease (-)							
Industry	May, 1926, t	o June, 1926	June, 1925, to June, 1926					
	Employ- ment	Pay roll	Employ- ment	Pay roll				
Cement Brick Pottery Glass Pig iron Structuraliron Hardware Stamped ware Cutlery Steam and hot water Stoves Agricultural implements	+1.3 +1.0 -1.0 -6.4 +3.6 +5.0 -5.1 -4.3 +6.2 -1.5 -1.9	+2.7 +7.4 +.4 +2.3 -7.3 +6.2 +7.3 -5.3 +1.2 +3.6 -1.9	+7.3 +16.1 -1.7 +5.9 +16.4 +5.6 +9.6 -5.9 -5.8 +18.9 -5.8 -1.6	+9.8 +27.3 -2.1 +13.6 +19.1 +12.0 +13.3 -6.1 -1.1 +25.7 -5.2 -3.7				

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CHANGES IN EMPLOYMENT AND PAY ROLL IN NEW YORK STATE FACTORIES FROM JUNE, 1925, AND MAY, 1926, TO JUNE, 1926—Continued

	Per cent of increase (+) or decrease (-)							
Industry	May, 1926, t	o June, 1926	June, 1925, to June, 1926					
	Employ- ment	Pay roll	Employ- ment	Pay roll				
Electrical machinery, etc Foundry Autos and parts Cars, locomotives, etc. Railway repair shops Millwork Sawmills Furniture and cabinet Furniture Pianos Leather Boots and shoes Drugs Petroleum Paper boxes. Newspapers Book and job Silk goods. Carpets W oolens. Cotton goods. Cotton and woolen Dyeing Men's clothing. Shirts and collars. Women's clothing. Women's headwear Flour Sugar Slaughtering Bread Confectionery. Cigars.	-1. 2 -4. 4 +8. 5 -3. 5 -1. 0 +5. 3 -1. 6 -2. 1 -3. 4 +1. 4 +2. 3 -1. 2 +1. 4 +2. 3 +1. 2	+1.6 -3.0 -3.8 +6.7 -2.6 -4.4 +2.1 -2.4 -1.2 -5.2 +17.3 +3.4 +2.9 +1.8 +7 -1.4 -8.0 -4.1 -1.4 -1.4 -1.4 -1.4 -1.4 -1.6 -1.6 -1.6 -1.6 -1.6 -1.6 -1.6 -1.6	+10. 2 +4. 7 -5. 7 +44. 1 -1. 4 -4. 1 -10. 9 +5. 1 +4. 8 +6. 9 +6. 7 -9. 4 +9. 4 +9. 4 +17. 4 +17. 4 +17. 4 +17. 4 +2. 3 -6. 1 -1. 5 -5. 0 -9. 7 +3. 5 -1. 1 -1. 5 -1. 5 -1. 1 -1. 5 -1. 5	+16.8 +10.1 -1.8 +15.2 +1.0 -1.2 +10.5 +10.5 +10.5 +11.6 +15.8 -13.6 +15.8 -14.6 +15.8 -14.6 +15.8 -14.6 +15.8 -15.8 +1.7 -4.6 +1.1 -8.7 -4.8 -7.8 -7.8 -7.8 -7.8 -7.8 -7.8 -7.8 -7				
Total	4	+.6	+1.1	+4.9				

<sup>1</sup> Less than one-tenth of 1 per cent.

#### Oklahoma

THE July 15, 1926, issue of the Oklahoma Labor Market, published by the Bureau of Labor Statistics of Oklahoma, shows the changes in employment and pay rolls in 710 establishments in that State from May to June, 1926, as follows:

CHANGES IN EMPLOYMENT AND PAY ROLLS IN 710 INDUSTRIAL ESTABLISHMENTS IN OKLAHOMA, MAY TO JUNE, 1926

		June, 1926					
	Number of plants reporting	Employment		Pay roll			
Industry		Number of em- ployees	Per cent of in- crease (+) or decrease (-) com- pared with May, 1926	Amount	Per cent of in- crease (+) or decrease (-) com- pared with May, 1926		
Cottonseed oil mills. Food production: Bakeries. Confections. Creameries and dairies. Flour mills. Ice and ice cream. Meat and poultry.	13 35 7 11 44 33 14	160 565 49 181 347 565 1,633	-34.2 +5.6 +11.3 +5.2 6 +38.8 +5.9	\$3, 171 14, 501 919 3, 511 7, 708 14, 459 38, 989	-24.9 +2.5 +24.8 +11.8 -3.6 +36.9 +12.8		

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CHANGES IN EMPLOYMENT AND PAY ROLLS IN 710 INDUSTRIAL ESTABLISHMENTS IN OKLAHOMA, MAY TO JUNE, 1926—Continued

			June	, 1926	
*		Emple	oyment	Pay	y roll
Industry	Number of plants reporting	Number of em- ployees	Per cent of in- crease (+) or decrease (-) com- pared with May, 1926	Amount	Per cent of in- crease (+) or decrease (-) com- pared with May, 1926
Lead and zinc: Mines and mills Smelters Metals and machinery:	46	2, 916	-1. 2	\$80, 121	-3.8
	17	2, 086	6	58, 898	+3.6
Autorepairs, etc. Foundries and machine shops Tank construction and erection.	29	1, 317	+8. 6	42, 058	+9. 2
	38	1, 077	+8. 1	31, 667	+13. 8
	16	693	4	17, 542	+. 8
Oil industry: Production and gasoline manufacture	123	4, 787	+. 9	136, 953	7
	66	6, 063	+3. 7	199, 733	-2.4
Job workPublic utilities:	24	265	0.0	7, 883	-2.0
Steam railroad shops	11	1,772	-2.0	49, 869	+1.1
Street railways	6	681	-2.2	18, 022	+.4
Water, light, and power	50	1,144	-7.5	31, 222	-3.9
Stone, clay, and glass:  Brick and tile  Cement and plaster  Crushed stone Glass manufacturing	11	421	-5.8	8, 797	-3.9
	6	1, 061	3	27, 748	+1.8
	6	274	+.7	4, 684	+.2
	9	976	-4.3	20, 921	-6.8
Textiles and cleaning: Textile manufacturing Laundries and cleaning Woodworking:	9	369	-18.5	5, 661	-10.9
	52	1, 428	+2.8	25, 152	+1.4
Sawmills	14	373	+7.5	5, 421	+1.5
	20	345	-2.3	8, 951	+.7
Total, all industries	710	31, 548	+1.1	864, 559	+.7

#### Wisconsin

THE Wisconsin Labor Market for July, 1926, issued by the State industrial commission, contains the following data on volume of employment in Wisconsin industries in June, 1926:

PER CENT OF CHANGE IN NUMBER OF EMPLOYEES AND IN TOTAL AMOUNT OF PAY ROLL IN IDENTICAL ESTABLISHMENTS IN WISCONSIN INDUSTRIES FROM JUNE, 1925, AND MAY, 1926, TO JUNE, 1926

	Per cen	t of increase	(+) or decre	ase (-)
Industry	May to J	une, 1926	June, 1925,	to June, 1926
	Employ- ment	Pay roll	Employ- ment	Pay roll
Manual Agriculture Logging Mining Lead and zinc Iron Stone crushing and quarrying Manufacturing Stone and allied industries Brick, tile and cement blocks Stone finishing	$\begin{array}{c} -23.0 \\ -5.6 \\ -6.7 \\ -3.4 \\ +2.3 \\ -4.3.3 \\ +12.5 \\ -2.5 \end{array}$	+3. 1 +3. 9 +1. 5 -1. 4 -1. 6 -6 +18. 3 -8. 4	-1.3 +4.1 -12.1 -16.9 -14.4 -1.0 -11.1 -9.7 -12.1	$\begin{array}{c} +7.1\\ +3.6\\ +14.4\\ -10.7\\ +1.4\\ -4.0\\ +1.6\\ -6.8 \end{array}$

PER CENT OF CHANGE IN NUMBER OF EMPLOYEES AND IN TOTAL AMOUNT OF PAY ROLL IN IDENTICAL ESTABLISHMENTS IN WISCONSIN INDUSTRIES FROM JUNE, 1925, AND MAY, 1926, TO JUNE, 1926—Continued

	Per cen	t of increase	(+) or decre	ase (-)
Industry	May to J	une, 1926	June, 1925,	to June, 1926
	Employ- ment	Pay roll	Employ- ment	Pay roll
Manual—Continued				
Manufacturing—Continued.				
Metal Pig iron and rolling-mill products Structural ironwork Foundries and machine shops Railroad repair shops Stoves Aluminum and enamel ware Machinery	$-1.2 \\ -4.9$	-4.9 +4.9 -4.8 5 +1.9 -11.1 4	+1.8 -13.0 +13.5 +1.8 -2.9 +6.8 +1.0 +5.3	+4. 2 -5. 9 +5. 0 +. 8 5 +4. 6 +11. 5
AutomobilesOther metal products	-2.8 $-1.2$	-12.7 $-13.0$	+6.0	+15.4 -6.5
Wood Sawmills and planing mills. Box factories. Panel and veneer mills Frurniture Sash, door, and interior finish Other wood products. Rubber Leather Tanning Boots and shoes Other leather products Paper Paper and pulp mills Paper boxes. Other paper products Textiles Hosiery and other knit goods Clothing Other textile products. Foods. Meat packing Baking and confectionery Milk products. Canning and preserving Flour mills Tobacco manufacturing Other food products Light and power Printing and publishing Laundering, cleaning, and dyeing Chemical (including soap, glue, etc.)	-2.0 -6.0 -1.5 -2.5 +1.7 -1.5 +1.5 +1.4 -1.2 +3.6 +5.2 +1.8 -2.1 +1.4 +2.7 +3.6 +3.6 +5.2 +1.5 +1.1 +1.1 +1.1 +1.5 +1.5 +1.5 -2.1 +1.5 -2.1 +1.5 -2.1 +1.5 -2.1 +1.5 -2.1 +1.5 -2.1 +1.5 -2.1 +1.5 -2.1 +1.5 -2.1 +1.5 -2.1 +1.5 -2.1 +1.5 -2.1 +1.5 -2.1 +1.5 -2.1 +1.5 -2.1 +1.5 -2.1 +1.5 -2.1 +1.5 -2.1 +1.5 -3.1 +1.1 +1.2 +1.1 +1.2 +1.1 +1.2 +1.1 +1.2 +1.1 +1.2 +1.1 +1.2 +1.1 +1.2 +1.1 +1.2 +1.1 +1.2 +1.1 +1.2 +1.1 +1.1	$\begin{array}{c} -2.1 \\ -6.0 \\ +2.3 \\ -2.7 \\ +2.8 \\ -2.6 \\ +5.6 \\ +5.6 \\ +7.4 \\ +1.5 \\ +1.4 \\ +1.4 \\ +1.4 \\ +1.1 \\ +2.6 \\ -3.4 \\ +1.1 \\ +2.6 \\ -3.4 \\ +1.1 \\ +1.1 \\ +2.6 \\ -3.4 \\ +1.1 \\ +1.1 \\ +2.6 \\ -3.4 \\ +1.1 \\ +1.1 \\ +2.6 \\ -3.4 \\ +1.1 \\ -2.5 \\ +4.7 \\ -2.5 \\ +4.7 \\ +1.1 \\ -2.5 \\ -4.0 \\ -3.3 \\ -3.3 \end{array}$	-3.0 +5.1 +10.3 +14.3 +7.6 -5.7 -5.4 -5.5 -5.8 -14.0 -31.6 -3.7 -15.5 -48.8 +34.2 +17.5 +10.2 +1.9 -6 -10.2	-6.5 -3.9 -13.0 +1.7 -34.3 +58.1 +58.1 +10.5 +6.5 +7.5 +10.5 +7.5 +10.5 +10.5 -4.1 -3.1 -4.6 -4.4 +1.1 -8.3 -25.7 -1.3 -3.6 -1.9 -1.1 +10.5 -7 -7.5
Building Highway Railroad Marine, dredging, sewer-digging	$+11.2 \\ +21.9 \\ +26.2 \\ -18.7$	+18.3 +12.3 -5.8	$ \begin{array}{r} -7.2 \\ -17.9 \\ +17.6 \\ +148.5 \end{array} $	$ \begin{array}{r} -10.1 \\ -7.4 \\ +12.7 \\ +189.6 \end{array} $
Communication: Steam railways Electric railways Express, telephone, and telegraph Wholesale trade Hotels and restaurants	44 0	+4.7 +.3 +3.4 +6.5	+4.4	+3. 9 +4. 1 -1. 5 +17. 4
Nonmanual				
Manufacturing, mines, and quarries.  Construction.  Communication.  Wholesale trade.  Retail trade—sales force only.  Miscellaneous professional services.  Hotels and restaurants.	$\begin{array}{c} +.8 \\ -2.7 \\ +.7 \\ +1.6 \\ -3.5 \\ +1.3 \\ +12.5 \end{array}$	+.9 -2.5 +2.4 +.2 -6.7 -1.2	+2.4 -4.6 +3.6 +4.2 +5.8 +5.5 +2.9	+1.8 +2.8 +4.2 +4.1 +.2 +5.4

## Employment in Buenos Aires in 1926 1

THE Argentine Department of Labor has recently published employment statistics for the Federal capital, showing that the total number of employed workers in August, 1925, was 408,398, while in February, 1926, this number had increased to 417,464.

The following statement, giving the results of an investigation made in industrial establishments in Buenos Aires, shows the number of workers in various industries in August, 1925, in comparison with employment in February, 1926:

onipio jinono in a conduny, 1020.	August, 1925	1926
Food industry	5, 126	4, 902
Beverage industry		1, 845
Tobacco industry	4, 868	5, 393
Chemical industry	1. 578	1, 592
Textile industry	8, 881	8, 538
Clothing industry	13, 130	13, 288
Lumber moustry	2, 110	1, 988
Metallurgical industry	5, 100	5, 128
Electrotechnical industry		76
Light and power industry	3, 378	3, 432
Building and construction industry		3, 360
Glass, gypsum, etc., industry	144	151
Paper and pasteboard industry	196	190
Polygraphic industry		3, 706
Leather industry		1,636
Transportation and communication industry	24, 708	25, 068
Commercial industry	1, 954	1, 933
Industry not specified	426	416
Total	80, 857	<sup>2</sup> 82, 651

 $<sup>^1</sup>$  Asociacion del Trabajo. Boletin de Servicios, Buenos Aires, June 20, 1926, p. 268.  $^2$  This is not the exact sum of the items, which add to 82,642, but is as given in the report.

## Retail Prices of Food in the United States

THE following tables are compiled from monthly reports of actual selling prices <sup>1</sup> received by the Bureau of Labor Statistics from retail dealers.

Table 1 shows for the United States retail prices of food July 15, 1925, and June 15 and July 15, 1926, as well as the percentage changes in the year and in the month. For example, the retail price per pound of hens was 36.6 cents on July 15, 1925, 40.2 cents on June 15, 1926, and 39.2 cents on July 15, 1926. These figures show an increase of 7 per cent in the year and a decrease of 2 per cent in the month.

The cost of the various articles of food combined shows a decrease of 1.8 per cent July 15, 1926, as compared with July 15, 1925, and a decrease of 1.7 per cent July 15, 1926, as compared with June 15, 1926.

TABLE 1.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE JULY 15, 1926, COMPARED WITH JUNE 15, 1926, AND JULY 15, 1925

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

Article Unit	Averag	ge retail pri	ce on—	(+) o (-) Ju	of increase r decrease ly 15, 1926, red with—
	July 15,	June 15,	July 15,	July 15,	June 15,
	1925	1926	1926	1925	1926
Sirloin steak Pound Of Pound Pound Steak Of Chuek roast Of Plate beef Of Of Pound Po	Cents 42. 2 36. 5 30. 4 22. 4 14. 0	Cents 42.0 36.2 30.6 22.7 14.6	Cents 42. 0 36. 3 30. 7 22. 7 14. 5	-0.4 -1 +1 +1 +4	0 +0.3 +0.3 0 -1
Pork chops	\$9. 2	42. 0	41. 7	+6	-1
	48. 7	51. 5	52. 3	+7	+2
	54. 4	59. 7	60. 9	+12	+2
	39. 3	41. 9	40. 3	+3	-4
	36. 6	40. 2	39. 2	+7	-2
Salmon, canned, red. do. Milk, fresh Quart Milk, evaporated 15-16 oz. can. Butter Oleomargarine (all butter substitutes). do. do. do. do. do. do. do. do. do. do	\$1. 5	38. 1	38. 1	+21	0
	13. 8	13. 8	13. 8	0	0
	11. 4	11. 5	11. 4	0	-1
	53. 2	50. 3	50. 1	-6	-0.4
	29. 9	30. 1	30. 2	+1	+0.3
Cheese	36. 6 23. 5 25. 8 46. 2 9. 4	35. 7 22. 6 25. 8 40. 7 9. 4	35. 7 23. 0 25. 9 42. 1 9. 4	$\begin{array}{c c} -2 \\ -2 \\ +0.4 \\ -9 \\ 0 \end{array}$	0 +2 +0.4 +3 0

 $<sup>^1</sup>$  In addition to monthly retail prices of food and coal the bureau publishes the prices of gas and electricity from each of 51 cities for the dates for which these data are secured.

Table 1.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE JULY 15, 1926, COMPARED WITH JUNE 15, 1926, AND JULY 15, 1925—Continued

Article	Unit	Averag	e retail pri	ce on—	(+) or (-) Ju	of increase decrease ly 15, 1926, ed with—
		July 15, 1925	June 15, 1926	July 15, 1926	July 15, 1925	June 15, 1926
Flour	Pounddodo8-oz. pkg	Cents 6. 1 5. 4 9. 2 11. 1 24. 6	Cents 6. 1 5. 1 9. 1 10. 9 25. 4	Cents 6. 0 5. 1 9. 1 11. 0 25. 4	-2 -6 -1 -1 +3	$\begin{array}{c c} -2 & 0 \\ 0 & 0 \\ +1 & 0 \end{array}$
Macaroni Rice Beans, navy. Potatoes Onions	do	20. 5 11. 2 10. 3 4. 4 9. 5	20. 3 11. 7 9. 2 5. 0 7. 4	20. 2 11. 7 9. 2 4. 1 6. 8	$ \begin{array}{r} -1 \\ +4 \\ -11 \\ -7 \\ -28 \end{array} $	-0.4 0 0 -18 -8
Cabbage Beans, baked Corn, canned Peas, canned	do	6. 5 12. 4 18. 3 18. 4	6 1 11. 9 16. 4 17. 4	5. 1 11. 9 16. 4 17. 4	$     \begin{array}{r}       -22 \\       -4 \\       -10 \\       -5     \end{array} $	-16 0 0 0
Tomatoes, canned	Pounddo	13. 7 7. 1 75. 8 50. 8	11. 9 6. 9 76. 9 51. 0	11. 8 6. 9 77. 0 51. 1	$ \begin{array}{r} -14 \\ -3 \\ +2 \\ +1 \end{array} $	$ \begin{array}{c} -1 \\ 0 \\ +0.1 \\ +0.2 \end{array} $
Prunes	Dozen	17. 3 14. 5 36. 2 61. 2	17. 1 14. 7 35. 9 50. 3	17. 2 14. 8 35. 2 49. 7	$ \begin{array}{r} -1 \\ +2 \\ -3 \\ -19 \end{array} $	+1 +1 -2 -1
All articles combined					-1.8	-1.7

Table 2 shows for the United States average retail prices of specified food articles on July 15, 1913, and on July 15 of each year from 1920 to 1926, together with percentage changes in July of each of these specified years, compared with July, 1913. For example, the retail prices per pound of pork chops was 21.7 cents in July, 1913; 43.7 cents in July, 1920; 34.3 cents in July, 1921; 34.4 cents in July, 1922; 31.2 cents in July, 1923; 30.3 cents in July, 1924; 39.2 cents in July, 1925, and 41.7 cents in July, 1926.

As compared with July, 1913, these prices show increases of 101 per cent in July, 1920; 58 per cent in July, 1921; 59 per cent in July, 1922; 44 per cent in July, 1923; 40 per cent in July, 1924; 81 per cent

in July, 1925, and 92 per cent in July, 1926.

The cost of the various articles of food combined shows an increase of 57.7 per cent in July, 1926, as compared with July, 1913.

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

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

Article	Unit	A	verag	e ret	ail p	rice o	on Ju	ly 1	5—	sp	ecifie	of inc d ye , 1913	ar c			
		1913	1920	1921	1922	1923	1924	1925	1926	1920	1921	1922	1923	1924	1925	1926
Sirloin steak Round steak Rib roast Chuck roast Plate beef	do	Cts. 26. 4 23. 2 20. 2 16. 4 12. 2		40. 2	39. 2	41.0	40.7	42. 2	36 3	94	54	48 47 41 24 5	55 53 45 27 5	49	57 50 37	56 52 38
Pork chops	do do do	21. 7 28. 0 28. 1 19. 7 21. 7	43. 7 54. 7 59. 8 41. 1 45. 0	34. 3 43. 2 51. 0 35. 2 38. 8	34. 4 40. 6 52. 3 37. 4 35. 7	31. 2 39. 1 46. 0 38. 5 34. 8	30. 3 36. 4 44. 7 38. 4 35. 3	39. 2 48. 7 54. 4 39. 3 36. 6	41. 7 52. 3 60. 9 40. 3 39. 2	101 95 113 109 107	54 81 79	45 86 90	40 64 95	30 59 95	74 94 99	87 117 103
Salmon, canned, red. Milk, fresh Milk, evaporated Butter Oleomargarine (all butter substitutes).	do	04.0	01.0	40.0	40. (	49. 1	49, 0	00. %	38. 1 13. 8 11. 4 50. 1 30. 2	80		45 31	55	53		
Cheese	Dozen	29. 9	29. 0 36. 4 57. 3	16. 7 21. 0 42. 3	17. 2 22. 7 36. 0	17. 1 22. 8 37. 1	17. 1 24. 7 39. 4	23. 5 25. 8 46. 2	23. 0 25. 9 42. 1	82  92	41	20	24	32	48	45
Flour Corn meal Rolled oats Corn flakes Wheat cereal	do	3.3	8. 7 7. 0 11. 0	5.8	5. 2	4.7	4.8	6.1	6.0	133	76 47		37	100	85	82
Macaroni											79	10		15 74		
Cabbage Beans, baked Corn, canned Peas, canned	do		7 5	5. 5 14. 2 15. 8	4. 6 13. 3 15. 4	5. 4 12. 9 15. 4	5. 0 12. 6 15. 8	6. 5 12. 4 18. 3	5. 1 11. 9 16. 4							
Tomatoes, canned Sugar, granulated Tea Coffee	do	54. 41	74.4	69.2	68.0	69.4	70.8	75.8	77.0	382 37 65	27			30	39	42
Prunes	Dozen_		28. 2 46. 5	30.7 40.8	24. 0 35. 8	17. 5 38. 8	15. 4 35. 9	14. 5 36. 2	35. 2							
All articles com- bined.6										120. 1	49.0	42. 7	47.8	43. 9	60. 5	57.7

<sup>1</sup> Both pink and red. 2 15-16 ounce can.

<sup>2 15-16</sup> ounce can.
3 8-ounce package.
4 28-ounce package.
5 No. 2 can.
6 Beginning with January, 1921, index numbers showing the trend in the retail cost of food have been composed of the articles shown in Tables 1 and 2, weighted according to the consumption of the average family. From January, 1913, to December, 1920 the index numbers included the following articles: Sirloin steak, round steak, rib roast, chuck roast, plate beef, pork chops, bacon, ham, lard, hens, flour, corn meal, eggs, butter, milk, bread, potatoes, sugar, cheese, rice, coffee, and tea.

Table 3 shows the changes in the retail prices of each of 22 articles of food for which prices have been secured since 1913, as well as the changes in the amounts of these articles that could be purchased for \$1 in specified years, 1913 to 1925, and in June and July, 1926.

TABLE 3:—AVERAGE RETAIL PRICES OF SPECIFIED ARTICLES OF FOOD AND AMOUNT PURCHASABLE FOR \$1, IN SPECIFIED YEARS, 1913 TO 1925, AND IN JUNE AND JULY, 1926

	Sirloir	steak	Round	1 steak	Rib	roast	Chuel	c roast	Plate	beef	Pork	chops
Year	Average retail price	Amt.	Average retail price	Amt. for \$1	Average retail price	Amt. for \$1	Average retail price	Amt. for \$1	Average retail price	Amt.	Average retail price	Amt. for \$1
1913 1920 1921 1922 1923 1923 1924 1925 1925	39.0	Lbs. 3.9 2.3 2.6 2.7 2.6 2.5 2.5	Cents per lb. 22, 3 39, 5 34, 4 32, 3 33, 5 33, 8 34, 7	Lbs.	Cents per lb. 19. 8 33. 2 29. 1 27. 6 28. 4 28. 8 29. 6	5. 1 3. 0 3. 4 3. 6 3. 5	Cents per lb. 16. 0 26. 2 21. 2 19. 7 20. 2 20. 8 21. 6	6. 3 3. 8 4. 7 5. 1 5. 0	Cents per lb. 12. 1 18. 3 14. 3 12. 8 12. 9 13. 2 13. 8	8. 3 5. 5 7. 0 7. 8 7. 8 7. 6	Cents per lb. 21. 0 42. 3 34. 9 33. 0 30. 4 30. 8 36. 6	Lbs. 4.8 2.4 2.9 3.0 3.3 3.2 2.7
June July		2. 4 2. 4	36. 2 36. 3	2. 8 2. 8	30. 6 30. 7	3. 3 3. 3	22. 7 22. 7	4.4	14. 6 14. 5		42. 0 41. 7	2.4 2.4
	Ва	eon	H	am	He	ens	М	ilk	Bu	tter	Che	eese
1913	42.7	Lbs: 3.7 1.9 2.3 2.5 2.6 2.7 2.1	Cents per lb. 26, 9 55, 5 48, 8 48, 8 45, 5 45, 3 52, 6	Lbs. 3.7 1.8 2.0	Cents per lb. 21. 3 44. 7 39. 7 36. 0 35. 0 35. 3 36. 6	4.7 2.2 2.5 2.8	Cents per qt. 8.9 16.7 14.6 13.1 13.8 13.8 14.0	Qts. 11. 2 6. 0 6. 8 7. 6 7. 2 7. 2 7. 1	Cents per lb. 38. 3 70. 1 51. 7 47. 9 55. 4 51. 7 54. 8	Lbs. 2.6 1.4 1.9 2.1 1.8 1.9 1.8	32.9	Lbs. 4. 5 2. 4 2. 9 3. 0 2. 7 2. 8 2. 7
1926: June July	51. 5 52. 3	1.9 1.9	59. 7 60. 9	1. 7 1. 6	40. 2 39. 2	2. 5 2. 6	13. 8 13. 8	7. 2	50. 3 50. 1	2. 0 2. 0	35. 7 35. 7	2.8 2.8
	Lai	·d	E	ggs	Br	ead	Fl	our	Corn	meal	Ri	ice
1913	18. 0 17. 0 17. 7 19. 0	Lbs. 6.3 3.4 5.6 5.9 5.6 5.3 4.3	Cents perdoz. 34. 5 68. 1 50. 9 44. 4 46. 5 47. 8 52. 1	Dozs. 2. 9 1. 5 2. 0 2. 3 2. 2	5. 6 11. 5 9. 9 8. 7 8. 7 8. 8	17. 9 8. 7 10. 1 11. 5 11. 5 11. 4	Cents per lb, 3. 3 8. 1 5. 8 5. 1 4. 7 4. 9 6, 1		Cents per lb. 3. 0 6. 5 4. 5 3. 9 4. 1 4. 7 5. 4	Lbs, 33, 3 15, 4 22, 0 25, 6 24, 4 21, 3 18, 5	Cents per lb. 8. 7 17. 4 9. 5 9. 5 9. 5 10. 1 11. 1	
June July	22. 6 23. 0	4. 4 4. 3	40.7	2. 5 2. 4	9. 4 9. 4	10.6		16. 4 16. 7	5. 1 5. 1	19. 6 19. 6	11.7	8. 5 8. 5
	Pota	atoes	Su	gar	Т	ea	Co	ffee				
1913 1920 1921 1922 1923 1923 1924	Cents per lb. 1. 7 6. 3 3. 1 2. 8 2. 9 2. 7 3. 6	Lbs. 58. 8 15. 9 32. 3 35. 7 34. 5 37. 0 27. 8	Cents per lb. 5. 5 19. 4 8. 0 7. 3 10. 1 9. 2 7. 2	Lbs.	Cents per lb. 54. 4 73. 3 69. 7 68. 1 69. 5 71. 5 75. 5	1.8	Cents per lb. 29. 8 47. 0 36. 3 36. 1 37. 7 43. 3 51. 5	Lbs. 3.4 2.1 2.8 2.8 2.7 2.3 1.9				
June July	5. 0 4. 1	20. 0 24. 4	6. 9 6. 9	14. 5 14. 5	76. 9 77. 0	1.3 1.3	51. 0 51. 1	2. 0 2. 0				

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

IN TABLE 4 index numbers are given which show the changes in the retail prices of specified food articles, by years, from 1907 to 1925, and by months for 1925, and for January, through July, 1926. These index numbers, or relative prices, are based on the year 1913 as 100 and are computed by dividing the average price of each commodity for each month and each year by the average price of that commodity for 1913. These figures must be used with caution. For example, the relative price of rib roast for the year 1923 was 143.4, which means that the average money price for the year 1923 was 43.4 per cent higher than the average money price for the year 1913. The relative price of rib roast for the year 1922 was 139.4, which figures show an increase of 4 points, but an increase of slightly less than 3 per cent in the year.

In the last column of Table 4 are given index numbers showing changes in the retail cost of all articles of food combined. Since January, 1921, these index numbers have been computed from the average prices of the articles of food shown in Tables 1 and 2, weighted according to the average family consumption in 1918. (See March, 1921, issue, p. 25.) Although previous to January, 1921, the number of food articles has varied, these index numbers have been so computed as to be strictly comparable for the entire period. The index numbers based on the average for the year 1913

as 100 are 159.7 for June and 157 for July, 1926.

The curve shown in the chart on page 153 pictures more readily to the eye the changes in the cost of the food budget than do the index numbers given in the table. The chart has been drawn on the logarithmic scale, because the percentages of increase or decrease are more accurately shown than on the arithmetic scale.

<sup>&</sup>lt;sup>2</sup> For index numbers of each month, January, 1913, to December, 1920, see February, 1921, issue, pp. 19–21; for each month of 1921 and 1922 see February, 1923, issue, p. 69; and for each month of 1923 and 1924, see February, 1925, issue, p. 21.

TABLE 4.—INDEX NUMBERS SHOWING CHANGES IN THE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN THE UNITED STATES, BY YEARS, 1907 TO 1925, AND BY MONTHS FOR 1925 AND JANUARY THROUGH JULY, 1926

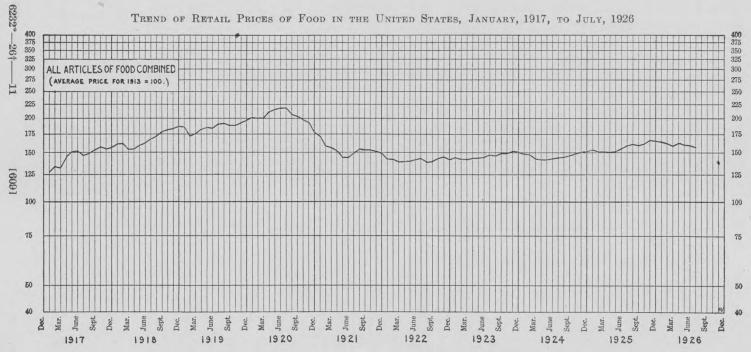
[Average for year 1913=100.0]

								Likito	ago roi	J COL S	.010 1	00.01											
Year and month		Round steak		Chuck		Pork chops		Ham	Hens	Milk	But- ter	Cheese	Lard	Eggs	Bread	Flour	Corn meal	Rice	Pota- toes	Sugar	Tea	Cof- fee	Al art cles
1907	71.5	68.0	76.1			74.3	74.4	75.7	81.4	87. 2	85.3		80.7	84.1		95.0							
1908							76.9				85.5		80.5	86.1		101.5							. 84
909						82.7	82. 9				90.1		90.1	92.6		109.4							. 88
910						91.6					93.8		103.8	97.7		108.2							- 93
911						85.1	91.3							93.5		101.6							9:
.912	91.0	89.3	93.6			91.2	90.5	90.6	93.5	97.4	97.7		93.5	98.9		105.2	101.6		132.1	115.1			97
913	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0			100.0							100.0		
914			103.0		104.1				102. 2					102.3	112.5						100.4		
)15			101.4			96.4			97.5					98.7							100.2		
916			107.4			108.3								108.8							100.4		
317			125.5			151.7								139.4	164.3	211.2	192. 2	119.0	252.7	169.3	106.9	101.4	14
18			155.1			185.7								164.9							119.1		
019			164.1	168.8	166. 9	201.4	205. 2	198.5	193.0	174.2	177.0	192.8		182.0							128. 9		
20			167.7			201.4								197.4							134.7		
31	152.8		147.0			166.2								147.5	170.8	175.8	100.0	109. 2	182.4	120.0	128.1 125.2	121. 6	1 1
922	147. 2		139.4			157.1								128.7 134.8	155.4	149.4	130.0	109. 2	170 6	192.7	127.8	196 5	1 1
922 923	153.9		143.4			144.8								138.6	157 1	142.4	156 7	116 1	158 8	167.3	131.4	145 3	1 1
925	159.8		149.5			174.3								151.0							138.8		
920	100.0	100.0	140.0	100.0	114.1	174.0	110.0	180.0	111.0	101.0	140. 1	100.1	141.0	101.0									
925: January			143.9			146.2								204.4							136.4		
February	151.6		143.4			144.3								154.8							137.5		
March			147.0			178.1								113.3							138.1		
April			150.0			175. 2								110.4							138.8		
May			150.5			171.4								113.9	167.9	184.8	180.0	120.4	100.0	130.9	139.0	170.2	1
June			150.5			172.4								122.6		104.8	180.0	120.4	200. 9	100. 9	139.3 139.3	170.6	5 1
July			153.5			186.7								133.9	107.9	184.8	180.0	120.7	200.0	127 2	139. 5	170.6	2 1
August			153.0			190.5					141.3			141.7	167 0	104.0	180.0	129.9	211 9	127.3	139.3	171 4	1
September			152.0 151.5			192.4								174.8							139.3		
October			149.0			178.6								201.2	167.0	181 8	176.7	131 0	305 0	120.0	139. 2	171 8	3 1/
November December			149. 5			170.0								191.9	167. 9	184.8	173.3	131.0	305. 9	121.8	139.3	172.1	1
					1																		1
926: January			151.5			173.8								156.2							139.9		
February			148.0			172.9								127.0							139.9		
March			151.0			177.1								111.6	107.9	187.8	170.0	134. 5	329.4	121.8	139.9 140.3	171 6	1 1
April			152.5			182.4					132.9			111.9		184.8	170.0	134. 5	259 0	120.0	140.3	171.6	5 1
May			153.5			191.9								112.8		104.8	170.0	104.0	204 1	121.0	140.4	171.1	1 1
June			154.5			200.0								118.0							141.5		
July	_ 165.4	162.8	155.1	141.9	119.8	198.6	195. /	220. 9	184.0	100.1	130.8	101.0	140.0	122.0	107.9	101.0	110.0	104.0	211.2	120.0	141.0	141.6	10

gitized for FRASER 1 30 articles in 1907; 15 articles 1908–1912; 22 articles 1913–1920; 40 articles 1921–1926. ps://fraser.stlouisfed.org

deral Reserve Bank of St. Louis





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Retail Prices of Food in

AVERAGE retail food prices are shown in Table 5 for 40 cities 11 other cities prices are shown for the same dates, with the bureau until after 1913.

TABLE 5.-AVERAGE RETAIL PRICES OF THE PRINCIPAL

[Exact comparisons of prices in different cities can not be made for some arti

		1	Atlant	a, Ga		Ba	ltimo	re, M	d.	Birn	ningh	am, /	Ma.
Article	Unit	July	15—	June	July 15,	July	15—	June	July 15,	July	15—	June	July 15,
		1913	1925	1926		1913	1925	1926	1926	1913	1925	1926	1926
Sirloin steak Round steak Rib roast	do	Cts. 26. 0 21. 5 19. 1	Cts. 37.7 34.3 29.6	36. 5	Cts. 40. 0 35. 8 31. 9	24.3 23.0	41.7	40.5 36.5	40.4		Cts. 39. 0 34. 2 27. 7	Cts. 40. 5 35. 1 28. 5	41.0
Chuck roast Plate beef Pork chops	do	15. 9 9. 4 24. 5	12.7	24. 2 13. 6 39. 2	23. 8 13. 9 39. 2	16. 7 12. 8 20. 0	22. 9 14. 7 39. 6	22. 0 15. 0 41. 7	22. 1 14. 9 40. 5	10.5	22.7 14.0 34.7	23. 2 14. 2 38. 8	14.
Bacon Ham Lamb, leg of	do	31.0	53.7		49. 2 61. 7 38. 6	26. 0 34. 5 19. 0	45.7 57.9 40.7	47. 4 61. 0 43. 6	46. 9 62. 6 41. 3	35. 0 31. 3 23. 3	47.8 52.4 37.5	58.4	
Hams Salmon, canned red Milk, fresh	do Quart	20. 1	31. 9 32. 4 16. 0	38. 1 37. 8 20. 0	37. 6 38. 7 20. 0	21.8	40. 2 27. 9 13. 0	41. 9 36. 7 13. 0	41. 9 36. 8 13. 0	17.3 10.3	32.1		36.3 41.4 20.6
Milk, evaporated Butter Oleomargarine (all but- ter substitutes).	15-16 oz. can_ Pounddo	37. 1	13. 4 56. 9 31. 8	55. 5	55. 5	37. 0	11. 2 57. 3 29. 0	11. 3 55. 3 30. 3	54.8	39, 0	12. 5 55. 8 35. 6	56. 6	
Cheese Lard Vegetable lard substitute	do	25. 0 15. 7	35. 0 23. 6 24. 6	33. 9 22. 8 23. 7	22.9	22. 0 15. 0	23. 2	34. 1 21. 4 24. 3	33. 9 21. 7 24. 7	23. 0 16. 8	36. 6 24. 1 22. 3	24. (	35. 23. 22.
Eggs, strictly fresh Bread Flour	Dozen Pound Pound	22. 6 6. 0 3. 6	41.6 10.4 6.9	39. 1 10. 9 6. 9	40. 0 10. 9 6. 9		9.4	9.8	9.7	5.4	10.4		
Corn meal Rolled oats Corn flakes	do 8-oz. pkg	2.6	4.7 9.7 11.5		9.5	2. 5	8.8		8.3		9.8		9.
Wheat cereal Macaroni Rice	28-oz. pkg Pound	8.6	25. 7 21. 8 11. 0	21.6	21.6	9.0	19.1	24.6 19.1 10.8	18.7	8.2	19.1		19.
Beans, navyPotatoesOnions	do	2. 2	12. 5 6. 0 10. 5		5.6	1.7	9.3 4.3 10.1	5.4	3.5	2.1		5. 9	6. 6
Cabbage Beans, baked Corn, canned	No. 2 can		9. 6 12. 4 18. 9		11.7		11,2	6. 5 10. 6 15. 4	10.6		12.7	12.7	
Peas, canned Tomatoes, canned Sugar, granulated	do Pound	5.8	19. 1 13. 7 7. 4	19. 2 11. 2 7. 3	10.8	4, 9	11.5	15.4 9.9 6.3	10.1	5. 5	12.9	10.8	3 10.
Tea Coffee Prunes	do	32.0	49.7	106. 6 51. 1 18. 7	51.1	56. 0 24. 8	48.3	47.8	47. 9	61.3	92, 1 53, 8 20, 0	54. 2	
RaisinsBananasOranges	Dozen		15. 4 27. 5 66. 3		28.0		13. 0 27. 2 60. 8	13.4 25.8 49.3	13. 5 25. 4 49. 8		15. 5 38. 8 65. 8	15. 2 37. 5 53. 0	5 37.

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

## 51 Cities on Specified Dates

for July 15, 1913 and 1925, and for June 15 and July 15, 1926. For exception of July, 1913, as these cities were not scheduled by the

ARTICLES OF FOOD IN 51 CITIES ON SPECIFIED DATES

cles, particularly meats and vegetables, owing to differences in trade practices]

1	Boston	, Mass	-	Bri	dgep Conn		В	uffalo	, N.	Y.	Bu	tte, M	ont.	Ch	arlest	on, S	. C.
July	15—	June	July		June		July	15—			July	June	July	July	15—		July
1913	1925	15, 1926	15, 1926	15, 1925	15, 1926	15, 1926	1913	1925	15, 1926	15, 1926	15, 1925	15, 1926	15, 1926	1913	1925	15, 1926	15, 1926
Cts. 1 35, 8 35, 8 25, 6	Cts. 1 67. 5 56. 2 42. 0	51.5	Cts.  1 66. 0 51. 5 39. 6	43. 6	41.7	Cts. 48, 2 41, 7 36, 7	Cts. 24. 0 20. 8 17. 0	Cts. 42. 0 35. 6 30. 1	41. 1 34. 8			28. 8	Cts. 32. 5 28. 8 28. 3	Cts. 21. 8 20. 0 20. 5		31.5	32. (
18. 7 24. 2	28. 8 19. 5 40. 6	27. 4 18. 2 45. 0	27. 9 18. 5 44. 4	28. 5 11. 9 40. 4	11.6	27. 1 11. 5 43. 5		22. 8 12. 9 42. 6	14.0	13.5	12.3		20. 2 12. 5 40. 2	15. 0 10. 6 20. 0	20. 0 13. 8 34. 1	20. 5 15. 2 38. 9	14. 9
25. 8 33. 0 25. 0	46. 8 58. 9 41. 6	49. 4 66. 0 46. 6	49. 9 66. 3 42. 5	51. 6 61. 1 41. 9	66. 9	67. 3		45. 7 51. 6 36. 0	60. 2	59.8	57. 7 57. 6 39. 1	58. 8 64. 6 39. 4	59. 2 63. 8 40. 0	26. 3 28. 3 21. 7	43. 4 50. 0 41. 9	54. 1	56. 9
26. 2 8. 9	41. 5 31. 0 14. 3	44. 4 38. 6 13. 9	42. 5 38. 0 14. 9	40. 9 30. 0 15. 0	35. 4	35. 5		37. 3 29. 4 13. 2	37.9	40. 5 37. 8 13. 0	33. 6 28. 8 14. 3	31. 9	36. 8 31. 9 14. 3	22. 2 11. 7	36. 8 31. 5 18. 0	39.1	39. 8
35. 5	11. 8 53. 9 29. 0	12. 3 51. 3 29. 2	12. 2 51. 1 29. 3	53. 6	11. 6 50. 9 29. 3		33. 0	11. 3 52. 7 29. 2		11. 2 51. 8 27. 8		47.3	11. 2	34. 0	11. 7 52. 7 30. 6	49.3	
22. 3 16. 0	38. 5 23. 8 25. 8	37. 1 22. 9 25. 4	36. 6 23. 1 25. 2	23. 2	22. 6		20. 5	36. 9 22. 8 26. 4	36. 7 21. 4 26. 2	36. 6 21. 9 26. 1		36. 5 24. 7 29. 3	35. 5 24. 9 29. 2	20. 0	33. 4 23. 6 24. 3	31. 6 24. 0 24. 3	
37. 3 5. 9 3. 8	64. 6 9. 0 6. 6	54. 7 9. 1 6. 5	57. 5 9. 1 6. 5	58. 9 8. 9 6. 0	50. 1 8. 8 6. 1	54. 6 8. 8 6. 2	28. 3 5. 6 3. 1	46. 8 8. 9 5. 6	41. 4 9. 0 5. 6	43. 0 8. 9 5. 6	58. 5 9. 7 6. 2	44. 0 9. 8 5. 9	49. 7 9. 8 6. 0	25. 8 6. 2 3. 7	43. 8 10. 8 7. 3	43. 6 10. 6 7. 3	10. 8
3. 5	6. 4 9. 5 11. 0	6. 1 9. 3 11. 0	6. 5 9. 2 10. 7	7. 7 8. 7 10. 5	7. 7 8. 5 10. 5	8. 0 8. 5 10. 5	2. 6	5. 4 9. 0 10. 3	5. 5 8. 6 10. 5	5. 4 8. 6 10. 2	6. 4 7. 8 12. 3		5. 9 7. 3 12. 3	2. 4	4. 1 9. 3 12. 1	4. 0 9. 4 11. 8	9.4
9.4	24. 5 23. 2 11. 7	24. 8 22. 8 12. 9	24. 6 22. 7 12. 7	23. 8 23. 1 10. 8	24. 6 22. 7 11. 2	24. 6 22. 7 11. 7	9. 3	23. 8 22. 2 11. 1	24. 6 21. 5 11. 5	21.5	26. 9 19. 7 11. 6	28. 4 19. 1 12. 2	28. 4 19. 2 12. 3		25. 0 19. 2 8. 8	26. 7 18. 9 9. 5	19. (
2. 2	11. 1 4. 4 9. 8	9. 9 4. 5 7. 9	10. 1 3. 9 7. 8	10. 9 4. 3 9. 9	9. 9 4. 9 8. 2	9. 9 4. 1 7. 6	2.0	10. 0 4. 3 10. 2	8. 7 5. 4 8. 3	8. 7 3. 6 7. 7	11. 6 4. 3 8. 5	10. 6 3. 8 6. 7	10. 6 4. 1 5. 4	2. 2	10. 9 3. 9 9. 3	10. 0 4. 3 7. 3	10. 0 3. 3 6. 8
	8. 5 13. 8 20. 7	7. 5 13. 3 19. 1	6. 8 13. 2 18. 9	6. 0 11. 7 20. 6	7. 5 11. 3 19. 4	6. 2 11. 3 19. 4		5. 0 10. 3 17. 7	6. 7 10. 1 15. 6	4. 9 10. 0 15. 8	6. 9 14. 9 16. 9	7. 0 14. 7 15. 7	6. 6 14. 5 15. 9		7. 6 10. 1 17. 8	3. 7 10. 0 15. 0	
5. 4	21. 2 13. 5 6. 8	20. 6 12. 1 6. 8	20. 5 11. 9 6. 7	21. 6 14. 4 6. 6	21. 2 13. 2 6. 4	21. 2 13. 2 6. 5	5. 3	17. 0 14. 7 6. 7	15. 9 13. 7 6. 6	16. 1 13. 3 6. 6	17. 1 13. 8 8. 9	14. 3 13. 3 8. 1	14. 5 13. 7 8. 2	5. 0	19. 0 11. 8 6. 5	17. 9 9. 9 6. 4	10.
58. 6 33. 0	75. 4 56. 3 17. 3	75. 9 55. 8 16. 5	74. 9 55. 5 16. 5	60. 9 48. 3 17. 4	59. 8 48. 6 16. 2	59. 6 48. 6 16. 0		68. 0 48. 5 17. 2	72. 4 49. 7 16. 8	71. 2 48. 8 16. 3	80. 9 55. 7 17. 1	83. 8 57. 0 18. 4	83. 8 57. 1 19. 3	50. 0 26. 3	76. 4 46. 1 16. 6	76. 7 46. 8 15. 5	46. 1
	13. 8 47. 8 65. 9	14. 0 44. 4 53. 0	14. 0 44. 5 52. 4	37. 1	14. 1 36. 4 55. 4	14. 1 35. 5 53. 7		13. 7 43. 4 63. 5	42. 2	14. 4 42. 1 54. 1	2 15. 5	15. 8 2 14. 8 45. 8			14. 5 40. 0 67. 0		38. 3 45. 0

<sup>2</sup> Per pound.

#### TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

		(	Chica	go, Ill		Cir	ncinn	ati, O	hio	Cle	evelar	nd, Ol	hio
Article	Unit	July	15—	June		July	15—	June		July	15—	June	
		1913	1925	15, 1926	15, 1926	1913	1925	15, 1926	15, 1926	1913	1925	15, 1926	15, 1926
Sirloin steak Round steak Rib roast	do	Cts. 24. 2 21. 3 20. 2		35, 5	36.0	Cts. 23. 8 21. 3 19. 1	35. 1	34.6	35.3	23.0	40.7 34.0	33. 9	
Chuck roast Plate beef Pork chops	-do	15. 9 11. 3 20. 4	14.0	14.8	24. 6 14. 5 39. 7	11.6	15. 6	21. 3 15. 3 40. 6	15.3	17. 5 11. 7 23. 2	22. 9 13. 3 44. 8	23. 6 13. 9 44. 3	13. 6
Bacon, sliced Ham, sliced Lamb, leg of	do	32. 7 32. 3 20, 2	51. 7 53. 8 39. 4		55. 6 58. 5 41. 5	26. 7 29. 7 15. 7	42. 9 55. 5 38. 2		60.0	38.0	57. 2	63.0	63. 7
Hens Salmon, canned, red Milk, fresh	do Quart	20. 2	36. 7 33. 4 14. 0	40. 2 39. 3 14. 0	39.3	23. 3	29.9		36.8		38, 6 31, 1 13, 8	39. 2	39. 6
Milk, evaporated Butter Oleomargarine (all but- ter substitutes).	15-16 oz. can_ Pound do	32, 3	10. 8 50. 4 27. 5	11. 0 48. 0 26. 9	11. 0 47. 1 27. 0	34. 4	10. 9 52. 8 31. 1	10. 8 49. 2 29. 6	48.8	35. 2			51. 5
Cheese Lard Vegetable lard substitute	do	15, 1	40. 6 22. 9 26. 4	21.7	22.3	14.2	36. 6 22. 0 25. 9	35. 1 21. 6 25. 8	21.1			23. 4	25. 0
Eggs, strictly fresh Bread Flour	Dozen Pound	25. 3 6. 1 2. 9	9.9	9.8	42. 8 9. 8 5. 6	4.8	39. 8 9. 2 5. 9	9.2	9. 2	29. 8 5. 5 3. 2	8.0	7.9	8.0
Corn meal Rolled oats Corn flakes	8-oz. pkg		6. 4 8. 6 10. 1		6. 1 8. 3 10. 1	2. 7	4. 7 8. 9 10. 3		4. 0 8. 6 10. 3		5. 6 9. 3 11. 5	9.4	5. 2 9. 5 11. 3
Wheat cereal Macaroni Rice		8.7	24. 0 19. 8 11. 6	10 1	24. 5 19. 2 11. 9	8. 8	23. 8 19. 9 11. 0	24, 9 18, 1 11, 2	24. 6 18. 2 11, 2	8, 5	24. 8 22. 1 11. 3	25. 5 21. 9 12. 0	21. 6
Beans, navy Potatoes Onions	do do	2.1	10. 0 4. 8 9. 1		9. 2 4. 4 6. 5		8. 8 5. 0 8. 5	5. 4			9. 5 4. 8 9. 3	6.1	3.9
Cabbage Beans, baked Corn, canned	No. 2 can do		5. 8 12. 7 18. 4	12, 6	12.7		5. 8. 11. 2 17. 0	6. 5 10. 9 15, 5	10.9		7. 0 13. 3 18. 5	12.8	5. 5 13. 3 17. 4
Peas, canned Tomatoes, canned Sugar, granulated	do Pound	5, 1	17. 8 15. 1 6. 8		17. 2 14. 1 6. 6	5, 2	13. 7	17. 0 12. 0 6. 9	17. 5 12. 1 7. 0		18.3 14.4 7.2	13.7	17. 7 13. 5 7. 1
Tea Coffee Prunes	do	53. 3 30. 7	74. 1 51. 2 18. 1	72. 3 51. 5 18. 8	51.3	60. 0 25. 6	45. 1	78. 0 46. 5 17. 8	46.8	50. 0 26. 5	53. 2	82. 5 54. 7 17. 1	54. 4
Raisins Bananas Oranges	Dozen		15, 5 40, 8 65, 3	15. 4 42. 9 51. 6	41.3		38. 2	40.0	35. 0		60.0	14. 7 47. 5 50. 6	47.5

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

#### CLES OF FOOD IN 51 CITIES ON SPECIFIED DATES-Continued

Co	lumb Ohio	us,	I	Dallas	, Tex		D	enve	r, Col	0.	D	etroit	, Mic	h.	Fa	ll Riv	er, Ma	ass.
	June		July	15—		July	July	15—	June		July	15—	June		July	15—	June	July
15, 1925	15, 1926	15, 1926	1913	1925	15, 1926	15, 1926	1913	1925	15, 1926	15, 1926	1913	1925	15, 1926	15, 1926	1913	1925	15, 1926	15, 1926
Cts. 40. 5 34. 9 30. 0	35. 2	Cts. 39. 6 35. 2 30. 6	Cts. 22. 8 20. 8 19. 7	Cts. 34, 3 31, 9 27, 2	32. 5		Cts. 25. 3 23. 2 17. 8	31.0			Cts. 25. 0 20. 2 19. 8		Cts. 42. 4 35. 4 30. 7	Cts. 42. 7 35. 8 31. 0	28.0		Cts. 161. 0 46. 9 31. 9	Cts.  1 60. 5  45. 5  31. 6
24. 3 15. 9 36. 8	15. 4	15. 2	16. 3 13. 2 22. 0	21. 2 15. 4 35. 5	17.0	17. 5	16. 2 9. 6 20. 3	10.5				13. 7	23. 2 14. 4 44. 4	23. 5 14. 6 43. 3	18. 5	22. 8 13. 2 37. 1	22. 6 13. 0 41. 2	22. 8 13. 9 40. 5
50. 0 55. 0 43. 8	57.7	60. 5	38. 0 31. 3 22. 0	47. 5 55. 6 42. 7		63.8		57.8	52. 4 59. 5 37. 5		28. 0	57. 5	64. 2	54. 8 64. 4 43. 8	26. 2 32. 7 21. 0	44. 3 51. 9 43. 2	45. 8 58. 7 45. 9	46. 6 57. 3 45. 8
37. 1 32. 8 11. 0		41.3		29. 2 33. 1 15. 0	41. 5	41.7		33. 5	33. 8 38. 4 12. 0	38. 7		38. 5 32. 6 14. 2	39. 9	41. 3 39. 8 14. 0		42. 9 32. 1 14. 0	46. 0 39. 5 13. 5	45. 6 40. 1 14. 1
11. 4 51. 4 29. 8	48.4	48. 0	36.0	13. 3 52. 7 33. 4	49. 5	49.5	36. 4	11. 1 48. 7 29. 4	10. 9 45. 9 29. 4	10. 8 4. 44 29. 2	33. 7	11. 1 53. 6 28. 0	51.0		35. 1	12. 6 52. 2 31. 6	12. 6 49. 5 30. 4	
35. 9 21. 0 25. 9	20.3	21.0			25. 3	25. 7	26. 1 16. 3	39. 3 24. 7 24. 2	36. 9 23. 4 24. 9			37. 5 24. 2 26. 9	22.6	36. 2 23. 0 27. 2		38. 6 22. 3 27. 6		38. 0 21. 8 26. 7
38. 3 8. 1 6. 2	8.1	34. 3 8. 1 6. 1	24. 0 5. 4 3. 3	42. 4 8. 5 5. 9	9. 5	9.6			36. 1 8. 4 5. 1	37. 8 8. 3 5. 0		8.7	40. 8 8. 4 6. 0	41. 3 8. 3 6. 0	38. 0 6. 2 3. 4	58. 5 9. 1 6. 2	9.3	53. 2 9. 3 6. 4
4. 5 9. 5 11. 1	9.3		2. 6	4. 9 10. 6 11. 5	10. 2	10.3		4. 4 8. 9 12. 1	4. 3 8. 6 11. 2	8.6		6. 0 9. 7 10. 8	9.3	5. 7 9. 4 10. 6		7. 3 9. 6 11. 5	6. 9 9. 5 11. 5	
24. 1 22. 5 13. 3	23. 0	21. 5		26. 1 21. 6 13. 1	21. 3	20.9		24. 5 19. 1 11. 5	20. 5	20. 6		24. 8 22. 0 11. 4	21.9	21.7		26. 2 23. 9 11. 2	24. 2	
9. 5 4. 7 9. 1	5, 4	7. 8 4. 7 8. 1	2. 2	12. 3 5. 5 9. 5	6. 0	5. 7	2. 1	10. 8 4. 2 10. 3	4.8	10. 0 3. 7 6. 5	1.9	9. 2 4. 8 9. 7	5. 0	8. 1 3. 6 7. 0	2. 2	10. 6 4. 0 10. 2	4.9	9. 9 3. 9 7. 9
6. 0 13. 6 18. 0	12. 5	12. 5		7. 4 15. 0 20. 8	13. 3	13. 2		5. 8 14. 4 19. 6	12.3	11.9		8. 0 12. 0 18. 6	11.7			7. 0 12. 4 17. 8	12.0	
16. 5 14. 5 7. 7	12.3	12.3		21.3 14.5 7.9	11.6	11.7		17. 2 14. 7 7. 9	12. 5	12. 6		17. 8 14. 1 7. 0	11.9	11.7		19. 0 13. 9 6. 9	11.9	11.9
87. 5 51. 1 18. 2	51. 6	51. 6	36. 7		60. 6		29. 4		51. 5	51. 5	29. 3	73. 5 51. 6 18. 8	51.8	51. 5	33. 0		52. 4	52. 5
14. 9 39. 1 58. 6		36. 7		16. 8 31. 3 59. 7	35. 0	33. 8		211. 9	212. (	14. 7 211. 8 41. 1	5	15. 2 37. 8 62. 7	36.4	35. 0		14. 4 2 9. 7 58. 4	2 9. 6	2 9. €

<sup>2</sup> Per pound.

## TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

		Hou	ston,	Tex.	Inc	lianaj	polis,	Ind.	Jac	kson	ville,	Fla.
Article	Unit			July	July	15—		July	July	15—	June	July
		15, 1925	15, 1926	15, 1926	1913	1925	15, 1926	15, 1926	1913	1925	15, 1926	15, 1926
Sirloin steakRib roast	do	Cts. 31. 2 29. 6 23. 5	31.5	34.0 32.8	24.7	37.5		38.1	22.0	30.7	31.9	37.1
Chuck roast Plate beef Pork chops	do	18. 5 15. 2 34. 2	17.9		19 1	14.9	15.2	15.4	10.3	11.6	12.5	12.9
Bacon, sliced	do	51.5	. 50. 8 53. 3 35. 0	57.1	32.8	55.9	61.9	49.3 63.0 41.7	28.7	45.7 53.3 35.0	59.4	58.8
HensSalmon, canned, red Milk, fresh	do Quart	30.5 31.1 16.0				36.7 33.0 11.0				34.9 30.8 18.8	38.9	38.1
Milk, evaporated Butter Oleomargarine (all butter substitutes).	15-16 oz. can_ Pounddo	12.0 53.1 31.1	48.7	48.9	33.2	10.7 51.7 29.9	10.8 49.2 30.0	48.6	38.6	12. 0 54. 7 30. 5	51.6	51.8
Cheese Lard Vegetable lard substitute	do	33. 9 24. 2 18. 6		23.8		37.3 21.8 27.2	35.5 20.7 26.7	35. 5 21. 4 26. 7			24.1	24.0
Eggs, strictly fresh Bread Flour	Dozen Pound	39. 9 8. 9 6. 0	9.0	9.0	22. 2 5. 1 3. 2	8.1	35.7 8.0 5.9	35.8 8.1 5.9	30. 6 6. 4	51.7 11.0 6.8	11.0	11.0
Corn meal Rolled oats Corn flakes	do 8-oz. pkg	5, 2 9, 1 12, 0	4.1 8.9 11.7	4.1 8.9 11.7	2.6	4.7 8.2 10.2	4. 2 9. 2 10. 2	4.1 8.1 10.2	3.0	4.4 9.9 11.5	4. 1 9. 2 11. 4	
Wheat cereal Macaroni Rice	do	24. 9 18. 7 10. 0	18.3		9. 2	24.6 20.3 11.3	24.6 19.0 11.8	19.0	6.6	24.8 20.6 10.5	24. 9 19. 7 11. 3	19.8
Beans, navy Potatoes Onions	do	11.3 5.5 10.8	9. 6 5. 7 5. 7	9. 6 5. 3 5. 5	2.2	8.9 4.7 10.0	7.6 4.9 8.2	7.5 4.6 7.3	2.6	11.0 4.5 9.0	10.3 6.8 8.0	5.9
Cabbage Beans, baked Corn, canned	No. 2 can	7. 6 12. 6 18. 7	3.9 11.6 15.6	4.5 11.3 15.6		5. 8 11. 8 17. 3	6. 2 10. 0 15. 0	4. 2 10. 1 15. 0		8.6 11.2 20.8	5. 4 10. 9 20. 2	10.8
Peas, canned Tomatoes, canned Sugar, granulated	Pound	17.5 13.3 6.9	14. 2 9. 8 6. 9	14. 2 9. 8 6. 9	5.8	16.7 14.4 7.3	14.8 11.5 7.2	15. 2 11. 3 7. 2	5.9	20.5 12.4 7.3	18.9 10.5 7.1	10.3
TeaCoffee_ Coffee_ Prunes_	do	76. 8 45. 1 17. 2	44.8	80. 8 44. 8 16. 7	30.0	. 78. 8 51. 4 19. 7	85.7 50.9 19.3	86. 1 50. 9 20. 3	60.0 34.5	95. 9 51. 2 17. 9	97. 5 49. 8 16. 8	50.3
Raisins Bananas Oranges	Dozendo	15.1 31.1 52.8	14.6 30.0 42.1	14.5 29.5 42.5		16.0 30.5 55.2	15. 9 31. 8 50. 3	16.1 31.4 49.1			16.4 29.0 51.7	30.0

<sup>&</sup>lt;sup>1</sup> The steak for which prices are here quoted is called "sirloin" in this city but in most of the other cities included in this report it would be known as "porterhouse" steak.

#### CLES OF FOOD IN 51 CITIES ON SPECIFIED DATES-Continued

Kar	isas (	City,	Mo.	Lit	tle R	ock, I	Ark.	Los	Ang	eles, C	Calif.	L	ouisv	ille, E	Ty.	Man	chest	er, N	. н.
uly	15—		July	July	15—	June		July	15—	June	July	July	15—	June		July	15—	June	
913	1925	15, 1926	15, 1926	1913	1925	15, 1928	15, 1926	1913	1925	15, 1926	15, 1926	1913	1925	15, 1926	15, 1926	1913	1925	15, 1926	15, 192
Cts. A. 7 21. 8 7. 8	Cis. 40. 6 34. 5 27. 6		40. 2 35. 2	Cts. 26. 7 20. 0 20. 0	Cts. 33. 4 30. 4 25. 8	31.5	35.0 31.9	Cts. 24. 0 21. 0 19. 6	36. 3 30. 0		30.2	Cts. 23. 6 20. 4 18. 3	30.6	31.7	31.3	Cts. 136. 2 29. 7 20. 7		45. 5	45.
4.9	20. 4 12. 6 38. 7	13. 3	13.3	16. 7 13. 8 23. 3	20. 8 15. 2 34. 4	16.1	15. 7	15. 8 12. 3 25. 4	13. 2	13.9	14.3		14.3	16.1	15. 9		23. 6 16. 5 37. 5	16.3	16.
0. 6 8. 8 8. 5	50. 3 56. 6 36. 2	61.3	60. 5	37. 5 30. 0 20. 8	50. 0 51. 2 40. 7	56.8	54. 9 57. 7 38. 1	34. 0 36. 7 18. 8	56. 3 64. 2 36. 9	72.0	73.0	29. 4 30. 0 18. 3	48. 6	51. 5 55. 5 44. 0	55. 5	29. 2	43. 6 46. 6 39. 9	50.9	53.
7. 8 8. 7	30. 8 35. 0 13. 0	38. 9	39. 2	20. 0	27. 7 31. 7 15. 3		41.4	26. 4 10. 0	29.9	36.0	36.1		29.6		38.9	24. 3 	42. 7 31. 8 13. 0		39.
5.4	12. 0 51. 8 27. 3		48.6	39. 4	12. 1 53. 0 29. 9	12. 3 48. 8 31. 1		37.0	10. 0 56. 7 30. 7	50.4	50.2	35. 3	11. 8 54. 1 30. 5	50. 2	11. 9 49. 5 32. 2	38. 1	12. 9 55. 7 27. 3	51.8	51
21. 8	36. 8 23. 9 27. 1		23. 5	23. 3		24.1	24. 5	18.3		24. 2	38. 7 24. 9 26. 1	15.4	23. I		21.7	21. 0 16. 0	37. 5 22. 7 26. 3	21.8	22
3. 1 6. 1 3. 0	40. 5 9. 7 5. 9	10.0	10.0	26. 7 6. 0 3. 5	41. 2 8. 7 6. 7	34. 9 9. 5 6. 9	9.5	33. 0 6. 0 3. 6	9.3	8.6	45. 6 8. 6 5. 6	5. 7	37. 6 9. 3 6. 8	9.4	36. 0 9. 4 6. 4	32. 3 6. 1 3. 4	51. 8 8. 4 6. 2	47. 5 8. 7 6. 3	8
2. 6	5. 7 9. 5 12. 5		9.1	2. 4	4. 4 10. 1 12. 2	10.8	10.6	3. 2	5. 8 10. 0 10. 1	9.8	5. 3 9. 7 10. 1		4. 4 8. 6 10. 6	8.4	3. 8 8. 5 10. 8		5. 5 8. 7 11. 5	-8.8	9
8.7	25. 0 21. 5 10. 4	20.5	20.6		24. 8 21. 4 10. 1	20. 5	20.4	7.7	23. 8 17. 4 11. 5	18. 1	18.4		24. 6 18. 5 11. 1	19.5	19.1		24. 6 24. 4 10. 7	23. 9	23
1.8	10. 1 3. 6 9. 5		3. 5	1.8	10. 3 3. 9 11. 4	5. 5	9. 6 5. 0 6. 9	1.7	10.7 4.0 8.3	9.3 3.8 5.7	9. 2 3. 6 5. 4	2.0	9. 3 4. 1 9. 0	5. 6	4.6	2.0	9. 9 3. 9 8. 7		3
	5. 4 13. 7 18. 0	12.9	12.8		8. 7 12. 0 20. 2	10.1	11.6		4. 0 11. 7 17. 8	11.7	11.4		5. 3 11. 1 19. 5	10.9	10.7		7. 6 14. 4 18. 8	14.0	13
5. 7	16. 7 14. 1 7. 4	12.3	12. 3		19. 2 13. 6 7. 7	10.6	10.6			215.7			17. 7 12. 6 7. 1	9.9	9.9			18. 9 11. 4 7. 1	11
4. 0	80. 4 53. 3 17. 8	54. 1	54. 2	50. 0 30, 8	54.3	107. 1 55. 3 17. 6	54. 9	36.3	51.9	75. 3 54. 4 16. 0	54. 5	27. 5		50.0	49.7	47. 0 32. 0	61. 5 52. 2 15. 6		52
	311.0	311.6	15. 5 311. 0 46. 6		8.9	15.8 3 9.3 53.5	3 9. 3		3 9.7	13. 5 8 10. 3 46. 4	3 9.7		37. 5	15. 9 36. 3 50. 0	37.5			14. 3 3 9. 6 48. 9	3 9

<sup>&</sup>lt;sup>2</sup> No. 2½ can.

<sup>3</sup> Per pound.

#### MONTHLY LABOR REVIEW

## TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

		Me	mph	is, Te	nn.	Mi	lwau	kee, V	Vis.	Min	neapo	olis, N	Iinn.
Article	Unit	July	15—	June		July	15—		July	July	15—		July
		1913	1925	15, 1926	15, 1926	1913	1925	15, 1926	15, 1926	1913	1926	15, 1926	15, 1926
Sirloin steak Round steak Rib roast	do	Cts. 22. 9 19. 7 20. 4	31.9	Cts. 36. 1 33. 6 26. 8	35. 8 34. 0	21. 2	34. 8	34. 6	34. 8	24. 2 22. 2	34. 7 31. 0	30. 6	
Chuck roast Plate beef Pork chops	_do	15. 9 12. 2 20. 0	13.9	19. 1 15. 2 38. 0	15.3	11.6	23. 6 13. 9 40. 3	14.5	14.4	10.3	11.1		12. 5
Bacon, sliced Ham, sliced Lamb, leg of	do	31. 4 30. 7 21. 2	44. 1 50. 4 38. 3	45. 2 58. 3 40. 0	59. 6	29.0	50. 9	56. 4	57.7	30.0	53. 7		
Hens Salmon, canned, red Milk, fresh	do Quart	20. 0 10. 0	30. 9 32. 3 15. 3			20. 6	30. 9	36. 9 33. 3 11. 0	33.8		33. 3		38. 9
Milk, evaporated Butter Oleomargarine (all but- ter substitutes).	Pound	36. 9			49.3	31. 3	11. 3 49. 3 28. 3	11. 2 47. 1 27. 1	46. 2	31, 0	11. 5 47. 9 27. 7	46. 2	46.3
Cheese	do	20. 0 15. 9	32, 9 21, 9 23, 9	32. 4 21. 4 23. 7	21.0	15.6	34. 9 23. 9 27. 1	22. 6	23.0	20. 8 15. 4	22. 5	32, 5 21, 4 27, 4	21.8
Eggs, strictly fresh Bread Flour	Dozen Pound	24. 0 6. 0 3. 5	40. 8 9. 6 6. 8	9.7	9.7	23. 8 5. 6 3. 1	39. 8 9. 0 5. 3	9.0	35. 2 9. 0 5. 6	5. 6	38. 9 10. 1 5. 8	9.8	35. 4 9. 8 5. 8
Corn meal Rolled oats Corn flakes	do 8-oz. pkg	2. 0	4. 2 9. 5 11. 1	3. 8 9. 4 11. 1	9.4	3. 0	5. 7 8. 8 10. 5	5. 7 8. 5 10. 3	5. 5 8. 6 10. 3	2. 4	5. 6 8. 5 10. 8		5. 6 8. 4 10. 7
Wheat cereal Marcaroni Rice	28-oz. pkg Pound do	8. 0	24. 4 19. 5 10. 1	19. 5	19.3		23. 8 18. 6 11. 3	24. 7 17. 9 11. 9	24. 5 18. 0 11. 9		24. 8 18. 7 11. 3		25. 3 19. 3 12. 1
Beans, navy Potatoes Onions			9. 7 4. 7 8. 0	9. 5 5. 4 5. 9	4.9	2, 0	9. 4 4. 7 10. 1	8. 3 4. 5 7. 5	8. 2 3. 8 7. 0	1. 7	9. 6 3. 1 10. 5	4. 6	9. 1 3. 3 7. 3
Cabbage Beans, baked Corn, canned	No. 2 can		7. 1 12. 0 17. 4	5. 0 11. 7 15. 7	11.8		5. 7 11. 4 18. 6	11.0	11. 1		4. 3 13. 6 16. 9		5. 1 12. 1 15. 4
Peas, canned Tomatoes, canned Sugar, granulated	do do Pound	5. 7	18. 5 12. 8 7. 0	17. 0 10. 5 7. 0	10.8	5. 5	16. 8 15. 0 6. 7	16. 4 13. 1 6. 6	13. 3	5. 6	15.0		15. 1 13. 4 7. 3
TeaCoffeePrunes	do do	63. 8 27. 5	96. 6 50. 1 16. 6	96. 7 51. 0 17. 1			71. 8 47. 4 17. 4	47.0	47.3	45. 0 30. 8	62. 0 53. 0 17. 5	53. 8	60. 5 53. 8 16. 9
RaisinsBananasOranges	Dozendo		33. 0	15. 6 33. 8 52. 0	30.0		14. 6 2 9. 2 58. 7	14. 7 2 9. 9 49. 0	14. 8 2 9. 6 49. 2		14. 4 2 11.3 59. 2	15. 1 2 11.5 45. 9	15. 1 2 10.9 47. 9

¹Whole.

#### RETAIL PRICES OF FOOD

#### CLES OF FOOD IN 51 CITIES ON SPECIFIED DATES-Continued

Мо	bile,	Ala.	N	ewar	k, N.	J.	New	Hav	en, C	onn.	Ne	w Orl	eans,	La.	Ne	w Yo	rk, N.	Y.
	June		July	15—	June		July	15—	June		July	15—		July	July	15—	June	July
15, 1925	15, 1926	15, 1926	1913	1925	15, 1926	15, 1926	1913	1925	15, 1926	15, 1926	1913	1925	15, 1926	15, 1926	1913	1925	15, 1926	15, 1926
Cts. 33. 3 32. 5 27. 1	Cts. 35. 0 34. 2 29. 2	33.6	Cts. 28. 4 28. 0 21. 2		43.8	43.6	30.0	45.4	43.8	43.9		29.7	Cts. 35. 9 31. 0 30. 2	Cts. 36. 0 30. 8 30. 0	26. 1	45. 2	Cts. 46. 1 44. 2 39. 0	Cts. 46. 0 44. 3 38. 9
20. 6 16. 3 37. 8	23. 8 18. 2 42. 5	22. 5 17. 3 41. 4	18. 0 13. 5 22. 8	25. 9 13. 5 39. 5	13.5	24. 5 12. 8 41. 8		14.6		26. 6 15. 8 41. 0	11.3		21. 1 16. 8 41. 0	21. 2 16. 4 39. 6	14.9	25. 0 19. 7 42. 0	24. 5 20. 1 44. 6	24. 4 20. 0 44. 7
45. 6 50. 7 38. 8	50. 4 54. 2 41. 4		25. 8 <sup>1</sup> 22. 0 21. 2	45. 6 57. 1 39. 6	57.3	<b>49.</b> 4 59. 6 <b>40.</b> 6			64. 2	53. 2 65. 4 42. 4		45. 6 51. 3 39. 0	49. 4 58. 8 41. 0	51. 1 57. 5 39. 4	26. 4 30. 0 18. 1	48. 4 59. 5 37. 0	52. 3 63. 2 41. 3	53. 0 66. 1 38. 1
35. 0 29. 8 17. 8	39. 0 41. 0 18. 5	41.0	24. 0 9. 0	27. 9	37.1	40. 6 37. 1 15. 0	24. 0 9. 0	42. 1 29. 9 15. 0		43. 8 34. 3 15. 0	19.3	34. 8 37. 3 12. 3		37. 4 39. 0 14. 0	22. 6 9. 0	39. 7 30. 0 14. 0	44. 9 36. 0 15. 0	41. 9 36. 3 15. 0
11. 8 56. 4 30. 8	11. 7 53. 9 31. 5		35. 6	11. 0 53. 0 30. 8	51.0	11. 2 51. 2 30. 6	33. 8	11. 9 52. 3 32. 2	49.2	50.5		11. 0 52. 7 30. 9	11. 1 50. 8 30. 3	11. 0 50. 4 30. 5	34.4	11. 0 52. 5 29. 5	11.1 50.9 29.6	11. 1 50. 7 30. 2
35. 9 23. 7 21. 4	34. 6 22. 3 22. 1	35. 1 22. 6 22. 6	24. 2 16. 0	39. 2 23. 5 26. 2	22.3	39. 8 22. 5 25. 8	22. 0 15. 7	37. 7 23. 6 25. 4	38. 3 22. 5 25. 7	37. 7 23. 3 25. 6	22. 0 15. 1	35. 5 22. 4 22. 7	33. 8 21. 9 23. 1	33. 8 22. 0 23. 1	19. 4 16. 2	37. 4 23. 9 26. 0	37. 8 23. 2 26. 0	38. 1 23. 4 26. 0
42. 6 9. 5 6. 9	36. 7 9. 7 6. 7	40. 7 9. 6 6. 6	38. 2 5. 6 3. 7	56. 4 9. 1 6. 1	49, 3 9, 3 6, 2	50. 8 9. 3 6. 2	39. 0 6. 0 3. 3	57. 3 8. 9 5. 9		54. 4 9. 2 6. 1	27. 6 5. 1 3. 9	44.1 8.9 7.3	39. 2 8. 9 7. 5	40. 9 8. 9 7. 4	35. 9 6. 4 3. 3	57. 4 9. 6 6. 2	51. 1 9. 6 6. 1	51. 2 9. 6 6. 1
4. 4 8. 8 11. 3	3. 8 8. 7 11. 3	3. 9 8. 7 11. 3	3. 6	6. 6 8. 4 10. 0	6. 6 8. 4 10. 0	6. 6 8. 5 9. 9	3. 2	6. 9 9. 4 11. 1	7. 0 9. 4 10. 8	6. 9 9. 4 10. 9	2.7	4. 6 9. 1 10. 6	3. 8 9. 1 10. 4	4. 0 9. 0 10. 4	3.4	6. 6 8. 8 10. 1	6.3 8.5 10.0	6.3 8.5 10.0
24. 3 20. 6 10. 2	25. 8 21. 4 11. 3	25. 5 21. 1 11. 6	9. 0	23. 6 21. 1 10. 3	21.1	24. 1 21. 1 11. 3	9. 3	24. 1 23. 1 11. 7	24. 8 22. 0 11. 9	24. 6 22. 3 11. 8	7. 4	24. 0 9. 8 10. 0	24. 6 9. 4 10. 1	24. 7 9. 6 10. 2	8. 0	23. 1 20. 8 10. 6	23. 9 20. 9 10. 7	24. 1 20. 8 10. 7
10. 2 5. 6 8. 5	8. 7 4. 9 6. 3	8. 8 5. 1 5. 5	2. 6	10. 5 4. 6 10. 1	9. 7 5. 6 7. 9	9. 8 3. 8 7. 0	2. 1	10. 0 4. 3 9. 8	9. 5 4. 9 8. 1	9. 7 3. 9 7. 8	2. 0	9. 4 5. 3 7. 3	8. 5 3. 6 4. 0	8. 5 4. 2 3. 8	2. 5	11. 4 4. 2 9. 6	10. 1 5. 4 7. 1	10. 2 4. 2 7. 1
6. 7 11. 4 17. 8	4. 0 10. 7 17. 7	5.3 10.7 17.3		6.3 11.5 18.2		5. 3 10. 7 16. 4		6. 2 11. 6 19. 6	11.4	6. 2 11. 4 18. 5		5. 4 12. 1 18. 6	4. 4 10. 9 13. 9	4. 5 10. 9 14. 1		5. 7 11. 4 17. 1	6: 9 10: 9 14: 9	5. 6 11. 0 14. 5
17. 1 12. 8 7. 2	16. 1 11. 0 6. 9	16. 4 11. 1 7. 1	5.3	18. 2 12. 2 6. 6	11.2	17. 4 10. 9 6. 3	5.3	20. 6 13. 8 6. 8	11.9	19. 6 12. 9 6. 7	5. 2	17. 4 13. 4 6. 3	17. 2 10. 0 6. 2	17. 2 10. 0 6. 2	4. 9	17. 3 12. 9 6. 1	15. 4 10. 5 6. 1	15.3 10.4 6.1
82. 5 50. 7 17. 8	81. 5 49. 5 17. 2	80. 5 50. 3 17. 8	53. 8 29. 3	62. 1 49. 4 16. 0	50.3	63. 5 50. 3 15. 8		58. 5 52. 5 17. 4	52.5	60. 1 52. 9 16. 3	62. 1 26. 7	83. 4 37. 5 18. 4	82. 6 36. 3 18. 1	82. 2 36. 1 17. 8	43.3 27.5	63. 9 46. 2 15. 7	65. 0 47. 7 15. 8	64. 9 47. 5 15. 5
14. 9 26. 4 52. 5	14. 6 23. 9 50. 5			13. 6 38. 3 64. 2	37.5	14.3 36.9 53.2		14. 1 36. 3 64. 4		13. 9 34. 8 51. 7		14.3 16.7 54.9	14.3 16.3 50.3	14.1 15.0 48.3		14.3 38.9 76.1	14. 6 39. 2 59. 1	15. 0 38. 1 57. 4

<sup>&</sup>lt;sup>2</sup> Per pound.

#### TABLE 5.-AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

		No	rfolk,	Va.	(	Omaha	, Nebr		Po	eoria, I	11.
Article	Unit	July	June	July	July	15-	June	July	July	June	July
		15, 1925	15, 1926	15, 1926	1913	1925	15, 1926	15, 1926	15, 1925	15, 1926	15, 1926
Sirloin steak Round steak Rib roast	do	Cts. 42. 0 36. 1 33. 3	Cts. 41. 2 34. 1 32. 4	Cts. 40, 9 34, 6 32, 2	22.0		34. 9		Cts. 36. 3 34. 1 25. 0	34.6	34.
Chuck roast Plate beef Pork chops	-do	24. 8 16. 9 34. 1	22. 9 15. 7 39. 8	22, 7 15, 8 39, 8	16. 2 11. 1 19. 9	11.4	21. 9 12. 6 40. 1		13.4	13.8	
Bacon, sliced Ham, sliced Lamb, leg of	do	45.3 45.3 40.6	49.6	49. 0 52. 1 40. 3	28. 0 29. 0 17. 8	57.8	54. 6 61. 1 39. 1	61.8	50, 6 53, 5 38, 1		58.
Hens Salmon, canned, red Milk, fresh	do Quart	35.9 31.4 17.0	37.8	39. 8 38. 3 17. 5	17. 5 	34. 2		39. 2	33. 8 32. 8 12. 0	39. 8	
Milk, evaporated Butter Oleomargarine (all butter substitutes).	15-16 oz. can Pounddo	11. 0 54. 6 29. 3	53, 6		32, 8	11. 4 49. 1 29. 5	11, 8 46, 5 30, 0	11. 8 46. 9 29. 6	11. 7 49. 2 29. 7		46.
Cheese Lard Vegetable lard substitute	do	33. 8 21. 9 22. 0		21.6	22, 5 17, 6	36. 0 24. 8 27. 5	24.3		35. 8 23. 4 27. 4	34. 2 22. 7 27. 3	22.
Eggs, strictly fresh Bread Flour	Dound	43. 0 9. 4 6. 1	9.9	9.9	23, 3 5, 2 2, 8	37. 8 9. 9 5. 2		34. 7 10. 2 5. 2	37. 1 10. 0 6. 0		33. 10. 6.
Corn meal Rolled oats Corn flakes	do do 8-oz. pkg	4. 8 8. 6 10. 6	4.3 8.4 10.3	4.4 8.4 10.2	2.3	5.3 10.7 12.2	4.9 10 3 12.4	4.9 10.3 12.4	5. 1 9. 5 12, 1	4. 8 8. 9 11. 8	4. 9. 11.
Wheat cereal	28-oz. pkg Pound do	23. 9 19. 7 11. 8	24. 1 19. 1 12. 0	23. 9 19. 1 11. 8		24. 6 21. 8 10. 2	28.3 21.1 11.7	28.3 21,1 11,5	25. 7 21. 0 11, 1	25.3 20.2 11.9	25. 20. 11.
Beans, navy Potatoes Onions	do	9. 8 4. 2 8. 8	8. 2 5. 5 7. 6	8. 1 3. 9 7. 1		10.3 4.1 10,7	9.7 4.8 9.0	9.7 3.8 7,9	9. 7 4. 1 11. 2	8. 5 4. 9 8. 3	8. 4. 8.
CabbageBeans, baked Corn, canned	No. 2 can	5. 9 10. 1 17. 9	4.9 10.0 15.5	9.9		5. 6 14. 4 17. 4	6. 1 13. 7 15. 8	4. 1 13. 6 16. 1	5. 8 11. 8 16. 9	6. 5 11. 9 15. 6	4. 11. 15.
Peas, canned	Pound	21.3 11.6 6.3	19. 7 10. 3 6. 5	19. 5 10. 1 6. 6		17. 0 15. 2 7. 4	16. 4 14. 1 7. 1	16. 1 13. 4 7. 2	19.3 15.4 8.0	18. 0 13. 8 7. 6	18. 13. 7.
TeaCoffeePrunes	do do	92. 7 51. 4 16. 4	88. 8 50. 2 16. 8	88. 7 50. 0 16. 5	56. 0 30. 0	76. 2 57. 5 17. 6	78. 5 57. 5 17. 7	78. 8 57. 6 17. 9	63. 4 51. 1 19. 3	66. 7 51. 8 20. 0	67. 51. 20.
RaisinsBananasOranges	Dozendo	13. 9 34. 6 61. 6		34.2		16. 5 4 10. 6 52. 9	4 11.7				4 10.

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

#### CLES OF FOOD IN 51 CITIES ON SPECIFIED DATES-Continued

Phi	iladel	phia,	Pa.	Pi	ttsbu	rgh, I	Pa.	Port	land,	Me.	Po	rtlan	d, Or	eg.	Pr	ovide	nce, R	. I.
July	15—	June		July	15—				June		July	15—		July	July	15—	June	July
1913	1925	1926	15, 1926	1913	1925	15, 1926	15, 1926	15, 1925	15, 1926	15, 1926	1913	1925	15, 1926	15, 1926	1913	1925	15, 1926	15, 1926
Cts. 32. 0 27. 5 22. 7	156.6 44.8	Cts. 156.3 42.3 37.7	156. 1 42. 7	24.8	40.1	48. 0 39. 5	Cts. 48. 5 39. 6 34. 6	1 64. 2 48. 5	1 63. 0 47. 0	47.7	23. 5 21. 4	28. 8 26. 5	Cts. 29. 4 26. 9 25. 2	26.9	1 39. 6 31. 0	51.3	Cts. 1 73. 0 50. 3 38. 5	1 72. 50.
18. 2 12. 7 22. 2	25.7 11.9 46.3	12.7	25. 4 12. 6 46. 7		12.3	12.4	24. 6 12. 3 43. 4	17.4	16.7	21.8 16.7 41.3	13.6	12.1	18.3 13.1 43.1	12.9		30, 5 21, 0 42, 6	18.0	18.
27. 9 32. 7 21. 0	59.9	65. 7	65.8	31.5	61.4	68.0	68.9	56. 5	60.0	46. 7 63. 0 41. 6	30.8	54. 2	57. 1 58. 3 36. 6		32.3	57.8	46. 4 63. 6 47. 1	64.
23.3	30.0	38.1	37.6		29.5	44. 6 37. 7 13. 0	43. 9 38. 4 13. 0	29.6	39.4	39.1	20. 3	32.1		36.7		30.9	45. 7 37. 9 13. 8	
39. 2	11. 5 55. 0 30. 9	54.4	53. 7	35.7	11.3 54.4 31.1	51.9	11. 5 51. 8 30. 3	55.9		12. 4 52. 7 29. 4	37, 5	10. 2 53. 3 29. 8	10. 4 47. 2 30. 2	10.3 47.0 30.4	36, 0	12. 2 53. 0 29. 7	12. 2 51. 6 29. 4	
25. 0 15. 3	23.7		23.0	24. 5 15. 5		38. 3 22. 2 26. 8	37. 9 22. 7 27. 4	37. 6 23. 4 25. 3	21.6	37. 9 22. 3 24. 9	17.9	24.6	37. 4 24. 0 28. 0	24.3			36. 1 22. 3 26. 8	
30. 4 4. 8 3. 2		9.4	9.5	5.4	47. 8 9. 2 5. 8	9.3	9.3		45. 2 10. 1 6. 0	49. 4 10. 1 6. 0	34. 0 5. 6 2. 9	42. 1 9. 6 5. 6	36. 3 9. 4 5. 2	37. 1 9. 4 5. 2	35. 7 5. 9 3. 5	9.2	49. 1 9. 2 6. 5	53. 5 9. 5 6. 8
2.7	5. 1 8. 7 10. 0	4.7 8.6 10.0			5.7 9.3 10.5		9.3	5. 4 7. 5 11. 6	5. 1 8. 0 11. 6	5. 2 8. 3 11. 6	3.3	5. 8 10. 4 11. 3	5. 0 10. 2 11. 3	5. 1 10. 2 11. 3		5. 3 9. 3 10. 8	5. 1 9. 3 10. 8	5. 1 9. 4 10. 8
9.8	23. 9 21. 6 12. 2	21.0	20.8	9. 2	25.3 23.4 11.8	23.3	23.5	25. 0 24. 5 12. 0		25. 9 24. 9 12. 9	8.6	26. 2 17. 9 11. 0	26. 5 17. 7 11. 2	26. 6 17. 8 11. 3		24. 2 23. 8 11. 1	24. 9 23. 1 12. 0	25. 1 23. 2 12. (
2. 1	10.1 4.9 9.7	8.9 5.6 7.2	8.9 4.1 6.8	1.8	9. 5 4. 4 10. 3	8. 0 5. 6 8. 1	3.6	10.7 3.0 9.9	9. 5 4. 4 7. 6	9. 6 3. 5 7. 5	1. 2	11.3 3.7 8.0	9. 5 4. 0 5. 6	9. 9 3. 0 4. 6	2.0	10. 5 4. 5 9. 1	9. 1 4. 8 7. 7	9. 4 3. 9 7. 2
	8. 2 10. 9 16. 7		10.6		6. 5 12. 8 17. 9	12.7	12.9	7. 9 15. 1 17. 8	15.4	6.3 15.3 16.1		5. 2 14. 6 21. 1	4, 1 13, 4 19, 2	4. 0 13. 4 19. 1		7. 1 11. 9 18. 9	6. 4 11. 3 17. 6	4.7 11.3 17.5
5. 0	15. 9 12. 5 6. 2	11.0	14.8 11.0 6.5		18.3 14.0 7.1	16.8 12.0 7.0	17.0 11.6 7.1	223.9	220.3	18. 6 20. 1 6. 9			19. 2 3 16. 9 7. 3			19. 7 15. 1 6. 8	19. 5 13. 6 6. 7	
54. 0 25. 0	71.0 44.9 14.8	45. 2	45.6	58. 0 30. 0	82. 0 51. 3 19. 1	49.7		54.4	53.6	62. 6 53. 6 15. 7	35.0	51.1	76. 6 52. 6 14. 3	76. 6 52. 7 14. 4	48. 3 30. 0	61. 1 54. 2 17. 7	61. 9 54. 2 16. 4	61. 8 54. 2 16. 4
	13.5 33.3 67.6		30.6		14. 2 39. 9 62. 5	40.0	14. 6 39. 4 51. 0	410.8	110. 5	10.8		12.9	412.9	113, 5		14. 1 34. 0 69. 5	14. 0 33. 0 59. 2	14. 2 33. 7 56. 3

No. 3 can.

<sup>8</sup> No. 2½ can. 4 Per pound.

## TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

		Ri	chmo	nd, V	a.		ocheste N. Y.		St	. Lou	is, M	0.
Article	Unit	July	15—				June		July	15—	June	
		1913	1925	15, 1926	15, 1926	15, 1925	15, 1926	15, 1926	1913	1925	15, 1926	15, 1926
Sirloin steak Round steak Rib roast	Pounddododo	Cts. 22. 2 19. 6 19. 3	34.1	39. 8 35. 1	35. 1	43.7	34.9	35. 2	24. 8 22. 9	36. 5	Cts. 37. 5 36. 3 30. 7	36.0
Chuck roastPlate beefPork chops	do	15. 9 12. 9 21. 2	15. 5	16. 5	23. 7 16. 5 42. 3	13. 4	24. 6 13. 6 45. 5	13. 1	14. 6 11. 0 19. 8	13. 2	14.0	13.8
Bacon, sliced Ham, sliced Lamb, leg of	do do	26. 6 26. 0 19. 3	45. 3 44. 2 43. 5	47. 1 48. 0 46. 1	49. 6 46. 0	53. 9 41. 0	59. 3 43. 9	61. 1 40. 4	27. 8 27. 3 19. 0	52. 8 38. 8	58. 0 39. 7	58. 3 38. 4
Hens	do Quart	20. 0	34. 9 32. 7 14. 0	39. 8 36. 2 14. 0	39. 8 36. 6 14. 0	40. 4 31. 1 12. 5	45. 2 38. 2 12. 5	44. 1 38. 3 12. 5	18. 0	34. 2 32. 9 13. 0	38. 6 39. 1 13. 0	36. 8 39. 2 13. 0
Milk, evaporated	15-16 oz. can_ Pounddo	38. 1	12. 4 57. 9 29. 9	12. 5 56. 4 31. 9	12. 6 55. 5 31. 9	11. 5 53. 0 30. 9	11. 6 49. 5 30. 7	11. 5 49. 7 31. 0	33. 3	10. 5 53. 6 27. 2	10. 4 51. 1 28. 3	10. 4 50. 3 28. 0
Cheese Lard Vegetable lard substitute	do	15. 0	22. 8	22.0	22. 2	22. 5	35. 6 21. 1 24. 0	21. 4	19. 5 14. 1	34. 6 19. 9 26. 1	19. 6	32. 9 19. 7 26. 1
Eggs, strictly fresh	Dozen Pound Pound	24. 6 5. 3 3. 3	41. 7 9. 4 6. 0	40. 1 9. 5 6. 0	9. 5	8.9		8.9	5. 5	9. 5		9.8
Corn meal	do do 8-oz. pkg	2. 0	4. 9 9. 3 11. 1	9.1	9.1	9. 5		9.4		8.9	4. 3 8. 7 10. 1	8.8
Wheat cereal Macaroni Rice	28-oz. pkg Pound	10. 0	25. 1 21. 1 12. 7	25. 8 20. 2 13. 3	25. 8 20. 2 13. 3	24. 3 22. 2 11. 0	24. 9 22. 5 10. 6	25. 3 21. 8 10. 4	8. 4	23. 7 21. 7 10. 5	24. 3 21. 0 10. 8	
Beans, navyPotatoesOnions	do	1.7	10. 7 4. 7 9. 1	9. 1 6. 2 8. 1	9. 1 4. 7 7. 5	9. 9 4. 4 10. 0		3. 6	1. 9	9. 1 4. 4 9. 6		4.3
Cabbage Beans, baked Corn, canned	No. 2 can		7. 8 10. 7 16. 6	10.0	10.1	11.0	6. 1 10. 5 16. 0	5. 8 10. 5 16. 3		5. 2 11. 0 17. 4	5. 7 10. 8 16. 3	10.6
Peas, canned Tomatoes, canned Sugar, granulated	dodo Pound	5. 0	20. 3 12. 4 6. 7	20. 1 10. 0 6. 8	10. 1	14. 1	18. 4 13. 3 6. 3	13.8		13. 3	11. 6	16. 5 11. 5 7. 0
TeaCoffeePrunes	do	26.8	88. 1 49. 9 18. 4	49.9	49. 4	49.9	66. 9 48. 6 17. 7	47. 1	55. 0 24. 3	48. 5	47.7	
RaisinsBananasOranges	Dozendo		14. 0 38. 1 67. 7	37.3	37. 3	39. 1	37.7	38. 0		35. 8	14. 7 32. 3 45. 2	

<sup>&</sup>lt;sup>1</sup> No. 2½ can.

#### RETAIL PRICES OF FOOD

## CLES OF FOOD IN 51 CITIES ON SPECIFIED DATES-Continued

Ī	St	. Pau	l, Mi	nn.	Sa		ke Cit	ty,	San	Franc	eisco, (	Calif.	Sava	nnah	, Ga.		Scrant	ton, Pa	
J	uly	15—		July	July	15—	June	July	July	15—		July		June		July	15—	June	July
19	913	1925	15, 1926	15, 1926	1913	1925	15, 1926	15, 1926	1913	1925	15, 1926	15, 1926	15, 1925	15, 1926	15, 1926	1913	1925	15, 1926	15, 1926
2 2	7ts. 7.0 3.3 1.9	Cts. 37. 1 32. 1 29. 9	31. 9	31.5	20.0	26. 9	27. 2	27.7	19.0	Cts. 32. 2 28. 7 30. 8	29.0	31. 6 29. 0		28. 5	28. 5	22.8	44. 2	Cts. 51. 2 41. 8 36. 8	Cts. 51. 4 42. 0 37. 5
1	7. 0 1. 2 9. 7	23. 3 12. 5 36. 3	13. 5	13. 4	12.0		18. 5 11. 9 39. 3	12.3	13.0	14.9	14.3	18. 4 14. 5 46. 6	13. 5	18. 8 15. 2 37. 8	18. 8 15. 5 38. 0	17. 5 12. 1 21. 3	12. 2	28. 5 12. 3 45. 8	28. 1 11. 9 46. 2
2	6. 8 8. 0 8. 9	48. 5 52. 4 34. 7	51. 7 56. 6 37. 3	57. 1	30.7	49. 3 52. 2 34. 9	58. 1	53. 3 61. 0 35. 9	30.0	62.5	67. 3	70.0	42.9	47.1	50.0		51. 1 59. 1 48. 2	52. 1 63. 9 49. 4	54. 3 64. 5 47. 1
	9. 7 6. 8	31. 6 34. 2 11. 0	37.8	32. 8 37. 8 11. 0		30. 8 33. 4 11. 5	35. 9	34. 9	23. 8	28. 5	36. 8	36. 3		37. 3 40. 2 17. 0	33, 4 39, 6 17, 0		44. 3 31. 5 12. 0	47. 7 37. 1 12. 0	49. 6 37. 3 12. 0
3:	2. 6	11. 8 47. 4 28. 3	12. 1 46. 3 28. 3		35. 0	10. 6 53. 3 29. 9	47. 3	45.7	36. 4	10. 1 59. 4 29. 2	50. 4	10. 1 50. 5 31. 3	11. 1 55. 8 34. 3	53. 5	11. 3 53. 5 34. 8	35. 3	11. 8 52. 1	11. 8 50. 1 29. 4	11. 9 50. 2 29. 4
1.	1. 0	33. 8 23. 5 27. 7	34. 2 22. 1 27. 2	22. 4	23. 3 19. 3	30. 9 26. 2 29. 8	29. 9 25. 1 29. 4	29. 4 25. 3 29. 5	19. 0 18. 8	37. 4 25. 5 28. 5		37. 9 24. 8 28. 2	34. 8 22. 0 19. 2	34. 1 23. 4 20. 6	34. 3 23. 0 21. 2	18. 0 15. 6	35. 7 23. 6 26. 7	35. 1 22. 5 26. 2	35. 2 23. 1 26. 3
1 1	2. 9 5. 9 3. 0	39. 5 10. 2 5. 9	35. 5 10. 2 5. 9	35. 7 10. 2 6. 0	29. 4 5. 9 2. 6	42. 9 10. 8 5, 2	33. 5 9. 8 4. 6	34. 1 9. 9 4. 7	31. 4 5. 9 3. 4	48. 6 9. 9 6. 3	40. 0 9. 8 5. 9	43. 6 9. 8 5. 9	44. 8 10. 2 7. 1	41. 1 10. 6 7. 0	43.3 10.5 7.0	28. 0 5. 6 3. 6	46. 9 10. 2 6. 5	43. 1 10. 4 6. 4	44. 4 10. 4 6. 5
	2. 5	5. 6 9. 6 12. 3	5. 4 9. 6 12. 0	5.3 9.9 11.9	3. 4	5. 7 8. 9 12. 0	5. 2 8. 9 12. 1	5. 5 8. 9 12. 3	3. 4	5. 8 9. 8 10. 6	6. 4 9. 5 10. 6	6.3 9.5 10.8	4, 1 9, 2 10, 4	3. 5 8. 9 10. 2	3. 6 8. 6 10. 1		7. 5 10. 0 10. 8	7. 5 10. 1 11. 1	7. 5 10. 0 11. 0
10	0.0	25. 0 19. 3 10. 7	26. 4 18. 7 12. 1	26. 6 18. 7 12. 2	8. 2	24. 9 20. 1 11. 7	25. 4 20. 3 11. 4	25. 5 20. 4 11. 4	8. 5	24. 5 14. 4 11. 1	25. 5 16. 1 12. 0	25. 4 15. 8 12. 1	23. 7 18. 2 10. 0	24. 4 18. 4 10. 6	24. 5 18. 1 10. 7	8, 5	26. 3 23. 0 10. 7	25. 8 23. 7 11. 6	25. 8 23. 5 11. 7
	i. 4	9.8 2.8 9,7	9. 2 4. 5 8. 0	9.3 3.5 7.8	1, 6	11. 0 2. 8 9. 9	10. 0 4. 3 7. 5	9. 6 2. 4 7. 5	1, 9	10. 4 3. 8 5. 6	9.6 4.3 4.6	9.6 3.7 4.1	11. 4 4. 7 9. 1	10. 6 5. 5 8. 1	10. 4 5. 1 7. 5	2. 0	12. 6 4. 2 11. 1	11. 1 5. 3 8. 1	11. 3 3. 9 7. 6
		5. 2 13. 9 16. 2	6. 4 13. 4 15. 2	4. 1 13. 8 15. 2		4. 5 14. 5 17. 5	6. 0 14. 1 15. 5			14. 2 19. 0	14. 1 18. 6	13. 7 18. 6	7. 1 12. 4 19. 7	4. 6 12. 5 16. 2	5. 5 12. 5 16. 3		6. 1 11. 7 18. 6	7. 0 11. 0 17. 2	6. 6 11. 0 17. 4
	5. 6	16. 6 14. 7 7. 5	16. 1 14. 3 7. 4	16. 1 14. 1 7. 4	5. 9	16. 9 16. 4 7. 9	15. 9 14. 8 7. 6	15. 9 14. 3 7. 7	5. 4	18. 8 16. 1 7. 1			17. 8 11. 5 6. 7	16. 9 9. 9 6. 8	16. 7 10. 1 6. 7	5. 6	19. 6 13. 9 6. 9	17. 7 11. 9 6. 7	17. 4 11. 9 6. 7
	5. 0	72. 4 53. 3 17. 3	69. 6 52. 2 17. 5	69. 9 52. 8 17. 3	65. 7 35. 8	84. 4 56. 9 15. 8	87. 3 56. 6 15. 3	88. 3 57. 1 15. 3	50. 0 32. 0	68. 2 51. 0 14. 7	68. 8 53. 6 15. 4	68. 8 54. 3 15. 4	77. 6 48. 8 15. 0	79. 6 48. 9 16. 3	81. 6 48. 7 16. 2	52. 5 31. 3	66, 6 53, 5 17, 2	66. 8 52. 4 18. 3	65. 5 52. 4 18. 3
			15. 7 12. 0 49. 9			13. 3 14. 5 54. 3	14. 3 2 15. 0 43. 4	14.8		12. 8 35. 0 56. 8	13. 0 33. 9 47. 1	13. 3 31. 7 48. 3	13. 6 31. 7 69. 3	14. 5 34. 3 49. 7	14, 9 32, 3 49, 3		14. 3 35. 0 62, 5	14. 9 34. 0 54. 2	15. 1 33. 7 52. 4

<sup>2</sup> Per pound.

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

		8	Seattle,	Wash		Spri	ngfield	, III.	Was	hingt	on, I	). C
Article	Unit	July	15—	June	July	July	June	July	July	15—	June	
		1913	1925	15, 1926	15, 1926	15, 1925	15, 1926	15, 1926	1913	1925	15, 1926	15,
Sirloin steak Round steak Rib roast	Pounddodo	Cts. 24. 4 21. 5 20. 0		30.5	Cts. 34. 1 30. 3 27. 4	Cts. 36. 4 35. 9 24. 7	Cts. 35. 9 35. 2 23. 9	Cts. 36. 1 35. 6 23. 7	Cts. 28. 1 24. 6 22. 0	48. 1		47
Chuck roast Plate beef Pork chops	do	16. 2 13. 0 23. 6	18. 0 14. 2 41. 0	20. 0 15. 1 45. 0	14.5	21. 7 13. 8 37. 7	22. 2 13. 9 38. 5	21. 9 13. 6 37. 1	12.4		24. 3 13. 8 45. 5	13.
Bacon, sliced Ham, sliced Lamb, leg of	do	31. 7 19. 6	57. 5 59. 2 34. 9	61. 4 63. 3 37. 6	62. 4 65. 7 37. 4	47. 8 54. 4 40. 3	49. 6 56. 4 44. 0	50. 7 59. 6 41. 8	30.0		53. 2 62. 0 48. 1	62
MensSalmon, canned, red Milk, fresh	do Quart	23. 8	34. 3 32. 3 12. 0	36. 0 38. 8 13. 0	34. 7 38. 5 13. 0	33. 9 33. 7 12. 5	36. 6 42. 4 12. 5	35. 7 41. 4 12. 5		29. 2		38
Milk, evaporated Butter Oleomargarine (all but- ter substitutes).	15-16 oz. can_		10. 5 54. 7 29. 8	10. 8 49. 7 30. 7	10. 6 49. 6 30. 7	11. 8 51. 4 31. 3	11. 8 49. 3 30. 3		36. 6	11. 7 55. 0 29. 7	12. 0 54. 3 31. 4	
Cheese	do	21. 7 17. 8	34. 4 24. 4 29. 2	36. 0 24. 3 27. 9	35. 7 24. 2 27. 8	36. 1 23. 7 28. 5	35. 8 22. 8 28. 0	22.8	23. 8 15. 0	23. 5	37. 8 22. 8 25. 6	23
Eggs, strictly fresh Bread Flour	Dozen Pounddo	34. 5 5. 5 2. 9	44. 2 9. 8 5. 5	37. 2 9. 7 5. 0	38. 0 9. 7 5. 1	37. 1 10. 3 6. 0	35. 7 10. 1 6. 3	33. 9 10. 1 6. 0	26. 0 5. 7 3. 8	8.0		8
Corn meal Rolled oats Corn flakes	do do 8-oz. pkg	3. 1	5. 6 9. 0 11. 9	5. 0 8. 9 11. 9	5. 0 9. 0 11. 9	5. 6 10. 3 11. 9	5. 2 10. 0 11. 8	5. 1 10. 0 11. 6	2, 5	5. 5 9. 5 10. 8	5. 1 9. 2 10. 6	
Wheat cereal Macaroni Rice	28-oz. pkg Pounddo	7. 7	26. 4 18. 1 12. 4	27. 5 18. 3 12. 9	27. 4 18. 3 13. 0	25. 9 20. 4 10. 8	26. 4 19. 1 11. 2	19.1	9.8	24. 2 23. 8 12. 0		23.
Beans, navy Potatoes Onions	do	1.5	11. 4 3. 9 8. 7	10. 2 4. 0 5. 6	10. 0 3. 2 4. 7	9. 7 4. 4 11. 1	8. 6 5. 1 8. 9	8. 7 4. 5 7. 2	1.8	9. 5 4. 9 10. 4	8. 7 5. 8 8. 0	8. 4. 7.
Cabbage Beans, baked Corn, canned			5. 1 14. 4 19. 8	5. 0 13. 2 19. 0	4. 4 13. 3 19. 0	6. 4 11. 4 19. 9	6. 8 11. 5 15. 6	10.9		7. 0 10. 8 17. 5	6. 5 10. 4 16. 0	10.
Peas, canned Fomatoes, canned Sugar, granulated	do Pound	6. 1	21. 4 1 18. 2 7. 5	20. 1 1 17. 8 7. 1	20. 1 1 17. 5 7. 1	18. 6 15. 5 7. 7	17. 0 13. 7 7. 5	17. 3 13. 7 7. 5		17. 8 12. 1 6. 9	16. 7 10. 5 6. 8	
Pea Coffee Prunes	do do	50. 0 28. 0	78. 9 50. 8 15. 5	78. 2 52. 7 15. 6	78. 3 52. 2 15. 8	77. 7 52. 3 18. 0	79. 3 52. 9 17. 3	53. 1	57. 5 28. 8	87. 6 46. 9 18. 2	48.6	48.
Raisins Bananas Pranges			14.3	14. 7 3 13. 6 46. 9	15. 0 2 13. 6 46. 0	15. 1 2 8. 8 66. 0	15. 4 2 10. 3 50. 3	15. 4 2 9. 6 49. 9		33.8	14. 8 36. 7 53. 3	34.

1 No. 21/2 can.

2 Per pound.

## Comparison of Retail Food Costs in 51 Cities

TABLE 6 shows for 39 cities the percentage of increase or decrease in the retail cost of food <sup>3</sup> in July, 1926, compared with the average cost in the year 1913, in July, 1925, and in June, 1926. For 12 other cities comparisons are given for the one-year and the

<sup>&</sup>lt;sup>3</sup> For list of articles see note 6, p. 149.

one-month periods. These cities have been scheduled by the bureau at different dates since 1913. These percentage changes are based on actual retail prices secured each month from retail dealers and on the average family consumption of these articles in each city.<sup>4</sup>

TABLE 6.—PERCENTAGE CHANGE IN THE RETAIL COST OF FOOD IN JULY, 1926, COM-PARED WITH THE COST IN JUNE, 1926, JULY, 1925, AND WITH THE AVERAGE COST IN THE YEAR 1913, BY CITIES

City	Percent- age increase July,	Percentage July, 19 pared w	926, com-	City	Percent- age increase July,	Percentag July, 1' pared w	926, com-
	1926, compared with 1913	July, 1925	June, 1926		1926, compared with 1913	July, 1925	June, 1926
Atlanta	64. 9	1 2. 1	0. 1	Minneapolis	56. 8	0.7	3. 3
Baltimore	62. 9	2.8	3.1	Mobile	48.6	0. 9	1 0. 5
Birmingham	68. 0	10.9	0. 4	New Haven		0.7	0. 9
Boston Bridgeport	58. 3	1.8	1. 2	New Orleans	55. 3 53. 5	2. 1	10.6
pridgeport		1. 8	1. 2	New Orleans	55. 5	2. 1	- 0. 0
Buffalo	61.0	1.8	3, 2	New York	59, 1	0.4	2. 3
Butte	011.0	2. 5	11.4	Norfolk	004.2	10.3	1.8
Charleston, S. C	60. 7	10.3	0.5	Omaha	55. 0	2.6	1.8
Chicago	67.8	1.9	2. 2	Peoria	00.0	1.9	2. 2
Cincinnati	59. 6	1.4	1. 5	Philadelphia	58. 8	2.3	2. 2
Cleveland	56. 3	3.7	4.6	Pittsburgh	56. 2	3. 2	3. 5
Columbus		1. 2	1.6	Portland, Me		0.4	0.6
Dallas		1.5	0.4	Portland, Oreg	37. 2	3. 6	2. 0
Denver	41.9	2.4	3. 1	Providence	58. 5	1,9	0. 8
Detroit	65. 2	4.5	3. 3	Richmond	66. 6	0.0	2. 1
Fall River	53. 6	0.9	1.4	Rochester		3.4	2.9
Houston		2.5	10.2	St. Louis	60.0	1.9	3. 3
Indianapolis		0.1	0.8	St. Paul		1 0. 4	3. 0
Jackson ville	58. 8	13.8	0.3	Salt Lake City	31.7	6. 5	3. 3
Kansas City	54. 6	1, 2	3. 6	San Francisco	50. 3	2. 8	0. 2
Little Rock	51. 5	10.8	0.5	Savannah		1 2. 1	0. 8
Los Angeles		2.7	10.4	Scranton	61. 3	1.4	2, 2
Louisville	54. 1	0.3	1.9	Seattle	45.7	2.8	1.6
Manchester	55. 2	10.5	1 1. 3	Springfield, Ill		2. 0	2,4
Memphis		0.8	1.0	Washington, D. C	65. 1	1.7	2.5
Milwaukee	60. 9	2.0	1. 6				

<sup>1</sup> Increase.

Effort has been made by the bureau each month to have all schedules for each city included in the average prices. For the month of July 99.5 per cent of all the firms supplying retail prices in the 51 cities sent in a report promptly. The following-named 45 cities had a perfect record; that is, every merchant who is cooperating with the bureau sent in his report in time for his prices to be included in the city averages: Atlanta, Baltimore, Boston, Bridgeport, Buffalo, Butte, Charleston, Chicago, Cleveland, Columbus, Dallas, Denver, Detroit, Fall River, Houston, Indianapolis, Jacksonville, Little Rock, Los Angeles, Louisville, Manchester, Memphis, Milwaukee, Minneapolis, Mobile, Newark, New Haven, New Orleans, New York, Norfolk, Omaha, Peoria, Philadelphia, Portland, Me., Portland, Oreg., Providence, Richmond, Rochester, St. Louis, St. Paul, Salt Lake City, Savannah, Scranton, Springfield, Ill., and Washington, D. C.

<sup>&</sup>lt;sup>4</sup>The consumption figures used from January, 1913, to December, 1920, for each article in each city are given in the Labor Review for November, 1918, pp. 94 and 95. The consumption figures which have been used for each month beginning with January, 1921, are given in the Labor Review, for March, 1921, p. 26.

The following summary shows the promptness with which the merchants responded in July, 1926:

RETAIL PRICE REPORTS RECEIVED DURING JULY, 1926

	** 11 3		Geog	raphic div	ision	
Item	United States	North Atlantic	South Atlantic	North Central	South Central	Western
Percentage of reports received	99. 5 45	99. 7	100.0	99. 4	99. 4	99. 1

#### Retail Prices of Coal in the United States a

THE following table shows the average retail prices of coal on January 15 and July 15, 1913, July 15, 1925, and June 15 and July 15, 1926, for the United States and for each of the cities from which retail food prices have been obtained. The prices quoted are for coal delivered to consumers but do not include charges for storing the coal in cellar or coal bin where an extra handling is necessary.

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

The prices shown for bituminous coal are averages of prices of the several kinds sold for household use.

AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JANUARY 15 AND JULY 15, 1913, JULY 15, 1925, AND JUNE 15 AND JULY 15, 1926

City, and kind of coal	1913		1925	1926	
	Jan. 15	July 15	July 15	June 15	July 15
United States: Pennsylvania anthracite— Stove. Chestnut. Bltuminous	\$7. 99 8. 15 5. 48	\$7. 46 7. 68 5. 39	\$15. 14 14. 93 8. 61	\$15. 40 15. 18 8. 67	\$15. 43 15. 19 8. 70
Atlanta, Ga.: Bituminous Baltimore, Md.: Pennsylvañia anthracite—	5. 88	4. 83	6. 70	7. 37	7. 37
Stove Chestnut Bituminous	1 7. 70 1 7. 93	17.24 17.49	1 15. 75 1 15. 25 1 7. 50	1 16. 00 1 15. 50 7. 58	1 16. 00 1 15. 50 7. 63
Birmingham, Ala.; Bituminous Boston, Mass.:	4, 22	4. 01	6. 87	7. 08	7. 28
Pennsylvania anthracite— Stove————————————————————————————————————	8. 25 8. 25	7. 50 7. 75	16. 00 15. 75	16. 00 15. 75	16. 25 16. 00
Bridgeport, Conn.: Pennsylvania anthracite— Stove			15. 00 15. 00	15. 00 15. 00	15. 00 15. 00

<sup>1</sup> Per ton of 2,240 pounds.

<sup>•</sup> Prices of coal were formerly secured semiannually and published in the March and September issues of the Labor Review. Since June, 1920, these prices have been secured and published monthly.

AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JANUARY 15 AND JULY 15, 1913, JULY 15, 1925, AND JUNE 15 AND JULY 15, 1926—Continued

	1913		1925	1926	
City, and kind of coal	Jan. 15	July 15	July 15	June 15	July 15
Buffalo, N. Y.:					
Pennsylvania anthracite—					
Stove	\$6.75	\$6.54	\$13.57	\$13.75	\$13.79
Chestnut	6. 99	6. 80	13. 19	13. 46	13. 39
Butte, Mont.: Bituminous			10.77	11.07	11. 04
Charleston, S. C.:			10.11	11.01	11.09
Bituminous	1 6. 75	1 6. 75	1 11.00	11.00	11.00
Chicago, Ill.:					
Pennsylvania anthracite—	8. 00	7 00	10 20	10 04	10.00
Stove	8. 25	7. 80 8. 05	16. 30 16. 19	16. 84 16. 63	16. 88 16. 63
Chestnut Bituminous	4. 97	4. 65	8. 21	8. 13	8. 27
Cincinnati, Ohio:				0.00	0.21
Bituminous	3, 50	3. 38	6. 50	6, 57	6. 57
Cleveland, Ohio: Pennsylvania anthracite—					
Stove	7. 50	7. 25	14. 42	14. 75	14, 83
Chestnut	7. 75	7. 50	14. 35	14. 75	14. 83
ChestnutBituminous	4. 14	4. 14	7.99	8. 56	8. 52
Columbus, Ohio:					
Bituminous			6. 03	6. 58	6. 59
Dallas, Tex.: Arkansas anthracite—					
Egg			15. 25	14. 50	15.17
Bituminous	8. 25	7. 21	11.61	12. 22	12. 72
Denver, Colo.:					
Colorado enthracite—		4.7			
Furnace, 1 and 2 mixed	8.88	9.00	15.92	15.69	15.75
Stove, 3 and 5 mixed Bituminous	8. 50 5. 25	8. 50 4. 88	16. 17 9. 80	15. 69 9. 41	16.00
Detroit, Mich.:	0, 20	4,00	9.00	9.41	9.89
Pennsylvania anthracite—					
Stove	8.00	7.45	15. 50	16.00	16.00
Stove	8. 25	7. 65	15. 33	15. 50	15. 50
Fall River Mass	5, 20	5. 20	8.79	9, 24	9.30
Fall River, Mass.: Pennsylvania anthracite—					
Stove Chestnut	8. 25	7.43	15.96	16.75	16.75
Chestnut	8. 25	7.61	15.71	16. 25	16. 25
Houston, Tex.: Bituminous			10.67	11.00	11.00
Indianapolis, Ind.:			10.07	11.00	11.00
Bituminous	3.81	3.70	6.58	6.72	6.73
Jacksonville, Fla.:					22 00
Bituminous	7. 50	7.00	12.00	12.50	12.00
Kansas City, Mo.: Arkansas anthracite—					
Furnace			14.00	13.50	13.70
Stove No. 4 Bituminous			15. 40 7. 84	15.33	15.17
Bituminous	4.39	3.94	7.84	7.48	7. 43
Little Rock, Ark.: Arkansas anthracite—					
Egg			13.00		13.00
Bituminous	6.00	5. 33	9.80	9.85	9. 41
Bituminous Los Angeles, Calif.:					
Bituminous	13.52	12.50	15. 13	15, 31	15.31
Louisville, Ky.: Bituminous Anchester, N. H.: Pennsylvania anthracite—	4, 20	4,00	6.17	6, 31	6. 27
Manchester, N. H.:	2, 20	2.00	0.11	0. 01	0.21
Pennsylvania anthracite—					
Stove	10.00	8. 50	17.00	17.00	17.00
Chestnut	10.00	8.50	16. 50	17.00	17.00
Memphis, Tenn.: Bituminous	2 4, 34	2 4, 22	7. 29	6, 75	6. 91
Milwaukee, Wis.:	- 4. 54	* 4. 44	1.25	0.75	0. 91
Bituminous Milwaukee, Wis.: Pennsylvania anthracite—					
Stove	8.00	7.85	16.60	16.80	16.80
Chestnut	8. 25	8.10	16, 45	16.65	16.68
Bituminous Minneapolis, Minn.:	6. 25	5.71	8.89	8.90	- 8.90
arithmen polis, militi.					
Pennsylvania anthracite—				1000	
Pennsylvania anthracite— Stove	9. 25	9.05	17.90	18.10	18.10
Pennsylvania anthracite— Stove Chestnut Bituminous	9. 25 9. 50 5. 89	9. 05 9. 30 5. 79	17. 90 17. 75 10. 88	17.95	18. 10 17. 95 11. 02

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AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JANUARY 15 AND JULY 15, 1913, JULY 15, 1925, AND JUNE 15 AND JULY 15, 1926—Continued

City, and kind of coal	1913		1925	1926	
	Jan. 15	July 15	July 15	June 15	July 15
Mobile, Ala.:					
Bituminous Newark, N. J.: Pennsylvania anthracite—			\$9.12	\$9.37	\$9.42
StoveChestnut	\$6.50 6.75	\$6.25 6.50	13. 50 13. 00	14.00 13.50	14.00
Pennsylvania anthracite—			15.00	15, 50	13. 50
Stove Chestnut New Orleans, La.;	7. 50 7. 50	6. 25 6. 25	14. 55 14. 55	15. 05 15. 05	15. 05 15. 05
Bituminous	2 6. 06	2 6. 06	9.14	9.46	9. 18
Pennsylvania anthracite— Stove	7.07	6, 66	14. 22	14. 75	14.78
Chestnut	7.14	6, 80	13.88	14. 50	14. 50
Stove Chestnut			15. 00 15. 00	15. 50 15. 50	15. 50 15. 50
BituminousOmaha, Nebr.: Bituminous	6, 63	6. 13	8.48	8.41	8. 52
Peoria, Ill.: Bituminous	100000	0, 15	9, 50 6, 38	9. 42 6. 96	9, 48
Philadelphia, Pa.: Pennsylvania anthracite— Stove————————————————————————————————————		1.0.00			
Chestnut Pittsburgh, Pa.: Pennsylvania anthracite—	1 7. 16 1 7. 38	1 6. 89 1 7. 14	1 14. 79 1 14. 32	1 15. 79 1 15. 54	1 15. 86 1 15. 54
Chestnut. Bituminous. Portland, Me.:	1 8. 00 3 3. 16	<sup>1</sup> 7. 44 <sup>3</sup> 3. 18	14. 63 6. 53	15, 13 5, 63	15. 00 5. 59
Pennsylvania anthracite— Stove			16. 32	16. 56	16, 56
Chestnut Portland, Oreg.: Bituminous	9. 79	9, 66	16. 32	16. 56	16, 56
Providence, R. I.: Pennsylvania anthracite—	9. 19	9, 00	13, 00	11.74	12, 04
Stove	4 8. 25 4 8. 25	4 7. 50 4 7. 75	4 15, 75 4 15, 50	4 16. 25 416. 00	4 16. 25 4 16. 00
Pennsylvania anthracite— Stove————————————————————————————————————	8. 00 8. 00	7. 25 7. 25	15.00	15. 33	15. 75
Bituminous	5, 50	4. 94	15. 00 7. 96	15. 50 8. 66	15. 75 9. 04
Stove Chestnut			14. 30 13. 95	14. 60 14. 15	14. 60 14. 15
St. Louis, Mo.: Pennsylvania anthracite— Stove	8. 44	7, 74	16. 18	16. 73	10 55
Stove	8. 68 3. 36	7. 99 3. 04	15. 95 6. 02	16. 45 5. 87	16. 75 16. 50 6. 04
Stove Chestnut	9. 20 9. 45	9. 05 9. 30	17. 90 17. 75	18. 10 17. 95	18. 10 17. 95
Bituminous Balt Lake City, Utah: Colorado anthracite—	6. 07	6. 04	11. 16	11. 26	11. 22
Furnace, 1 and 2 mixed Stove, 3 and 5 mixed Bituminous	11. 00 11. 00 5, 64	11. 50 11. 50 5. 46	18. 25 18. 25 8. 41	18. 00 18. 00 6. 62	18. 00 18. 00 6. 49

Per ton of 2,240 pounds.
 Per 10-barrel lot (1,800 pounds.
 Per 25-bushel lot (1,900 pounds).
 Fifty cents per ton additional is charged for "binning." Most customers require binning or basketing the coal into the cellar.

AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JANUARY 15 AND JULY 15, 1913, JULY 15, 1925, AND JUNE 15 AND JULY 15, 1926—Continued

City, and kind of coal	1913		1925	1926	
	Jan. 15	July 15	July 15	June 15	July 15
Town Promotogo Calif.					
San Francisco, Calif.: New Mexico anthracite—					
Cerillos egg	\$17.00	\$17.00	\$25,00	\$25,00	\$25, 00
Colorado anthracite—	Ф11.00	φ11.00	φ20.00	φ20.00	φ20. 0
Egg	17, 00	17.00	24, 50	24, 50	24. 5
Bituminous	12.00	12.00	16. 39	16. 22	16. 2
Savannah, Ga.:	12.00	12.00	10.00	10. 22	20.2
Bituminous			\$ 10, 08	8 10, 88	5 10. 8
Scranton, Pa.:					
Pennsylvania anthracite—					
Stove	4. 25	4.31	10.38	10.92	10.9
Chestnut	4, 50	4, 56	10.30	10, 67	10.6
Seattle, Wash.:					
Bituminous	7. 63	7.70	9.81	8. 51	9.0
Springfield, Ill.:		177			
Bituminous			4.38	4.35	4.3
Washington, D. C.:	1				
Pennsylvania anthracite—	2000				100 b
Stove	17.50	17.38	1 15. 34	1 15. 53	1 15. 5
Chestnut	17.65	1 7. 53	1 14. 83	1 15, 22	1 15. 2
Bituminous—			. 10 10	. 10 00	1 10 0
Prepared sizes, low volatile			1 10. 46	1 10. 67	1 10. 9
Prepared sizes, high volatile			1 8, 38	1 9. 00	18.7
Run of mine, mixed			17.44	1 7. 75	17.7

## Index Numbers of Wholesale Prices in July, 1926

SLIGHT decline in the general level of wholesale prices from June to July is shown by information gathered in representative markets by the Bureau of Labor Statistics of the United States Department of Labor. The bureau's weighted index number, which includes 404 commodities or price series, registered 150.7 for July compared with 152.3 for June, a decrease of 1 per cent. Compared with July, 1925, with an index number of 159.9, there was a decrease of 5\mathfrak{3}\square per cent.

Farm products averaged somewhat lower than in June, due mainly to declines in the price of winter wheat, hogs, lambs, onions, and potatoes. Foods, clothing materials, fuels, chemicals and drugs, and house-furnishing goods also averaged lower than in the month before, while minor increases were reported for metals and building

materials.

Of the 404 commodities or price series for which comparable information for June and July was collected, decreases were shown in 139 instances and increases in 94 instances. In 171 instances no change in price was reported.

 <sup>1</sup> Per ton of 2,240 pounds.
 6 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.

# INDEX NUMBERS OF WHOLESALE PRICES, BY GROUPS OF COMMODITIES [1913-100.0]

Commodity group	July,	1926	
Commonty group	1925	June	July
Farm products Foods Clothing materials Fuels. Metals and metal products Building materials Chemicals and drugs House-furnishing goods. Miscellaneous. All commodities.	161. 8 157. 3 188. 8 172. 1 126. 4 170. 1 133. 3 169. 2 143. 4 159. 9	143. 7 156. 6 175. 1 179. 2 125. 1 171. 2 131. 1 161. 7 122. 5 152. 3	140. 8 153. 6 173. 3 177. 0 126. 2 171. 5 130. 9 161. 1 122. 5 150. 7

Comparing prices in July with those of a year ago, as measured by changes in the index numbers, it is seen that large decreases took place in farm products, clothing materials, and miscellaneous commodities, with smaller decreases in foods, house-furnishing goods, and chemicals and drugs. Fuels and building materials, on the other hand, averaged higher than in July of last year. Practically no change in the general price level, as compared with a year ago, is shown for metals and metal products.

# Wholesale Prices in the United States and in Foreign Countries, 1913 to June, 1926

N THE following table the more important index numbers of wholesale prices in foreign countries and those of the United States Bureau of Labor Statistics have been brought together in order that the trend of prices in the several countries may be directly compared. In some instances the results here shown have been obtained by merely shifting the base to the year 1913—i. e., by dividing the index number for each year or month on the original base by the index number for 1913 on that base as published. In such cases, therefore, these results are to be regarded only as approximations of the correct index numbers. It should be understood, also, that the validity of the comparisons here made is affected by the wide difference in the number of commodities included in the different series of index numbers. For the United States and several other countries the index numbers are published to the fourth significant figure in order to show minor price variations.

# INDEX NUMBERS OF WHOLESALE PRICES IN THE UNITED STATES AND IN CERTAIN FOREIGN COUNTRIES

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

Country	United States	Canada	Belgium	Bulgaria	Czecho- slovakia	Den- mark	Finland	France	Ger- many	Italy
Computing agency	Bureau of Labor Statis- tics	Dominion Bureau of Statistics	Minis- try of Indus- try and Labor	Director General of Sta- tistics	Central Bureau of Sta- tistics (revised index)	Finans-	Central Bureau of Sta- tistics	General Statisti- cal Bu- reau	Federal Statisti- cal Bu- reau	Ric- cardo Bachi
Commodi- ties	404	1 238	128	38	135	33	135	45	38	2 107
Year and month 1913	126. 8 177. 2 194. 3 206. 4 226. 2 146. 9 148. 8 153. 7	100. 0 102. 3 109. 9 131. 6 178. 5 199. 0 209. 2 243. 5 171. 8 152. 0 155. 2 160. 3	3 100 	100 121 185 268 667 831 1166 2392 2006 2472 2525 2823	1334 977 997 1001	164	1183 1263 1219 1095 1100 1129	100 102 140 188 262 339 356 509 345 327 419 489 551	100. 0 	100 95 133 202 299 409 364 631 577 562 575 585 690
1923 January February March April May June July August September October November December	156. 7 158. 6 158. 7 156. 2 153. 5 150. 6 150. 1	151. 4 153. 6 155. 9 156. 9 155. 5 153. 5 153. 5 154. 6 153. 1 153. 3	434 474 482 480 474 484 504 529 514 515 531 545	2657 2666 2828 2757 2613 2545 2408 2292 2265 2263 2412 2597	991 1005 1012 1012 1003 977 949 942 943 960 952 969	181 192 199 200 204 202 207 207 207 202 205 207 210	1134 1127 1108 1096 1093 1095 1080 1080 1089 1077 1070 1096	387 422 424 415 406 409 407 413 424 421 443 459	65. 0 84. 0 96. 8 89. 5 71. 9 74. 0 88. 8 85. 8 101. 7 117. 9 139. 0 126. 2	575 582 587 588 580 569 566 567 569 563 571
January February March April May June July August September October November December	149. 9 148. 4 146. 9 144. 6 147. 0 149. 7 148. 8 151. 9 152. 7	156. 9 156. 8 154. 4 151. 1 150. 6 152. 3 153. 9 156. 8 157. 0 157. 7	580 642 625 555 557 566 566 547 550 555 569	2711 2658 2612 2798 2551 2811 2737 2853 2848 2988 3132 3181	974 999 1021 1008 1001 968 953 986 982 999 1013 1024	210 223 227 228 225 219 220 233 231 234 234 231 232	1071 1078 1094 1095 1090 1088 1085 1111 1117 1114 1120 1139	494 544 499 450 458 465 481 477 486 497 504	117. 3 116. 2 120. 7 124. 1 122. 5 115. 9 115. 0 120. 4 126. 9 131. 2 128. 5 131. 3	571 573 579 579 571 566 567 572 580 602 621 640
1925 January February March April May June July August September October November December	160. 6 161. 0 156. 2 155. 2 157. 4 159. 9 160. 4 159. 7 157. 6 157. 7	165. 5 164. 7 161. 6 156. 5 158. 8 158. 1 158. 9 156. 2 156. 0 161. 2 163. 5	559 551 546 538 537 552 559 567 577 575 569 565	3275 3309 3272 3244 3177 3225 3041 2870 2834 2823 2822 2913	1045 1048 1034 1020 1006 998 1009 993 996 989 977 977	234 234 230 220 216 216 206 189 168 163 158	1137 1141 1133 1133 1122 1129 1118 1142 1133 1121 1118 1120	514 515 514 513 520 543 557 557 556 572 605 633	138, 2 136, 5 134, 4 131, 0 131, 9 133, 8 134, 8 131, 7 125, 9 123, 7 121, 1 121, 5	658 660 659 658 660 683 707 731 721 716 712 715
1926 January February March April May June	1 155.0	163. 8 162. 2 160. 1 160. 6 157. 0 155. 7	560 556 583 621 692 761	2901 2899 2844 2774 2938 2842	966 950 938 923 928 926	157 151 145 141 141 140	1094 1091 1081 1081 1070	634 636 632 650 688 738	120. 0 118. 4 118. 3 122. 7 123. 2 124. 6	708 704 693 692 699 708

<sup>&</sup>lt;sup>1</sup> 236 commodities since April, 1924. <sup>2</sup> 36 commodities prior to 1920; 76 commodities in 1920 and 1921; 100 commodities in 1922.

 <sup>&</sup>lt;sup>3</sup> April.
 <sup>4</sup> July.
 <sup>5</sup> July 1, 1912–June 30 1914.

INDEX NUMBERS OF WHOLESALE PRICES IN THE UNITED STATES  ${\bf AND}$  IN CERTAIN FOREIGN COUNTRIES—Continued

Country	Neth- er- lands	Nor- way	Spain	Swe- den	Swit- zer- land	United King- dom	Aus- tralia	New Zea- land	South Africa	Japan	China	India
Computing agency	Central Bureau of Statistics	Central Bureau of Statistics	Institute of Geography and Statistics	Chamber of Commerce	Dr.J. Lo- renz	Board of Trade	Bu- reau of Cen- sus and Sta- tistics	Census and Statistics Office (revised)	Office of Cen- sus and Sta- tistics	Bank of Japan, Tokyo	Bu- reau of Mar- kets, Treas- ury De- part- ment, Shang- hai	Labor Office, Bom- bay
Commodi- ties	648	174	74	160	71	150	92	180	187	50	7 117	42
Year and month 1913. 1914. 1915. 1916. 1917. 1917. 1919. 1919. 1920. 1921. 1922. 1923. 1924. 1925. 1925. 192	100 109 146 226 276 373 304 292 182 160 151 156	100  232 267 253	100 101 119 141 166 207 204 221 190 176 172 183 188	100  359 222 173 163 162 161	196. 5 167. 7 179. 9 175. 7 162. 9	100. 0 	4 100 141 132 146 170 180 218 167 154 170 165 162	100 104 117 126 143 169 176 207 192 165 158 165	100 97 107 123 141 153 165 223 161 129 127 129 128	100 95 97 117 147 193 236 259 200 196 199 206 202	100. 0 	2366 2222 2166 199 187 181 182 163
January February February March April May June July August September October November December	157 155 156 156 149 149 145 142 145 148 153 154	223 222 228 229 232 231 233 232 235 243 247	170 170 171 174 171 170 170 171 174 171 173 176	163 165 168 168 166 164 162 162 162 161 160 160	174. 7 175. 3 181. 0 185. 9 186. 5 181. 0 179. 8 175. 3 173. 4 181. 1 181. 6 182. 5	157. 0 157. 5 160. 3 162. 0 159. 8 159. 3 156. 5 154. 5 157. 8 158. 1 160. 8 163. 4	163 161 163 167 170 178 180 175 172 171 173 174		131 126 124	184 192 196 196 199 198 192 190 210 212 209 210	152. 7 157. 5 158. 7 157. 7 158. 4 155. 2 155. 4 153. 1 156. 8 156. 1 157. 3 157. 5	181 177 182 180 180 178 176 179 181 186 188
1924 January February March April May June July August September October November December	156 158 155 154 153 151 151 151 158 161 161	251 261 264 263 261 262 265 271 272 273 276 279	178 180 180 184 179 179 182 182 184 186 181	161 162 162 161 160 158 157 160 163 167 167	183. 2 183. 4 180. 1 181. 4 180. 4 178. 3 173. 3 170. 6 169. 9 169. 0 168. 5 169. 8	165. 4 167. 0 165. 4 164. 7 163. 7 162. 6 162. 6 165. 2 166. 9 170. 0 169. 8 170. 1	174 170 167 166 165 163 163 162 162 163 163 163		131 	211 208 206 207 205 199 195 200 206 213 214 213	155. 8 159. 5 157. 5 153. 7 154. 3 151. 8 151. 5 148. 8 149. 3 152. 8 154. 9 157. 4	188 188 181 184 181 185 184 184 181 176 176
1925 January February February March April May June July August September October November December	160 158 155 151 151 153 155 155 155 154 154 155	279 281 279 273 262 260 254 249 237 223 220 220	191 192 193 190 191 187 188 184 185 187 186	169 169 168 163 162 161 161 159 157 154 155 156	170. 8 170. 8 169. 9 165. 9 163. 0 161. 9 160. 6 159. 6 159. 4 159. 2 157. 0 156. 7	171. 0 168. 9 166. 3 162. 5 159. 0 157. 6 157. 5 157. 0 156. 0 154. 8 153. 7 153. 2	163 162 160 158 159 162 162 162 163 165 166	166 162 162 162 162 162 161 161 160 162 161 160	130 	214 210 204 202 199 200 198 200 201 200 198 194	159. 9 159. 2 160. 3 159. 3 157. 8 157. 3 162. 8 160. 3 160. 2 159. 0 158. 4 158. 1	173 173 171 165 164 160 158 160 157 158
1926 Fanuary February March April May	153 149 145 143 143 144	214 211 205 199 197 194	186 183 183 179 179	153 152 149 150 151	155. 5 154. 5 150. 8 148. 4 146. 6 145. 1	151. 3 148. 8 144. 4 143. 6 144. 8 146. 4	161 160 163 167 167	159 159 157 156 156	124	.192 188 184 181 177	164. 0 163. 0 164. 4 162. 8 159. 7 155. 8	154 151 150 151 151

<sup>&</sup>lt;sup>4</sup>July. <sup>6</sup>52 commodities in 1920; 53 commodities from August, 1920, to December, 1921. <sup>7</sup>147 items.

Income and Expenditure of a Laborer's Family in Argentina in 1925 1

THE National Labor Department of Argentina has published the results of an inquiry recently undertaken by it to ascertain the average income and expenditure of a working-class family during the year 1925. The data obtained from a study of 1,000 families in Buenos Aires show that a working-class family consists on the average of five members: Father, mother, and three children. It is also found that on the average, two members of the same family contribute to its support.

The report states that the workers had steady employment throughout the year. It was also found that the eight-hour day was general and that wages showed no change as compared with the previous year.

The average earnings of the workman's family in 1925 were 2,032.99 pesos (paper currency),<sup>2</sup> as against 2,006.36 pesos in 1924 and 2,515.96 pesos in 1923. The average annual expenditure per family in 1925 was 1,976.17 paper pesos, as against 2,023.81 pesos in 1924 and 2,508.30 pesos in 1923. Comparing the earnings in 1925 with the expenditures, a favorable balance of 2.84 per cent is shown, equivalent to 56 pesos. This surplus, however, the report states, can not be regarded as a saving, and it may be said that income and expenditure were about evenly balanced.

The analysis of expenses shows that food costs amounted to 55.82

per cent; rent, 18 per cent; and other items, 23.34 per cent.

The following table taken from the report shows the average quantity of food consumed per family of five in one month and its cost:

AVERAGE QUANTITY OF SPECIFIED ARTICLES OF FOOD CONSUMED PER FAMILY IN ONE MONTH AND AVERAGE PRICES THEREOF

[Exchange rate of gold peso in 1925=91.38 cents; normally, paper peso=about 44 per cent of face value; kilogram=2.2 pounds; liter=1.06 quarts]

		Average	Avera	Per cent	
Article	Unit	quantity consumed per family	Per unit	Per family per month	of total food bill
Sugar Beef Spaghetti Milk Bread Rice Flour Fat Oil Eggs Wine Greens	KilogramdodokilogramKilogramdododododododo	8 30 15 50 30 4 4 6 20 1	Pesos 0. 59 57 43 20 35 50 35 93 11 1. 36 97	Pesos 4. 72 17. 10 6. 45 10. 00 10. 50 2. 00 1. 40 5. 58 2. 20 1. 36 9. 70 15. 00 6. 00	5.1 18.6 7.6 10.9 11.4 2.1 1.5 6.1 2.6 1.6 10.6 16.5 6.6
Total				92. 01	100.

The 1,000 families included in this inquiry occupied 1,097 rooms, of which 172 were in wooden structures and 925 in brick buildings. The average rent paid for a room in a frame house was 22.73 paper pesos per month, and for other rooms 30.77 paper pesos per month.

It was not possible to ascertain the precise distribution of the "other expenses" which amounted to 23 per cent of the total, as the people concerned were unwilling to give this information. It is

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<sup>&</sup>lt;sup>1</sup>Argentina. Departamento Nacional del Trabajo. Cronica Mensual. Buenos Aires, February, 1926, pp. 1734-1736.  $^2$  Average exchange rate of gold peso in 1925-91.38 cents; paper peso normally convertible at about 44 per cent of face value.

hoped, however, that this information will be obtained in the next inquiry. Of the 1,000 families investigated, 776 had balanced budgets, 162 had a surplus which averaged 445 paper pesos for the year, and 62 families reported an average deficit of 294 paper pesos.

The report of the labor department concludes as follows:

It can not be doubted that one of the causes which contributed to the balancing of these family budgets was that only 18 per cent of the income was spent in rent, leaving the remainder for necessaries, whereas experience has shown that when rent exceeds 25 per cent there is a deficit in the budget. It is desirable to record that of the families studied the majority live in one room and that 16 per cent of these rooms are in wooden dwellings.

The following tables show the average income and expenditure of the 1,000 laborers' families in Buenos Aires in 1925, by means of support and by number of persons in family.

AVERAGE ANNUAL INCOME AND EXPENDITURE FOR 1,000 FAMILIES IN BUENOS AIRES, BY MEANS OF SUPPORT

[Average exchange rate of the gold peso in 1925=91.38 cents; normally, paper peso=about 44 per cent of face value]

Families supported by—	Number of families	Average annual income	Average annual ex- penditures
Father Mother Parents Parents and one or more children Father and one or more children. Mother and one or more children One or more children Single man Single woman	397 19 129 36 228 75 77 8 31	Pesos 1, 677. 07 886. 31 1, 875. 00 2, 699. 22 2, 956. 03 1, 716. 28 2, 240. 42 1, 282. 50 778. 97	Pesos 1, 680, 20 982, 74 1, 790, 38 2, 543, 50 2, 803, 38 1, 671, 16 2, 180, 75 1, 291, 50 757, 87
Total	1,000	2, 032. 99	1, 976. 17

AVERAGE ANNUAL INCOME AND EXPENDITURE FOR 1,000 FAMILIES IN BUENOS AIRES, BY NUMBER OF PERSONS IN FAMILY

[Average exchange rate of the gold peso in 1925=91.38 cents; normally, paper peso=about 44 per cent of face value]

	Num-	Average	Average annual expenditure for—			
Number of persons in family	ber of fami- lies	annual income	Food	Rent	Miscel- laneous items	
Husband and wife. Parents and one child. Parents and two children. Parents and fure children. Parents and four children. Parents and four children. Parents and five children. Parents and six children. Parents and six children. Parents and seven children. Parents and seven children. Parents and nine children. Father and one child. Father and two children. Father and two children. Father and four children. Father and four children. Mother and one child. Mother and one child. Mother and three children. Mother and four children. Mother and four children. Mother and four children. Mother and at we children. Mother and as we children. Mother and seven children. Mother and nine children. Mother and nine children. Brothers Single man. Single woman.	37 27 11 5 8 11 6 2 1 38 46 21 11 8 42 2 1 1 1 2 2 3 8	Pesos 1, 563, 10 1, 735, 50 1, 1735, 50 2, 122, 17 2, 472, 37 2, 681, 00 2, 723, 33, 138, 22 3, 346, 36 4, 467, 60 1, 768, 75 2, 380, 00 2, 750, 00 2, 750, 00 1, 286, 16 1, 893, 91 2, 660, 18 3, 082, 25 2, 115, 00 3, 082, 05 2, 280, 00 1, 865, 00 1, 266, 00 740, 26	Pesos 818. 01 1, 096. 41 1, 093. 53 1, 240. 48 1, 514. 62 1, 581. 74 1, 759. 46 1, 759. 46 2, 712. 50 1, 036. 36 1, 160. 00 1, 380. 00 1, 600. 00 634. 74 1, 717. 50 1, 380. 00 1, 224. 54 1, 717. 50 1, 380. 00 1, 600. 00 6324. 39	Pesos 342, 89 358, 36 380, 11 399, 83 374, 15 426, 04 417, 73 444, 00 345, 82 588, 00 352, 50 367, 63 352, 00 358, 00 352, 00 354, 93 322, 50 354, 93 320, 57 400, 73 424, 50 424, 50 427, 50 438, 86 360, 00 427, 50 438, 86 361, 48	Pesos 423, 22 434, 41 435, 00 463, 88 527, 00 525, 06 505, 37 717, 48 832, 91 1, 179, 96 656, 00 954, 00 954, 00 499, 48 6773, 72 850, 55 8773, 72 850, 55 387, 00 532, 50 339, 45	
Total	1,000	2, 032. 99	1, 134. 96	366.40	474. 81	

# Cost of Living in Mexico City 1

IN THE June 1, 1926, issue of the Boletin Financiero, the Mexican Statistical Department has compiled index numbers showing the changes in the prices of specified food and miscellaneous articles in Mexico City in March, 1926, as compared with March, 1925, from which the following table is taken:

INDEX NUMBERS OF RETAIL PRICES OF PRINCIPAL ARTICLES OF FOOD AND MISCELLANEOUS COMMODITIES IN MEXICO CITY FOR MARCH, 1925 AND 1926

Article	March, 1925	March, 1926	Article	March, 1925	March 1926
Food articles			Food articles—Continued		
Rice, extra	57	57	Chick-peas, small, better quality	68	100
Rice, first class	54	56	Beans, pulse or vetch	100	123
Rice, second class	59	64	Flour, American	121	125
Sugar, cube	81	98	Flour, Mexican, first class	120	132
Sugar, granulated, first class	79	91	Flour, Mexican, second class	113	122
Sugar, granulated, second class	80	97	Eggs	86	100
Sugar, pilon		103	Milk		158
Sugar, brown, in cones	72	123	Lentils	183	161
Cocoa, Ceylon and Java		135	Corn, inland		144
Cocoa, Sanchez		128	Corn, coastal	113	
Cocoa, tobasco		141	Butter, Sancocho	114	149
Coffee, Caracolillo	143	151	Butter, American	134	134
Coffee, Planchuela, first class		160	Potatoes, yellow		200
Coffee, Planchuela, second class	132	140	Potatoes, white	212	275
Beef, first class	181	221	Potatoes, spotted	266	300
Beef, second class		202	Paste for soup	93	143
Beef, third class	130	175	Fish	96	261
Mutton, first class	123	145	Cheese, fresh	97	134
Mutton, second class	124	137	Cheese, old		121
Pork, first class		197	Salt, grain	75	129
Pork, second class		178	Salt, ground	88	112
Chile peppers, ancho	59	73			
Chile peppers, cascabel	147	174	Miscellaneous commodities		
Chile peppers, chilpotle		142	202.10000000000000000000000000000000000		
Chile peppers, mulato		134	Charcoal, vegetable	100	100
Chile peppers, pasilla	77	70	Fire wood	94	110
Beans, black		141	Petroleum	95	121
Beans, colored	181	138	Candles, stearine	88	117
Chick-peas, first class	65	93	Candles, paraffin	96	117
Chick-peas, second class	86	94	Candles, tallow	94	204

<sup>1</sup> Report from the American consul, Alexander W. Weddell, at Mexico City, dated June 10, 1926.

# LABOR AGREEMENTS, AWARDS, AND DECISIONS

# Review of Labor Agreements of 1925

THE Bureau of Labor Statistics will issue shortly as Bulletin No. 419 extracts from such collective agreements made during the year 1925 as the bureau has been able to secure. The list is by no means complete, as there is no central depository where agreements may be found. Nor indeed are agreements always reduced to writing; many of them are unwritten and are observed

simply as a matter of tradition or custom.

From the labor standpoint, one purpose of collective or trade agreements is to prevent competition between the individual workers in fixing the terms of employment. To this end the union as a whole makes agreements with employers of labor, either singly or in associations, stating what the wages, hours of labor and other conditions of work shall be, requiring employers to obtain their workers through union offices, and promising in so far as possible to furnish employers with first-class labor alone.

Collective agreements began to be common immediately after the Civil War with the increase in the number of unions. Since the opening of the present century, however, there has been a rapid increase in their number. At first most of them were oral, but in order to prevent misunderstanding the practice is now to reduce the more

important of them to writing.

The length of the written agreements varies greatly. Some of them contain barely 100 words, others occupy upward of 100 pages. Some are confined mainly to wages and hours of work. Others contain extended provisions relative to arbitration, apprenticeship, discharge, holidays, overtime rates, and the like.

The form of these agreements varies. The officers of each national and international union work out general provisions satisfactory to themselves and their members, and such provisions appear very

generally in the local agreements of the respective unions.

With the exception of the agreements made by the glass, pottery, and wall-paper unions and provisions regarding the use of the label, few agreements binding the locals are made by the national officers, though many national officers demand the right to approve agree-

ments made by the local unions.

In addition to the provisions relative to wages and hours, the agreements frequently contain clauses relative to the recognition of the union. Since the agreement is between the union and the employer it is but natural that a clause should be inserted obligating the employer to employ union members exclusively. Further, to assure the observance of this rule, a clause is frequently inserted requiring employers to obtain their workers through union officials. In some

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instances where employers are unwilling to be bound so closely the clause provides that as between two applicants for a job, one of whom is a union and the other a nonunion worker, the employer is to give preference to the union man, other things being equal.

Foremen and superintendents are generally considered as representatives of the employer and therefore as not eligible for membership in the union, but some agreements require membership in the union, especially if these employees do any journeyman work. Some unions, notably those of the painters, specifically forbid their members assuming the role of contractor.

The hours of work are always stated in the agreement. The eighthour day is very generally observed. The 44-hour week is practically the rule of the building, clothing, metal, printing and stone trades for day work while in many instances 40 hours' work only is required of night workers. There are indeed a few cases where

but 40 hours a week are required from day workers also.

Very seldom do collective agreements provide for a seven-day week. Sunday is the general day of rest but in continuous occupations any day may be so observed. State holidays are generally observed by unions, and, except in the building trades, these are frequently paid for. There are a few cases where provision is made that employees shall be given a week or two of vacation with pay.

Work done outside the regular working hours is considered overtime. Many efforts have been made by the unions to reduce the amount of such work. In some cases no overtime work is allowed until the consent of the union officials is obtained. In other cases the amount of overtime is limited to one or two hours a day or three hours a week. As a rule the workers are paid time and a half or double time for overtime. In continuous operations and in trades where there is regular night work or the employees work in shifts, overtime rates do not apply. Instead, a separate wage scale is made which calls for either a slight increase in wages over the day scale or a decrease in the number of hours worked per shift.

A number of agreements make some provision for arbitration and forbid strikes during the term of the agreement. The form of arbitration is similar in nearly all cases—a board of one, two, or three appointed from each side to the controversy with one impartial member chosen by the members appointed by the two sides. Some of the provisions relating to arbitration are very elaborate and contain minute directions for procedure. Both sides agree beforehand

to observe the decision of the board.

Many agreements contain provisions relating to apprenticeship, showing that the apprenticeship system is far from passing into disuse. Apprenticeship matters are under the direction of a joint committee of employers and employees which articles apprentices to employers, examines them periodically in regard to their progress, sees that they attend school for the required length of time each year, and on the completion of the apprenticeship period, varying from six months to five years, examines them and admits them into the union if found qualified.

The matter of unemployment is variously handled. The usual method in time of slack periods is to discharge all unnecessary help and keep at work only as many as may be needed, in which case the

agreements generally provide that the employees older in point of service shall be retained and those with shorter periods of service shall be discharged first. Other agreements forbid discharges under such circumstances and require an equal distribution of work. Of late there has been tried in the clothing industries a system of unemployment insurance, whereby a fund is created by contributions from the employers and employees and is used to make payments to employees during the period of unemployment.

Seniority in the public utilities and the check off in the mining industry are referred to in the bulletin. Not infrequently the agreements prescribe the working conditions, such as provisions relative to the comfort and safety of employees, proper sanitary arrangements, toilets, wash rooms, dressing rooms and lockers. Some agreements require employers to carry liability insurance.

As a rule, agreements are made for one year, though the term may be for as short a period as six months or for as long as five years. Agreements running for more than a year generally contain a provision allowing wages to be revised yearly. Many agreements are

for an indeterminate period.

The present bulletin containing copies of agreements with the provisions referred to above is confined to agreements made and in effect in 1925. It is the second compilation of this character made by the bureau. The earlier bulletin (No. 393) contained extracts from agreements made in 1923 and 1924. The selections in this earlier bulletin were mainly excerpts showing particular conditions. Very few agreements were given in full. In the later bulletin the attempt has been made to give under each head one or two agreements in comparatively complete form, followed by extracts from other agreements showing various matters of interest

#### AGREEMENTS

# Brewery Workers-Duluth, Minn.

THE following extracts from the agreement of Brewery Workers' Local No. 133, of Duluth, Minn., are of interest:

ARTICLE 1.—General provisions applying to all departments

Section 1. Only members in good standing of the Local Union No. 133 shall be employed in the various departments of the breweries and branches. This shall not apply to chief engineers, nor firemen, nor watchmen who do manual labor.

In case vacancies occur and the union is unable to supply men on application, then the employers shall be entitled to employ whom they choose, provided he is an American citizen, or at least in possession of his first citizenship papers, who shall, however, at the request of the secretary, join the union within three weeks and who shall be accepted to membership provided his initiation does not conflict with the constitution of the international union.

Sec. 2. Should the union be unable to furnish help during the busy season, from April 1 to October 1, extra help may be employed at the rate of wages common in Duluth as long as such employment does not cause any lay-off to the union men. All such extra men shall have a permit card issued by the Local

Union No. 133, within three days of their obtaining employment.

A permit card is good for one month only, but can be renewed again excepting when a good standing member of the International Union of Brewery, Flour, Cereal and Soft Drink Workers reports for work, then the last permit-card man put to work, shall at the last day of the month on which his card expires, be paid off and the union member take his place.

If a vacancy in the regular force takes place and no union member is out of work, the oldest permit-card man in point of service shall fill such vacancy, if

capable.

SEC. 7. The international union binds itself to hold every member to fulfill

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sec. 8. respect for same. Should a disagreement arise it shall be submitted to a board of arbitration constituted as follows: Two men to be chosen by the union and two men to be chosen by the firm and should these four men so chosen be unable to agree, then they shall elect a fifth man, who shall not be identified with the industry or a trades-union, and the decision of a majority of this board shall be binding on both parties.

Pending arbitration there shall be no strike or lockout.

SEC. 8. Only union malt and cooperage shall be used as long as such is obtainable at reasonable prices.

### ART. 2.—Brewing department

SECTION 1. Eight out of nine consecutive hours shall constitute a day's work, and six days a week. The hours shall be regulated within nine consecutive hours, with an hour intermission for meal.

Sec. 4. Wages shall be paid every two weeks and shall not be less than \$25.50 per week for brewery men. First men of various departments not less than

\$27 per week.

Malsters who work a morning and an afternoon shift on Sundays shall be given one day off each week with full pay; but those who do merely the necessary work on Sunday mornings shall perform this work without overtime pay or other compensation. In case of shutdown of malt house, malsters are to be transferred to brewery work, if possible, provided brewery men are not laid off.

#### ART. 3.—Delivery department

Section 1. Nine out of 10 consecutive hours shall constitute a day's work

and 6 days a week.

On Sundays and holidays drivers shall clean their horses and truckmen shall clean their trucks and oil them. Such duties shall be a part of the regular week's work.

Sec. 2. Wages shall be paid every two weeks at the following rates: Team drivers not less than \$25.50 per week. Truckmen not less than \$26.50 per week. Present truckmen not subject to reduction. Stablemen, 7 days, \$24 per week. Stablemen may be called for other work because of reduction of number of

horses. Stablemen must not strike.

Yardmen, car loaders not less than \$25 per week.

Stablemen to receive one day per month or two weeks per year vacation without reduction of pay.

#### ART. 4.—Bottling department

Section 1. Eight out of 9 consecutive hours, interrupted by 1 hour for meal,

shall constitute a day's work and 6 days a week for this department.

SEC. 3. Wages shall be paid every two weeks as follows: Experienced slack barrel repairers, \$23.50 per week; machine operator and box repairers, \$23.50 per week; all other men not less than \$22.50 per week; checkers not less than \$23.50 per week; apprentices from \$16 to \$18 per week; assistant shipping clerks or team loaders not less than \$28 per week.

#### ART. 5.—Mechanical department

SECTION 1. Eight out of 9 consecutive hours shall be considered a day's work in this department, but the ice-machine engineer shall remain in the engine room during meal hours to be on hand in case of trouble.

Sec. 3. Engineers shall work 7 days per week with every alternate Sunday off and shall have either 1 day per month or 1 week per year free, without reduction

Sec. 4. Wages shall be paid every two weeks as follows: Engineers, 7 days, \$28 per week; firemen, 7 days, \$26.50 per week; helpers and repairmen, 6 days, \$24 per week; general mechanics, 6 days, \$28 per week. Firemen to have one

week's vacation at full pay each year.

Sec. 6. Neither engineers nor firemen shall leave their duties in case of strike, but shall keep the machines running to protect goods in storage, but they shall be relieved of this obligation once nonunion men are employed in any department, of the brewery.

ART. 6.—Term of agreement

This agreement shall be in full force and effect from May 1, 1926, to May 1, 1927, and shall continue to be in force from year to year after said April 30, 1927, unless at least 30 days prior to the end of any subsequent year either party thereto shall have given to the other party written notice to the contrary, specifying all desired changes: *Provided*, *however*, if the carrying on of the brewery and soft-drink business, which is the business contemplated in and by this agreement, shall at any time of the life hereon, be, for any reason discontinued, or by any means whatsoever as a result of legislation, national, State, or otherwise, prohibited, then and in that event, this contract and all rights created hereby shall forthwith be canceled and become null and void and cease and terminate.

# Coopers—Spokane, Wash.

HE following agreement came into effect May 1, 1926, between the Coopers' International Union, Local No. 69, and the employers of Spokane, Wash .:

That party of the first part agrees that all men employed in the manufacture and repairing of cooperage packages and tank work are to be rated as coopers, machine operators, or helpers, and all persons so employed shall be a member of the Coopers' International Union, Local No. 69.

A day's labor shall consist of 8 hours, except on Saturday to be 5 hours. The working hours shall be from 7 a. m. to 12 m., and from 1 p. m. to 4 p. m., or from 8 a. m. to 12 m., and from 1 p. m. to 5 p. m.

The party of the first part agrees to pay the following scale of wages for work performed. Wages to employees on tight-barrel cooperage, tank work and slack barrel, shall in no case be less than \$6 per day; experienced helpers \$5 per day; inexperienced helpers \$4 per day.

If a cooper is employed less than a week on a job, he shall receive 50 cents per

day more. A shop must employ at least 1 journeyman cooper to be allowed the

use of our stamp.

Men sent out of shop to perform work shall receive 50 cents per day extra.

Wages must be paid weekly.

Each and every employee must furnish their own tools for repairing and making of new barrels and kegs, except for bushing, which is to be furnished by employer.

Overtime, Sundays, holidays, and Saturdays after 5 hours' work shall be paid

for at the rate of time and one-half.

Sickness shall be no cause for discharge. On recovering men shall receive their former position. No man shall be discharged or discriminated against for upholding union principles.

The Coopers' International Union label shall be placed on all cooperage and

repair work. Material used for cooperage, bought, shall as far as possible,

bear the Coopers' International label.

This agreement to take effect May 1, 1926, and to remain in full force and effect until May 1, 1927, but should any controversy arise between organized labor and party of the first part, this agreement will be null and void during such controversy.

# Electrical Workers-Atlanta, Ga.

THE Georgia Railway & Power Co. of Atlanta made an agreement with Electrical Workers' Local No. 84, covering such of the emplovees as were members of the local. The agreement was made May 28, 1926, but was retroactive to March 1.

The principal provisions of the agreement are as follows:

ARTICLE I. This agreement shall only apply to employees of the company, members of the brotherhood, who devote all or a portion of their time as employees in what is known as the "electrical department" as electrical workers, commonly known as "operators," "electric shop repairmen," "station construction men," "underground department men," "high and low tension line department men," "armature winders and wire men at Fulton County plant," "storage-battery men," "power-house operators and water tenders at Butler and Davis Street plants," and "load dispatchers."

ART. II. That any and all electrical workers as above described, employed by the company, shall have the right to join or not join the brotherhood, as they individually prefer, it being agreed that there shall be no discrimination for or against any employee in said department of the company, on account of member-ARTICLE I. This agreement shall only apply to employees of the company,

against any employee in said department of the company, on account of membership in the brotherhood. And likewise that no employee of the company shall be discriminated against for nonmembership in the brotherhood, and that neither the brotherhood nor any employee of the company members of the brotherhood shall attempt to coerce any employees of the company into joining the brotherhood against their will, or interfere with them in any way because of failure or

refusal on their part to join the brotherhood.

ART. III. The workday of all employees covered by this agreement, other than "operators," "trouble men," "power-house operators and water tenders at Butler and Davis Street plants," and employees in the electric repair shop, shall be 9 hours from station to station between the hours of 7 a. m. and 5 p. m. each day except Saturday, and 5 hours on Saturday, between 7 a. m. and 12 noon, and the workday for employees in the electric repair shop shall be 9 hours from station to station each day except Saturday, and 5 hours on Saturday. For these employees time and one-half time shall be paid for any time in excess of the scheduled day and time and one-half time shall be paid for work done on Sundays and the following legal holidays: New Year's Day, Fourth of July, Labor Day, Thanksgiving Day, and Christmas Day. Whenever any of these

The 9-hour day for employees in the electric repair shop, shall generally be between the hours of 7 a. m. and 6 p. m. on week days, and between 7 a. m. and 1 p. m. on Saturdays. They, or some of them, may, however, from time to time, be assigned to duty at night or permanent night shift, or shifts may be organized, in which events only straight time will be paid for 9 hours out of 24 hours to those assigned to temporary or permanent night work or shifts, unless those called for temporary night work are not given at least 24 hours' previous notice

of the desire to have them work at night.

In any event, time and one-half shall be paid for the work done at night to those employees called for temporary night work during the first two nights of

any consecutive period of night work.

In the event any employees are required to report back for overtime work they shall receive I hour's time at overtime rate in addition to the time put in on the work, and no employee shall receive less than 3 hours' time at straight time for any call for overtime work, including allowance of 1 hour at overtime rate as above stated.

That all time worked continuously beyond the scheduled 9-hour day shall be paid for as overtime at the rate of time and one-half. Periods of work shall be considered continuous within the meaning of the next preceding clause unless the interval between the periods of work exceeds 6 hours, although no pay is to

be made for the lay-off period.

That linemen and other employees in what is known as the high and low tension line department, employees in the station construction department, and employees in the Atlanta repair shop, shall be kept on duty 9 hours each workday, except Saturday, and shall be kept on duty 5 hours on Saturday, performing such work as is assigned to them, and shall be paid for 50 hours per week, provided they have remained on duty 9 hours each workday other than Saturday and 5 hours on Saturday

That the company will provide for all trouble men, linemen and foremen of linemen in the low tension line department, one outfit of rubber boots, rubber

coat, and rubber hat for use in handling live wires.

ART. IV. The workday for employees known as "operators," "load dispatchers," "trouble men," "power-house operators and water tenders at Butler Street and Davis Street stations," shall be 8 hours in any consecutive 24 hours, with time and one-half for all time in excess of the scheduled 8-hour day. It is understood that employees known as "operators," "load dispatchers," "trouble men," "power-house operators and water tenders," work every day in the year and are

to receive only straight pay for a day's work on Sundays and on holidays.

ART. V. That each of the employees known as "operators," and that each of the employees known as "trouble men," who are required to be on duty every day in the year, take two days holiday in each month without pay, and the remaining operators in the several stations and the remaining trouble men in the several trouble departments, as the case may be, shall perform the necessary overtime work in order to make up for the absent operator or trouble man by working such longer hours as may be required for this purpose, and are to be paid overtime rate for such overtime work in excess of their scheduled day.

Whenever an operator is placed in charge of a first-class station and has remained in charge of first-class stations for at least 60 days in the aggregate, he shall thereafter be classified as a "first-class operator," so long as he is held sub-

ject to call for service in charge of first-class stations.

When a "first-class operator" is qualified in mechanical experience, he shall be

eligible to promotion to station foreman according to seniority rules.

All "first-class operators" shall be eligible to promotion to load dispatchers

according to seniority rules.

ART. VI. That hereafter, in making promotions among the men in the respective divisions of the electric department in which they are employed to vacancies occurring in such divisions, the general rule of seniority shall be followed, provided the person who may be entitled to seniority to be promoted to the vacancy shall be competent to fill such vacancy. Differences, if any, which may arise between the company and the brotherhood as to the competency of any man to be promoted to fill the vacancy may be treated and disposed of as other grievances under this contract.

When a promotion job is open and to be filled under the rule of seniority herein, the company shall give notice by bulletin posted in the department where promotion is to be made, for a period of not less than 10 days, so that the employees may advise who is entitled to promotion under the seniority rule and so the

employees may have time to make application for the position.

When an employee is promoted to a position as "trouble man," he shall be assigned to work with an experienced "trouble man" for a period of not less than

90 days to give him time to learn the circuits.

A journeyman in line for promotion to foreman shall be paid at the foreman's rate of pay when he has charge of a gang during absence of the foreman after 1 day or longer at any given time, he performing foreman's duties

ART. VII. In all open work on wires carrying from 2,200 to 6,600 volts and on trolley wires with opposite polarity, there shall be on the pole tower or frame while the work is being done 2 journeymen.

Whenever a trolley gang is required to work with ladders on private right-of-way or other places that can not be reached by the tower car, the company shall provide 2 extra men to flag approaching trolley cars and 2 men to carry ladders.

In the high line department, when gangs are called upon to change dead ends on poles or towers or frames while the lines are alive, there shall be provided not less than 3 journeymen to do the work on pole, tower, or frame, and 2 men on the ground.

Brush repair men and commutator grinders shall not be required to work at this particular work more than 30 days at a time, with an interval of not less

than 90 days before being reassigned to this particular job.
When employees living in the city of Atlanta are assigned to work outside of the 7-mile zone and are detained in work more than 9 hours, the company shall pay board and lodging for such employees for all the time in excess of the first 9

Drivers of line trucks in the low-tension line department in the city of Atlanta shall receive one-half hour extra pay each day at straight time rate to cover time of getting truck out of garage before work time in the morning and returning it to the garage at night, and this extra half-hour time shall be paid every day the driver works, whether the truck remains out a full day or not.

This shall also apply to drivers of trucks in the repair shop and station construction departments on such days as such driver is required to get and put up

truck at Gilmer Street garage.

ART. VIII. The wages to be paid employees of the company covered by this agreement and to be effective from and after March 1, 1926, and to continue

agreement and to be effective from and after March 1, 1926, and to continue in effect until March 1, 1927, shall be at the rates stated in the schedule hereto attached, marked "Exhibit A," and made a part hereof.

ART. IX. The helpers in all departments of the company's business covered in this contract shall be divided into two classes, namely, "class A helpers," and "class B helpers." All new helpers hereafter employed by the company shall be classified as "class B helpers." At any time after 6 months from date of their employment they may be classified upon the judgment of the company on recommendation of their foreman, as "class A helpers." No newly employed helper shall be entitled to be considered for classification as a "class A helper" until after the expiration of 6 months from the date of his employment; provided, however, that an experienced helper may, upon his employment or at any time thereafter be classified as a "class A helper" in the judgment of the company on the recommendation of the foreman. Differences, if any, which arise between the company and the brotherhood as to the proper classification of helpers herein, may be treated and disposed of as other grievances under this contract.

ÅRT. X. When any dispute arises between the company and the brotherhood over which they can not mutually agree during the life of this agreement, the same shall be submitted to a board of arbitrators composed of three disinterested persons, one of the arbitrators to be chosen by the company, one by the brother-hood, and the two arbitrators thus selected shall choose a third. This board of arbitrators so constituted shall hear all evidence and all arguments on the points in dispute, and the written decision of the majority of the board of arbitrators shall be final and binding on the parties hereto. The parties hereto shall each pay the arbitrator of his own selection and they shall jointly pay the shird arbitrator and the other legitimate joint expenses of such arbitration, tach party, however, paying its own expenses incurred in preparing and pre-eenting its case. Work shall continue during arbitration.

ART. XI. That the right to hire and discharge employees and the management of the properties in all departments are reserved by and shall be vested exclusively in the company. The company shall have the right to determine how many men it will employ or retain in all departments covered by this contract, together with the right to exercise full control and discipline in the inter-

est of the proper service and conduct of its business.

ART. XII. The company agrees to meet and treat with the duly accredited officers and committees that are elected or selected by the brotherhood upon all questions and grievances that may arise between the parties hereto during

the life of this agreement.

ART. XIII. Any member of the brotherhood who has been suspended, or discharged shall have the right to have his case taken up by the officers or committees of the brotherhood with the duly accredited officers of the company; and in such cases where, upon investigation, it is found and mutually agreed to by the representatives of the brotherhood and the company that such employee who has been suspended or discharged was not at fault, he shall be reinstated to his former position and paid the wages to which he would have been entitled had he continued in the company's employment during the period of suspension or discharge. Nothing herein shall abridge the right of the company to relieve or discharge employees from duty because of lack of work.

ART. XIV. Employees of the company, members of the brotherhood, agree that they will perform loyal and efficient work and service in their respective departments; that they will use their influence and best endeavors to protect the property of the company and its interests; that they will cooperate with the company in promoting and advancing the welfare and prosperity of the same at all times. No employee of the company shall at any time be discrimi-

nated against because of membership in the brotherhood.

ART. XV. The brotherhood and its members agree that during the continuance of this contract there shall be no strikes or walkouts by the brotherhood or its members, and the company on its part agrees that during the continuance of this contract there shall be no lockouts of the brotherhood or its members,

it being the mutual desire of both parties hereto to provide during this contract for uninterrupted and continuous service. Nothing herein, however, is intended to prevent the resignation or discharge of individuals, discharges being subject to review under the conditions and in the manner hereinbefore provided for.

#### HOURLY WAGE RATES FOR SPECIFIED OCCUPATIONS

Occupation	Hourly rates	Occupation	Hourly	
Operators: Dispatchers, first class Dispatchers, second class. Operators, first class Operators, first class Operators, third class Operators, furth class Operator agent, first class Operator agent, first class Operator agent, second class Operator agent, third class Operator agent, third class Repair-shop employees: Battery foreman Department foreman First class foreman Journeymen Repairmen Helper, first class Helper, second class Wiremen Station construction workers: General foreman Journeymen Second-class journeymen Helpers, class A. Helpers, class A. Helpers, class B. Linemen, first class Linemen, first class Linemen, second class Linemen, first class Linemen, first class Linemen, second class Linemen, second class Linemen, first class Linemen, second class Linemen, second class Linemen, first class Linemen, second class Linemen, second class Linemen, first class Linemen, second class Linemen, first class Linemen, second class Linemen, second class Linemen, first class Linemen, second class Linemen, second class Linemen, second class Helpers, class B	. 49½ . 45½ . 70¾ . 64¾ . 58½ . 95 . 89¾ . 83½ . 72½ . 65 . 53 . 46 . 72½ . 53 . 53 . 46 . 72½ . 53 . 53 . 46 . 72½ . 53 . 54 . 54 . 55 . 50 . 50	Low tension line department employees: Foreman Linemen, first class Linemen, second class Apprentice linemen Helpers, class A Helpers, class B Trouble men Commercial trouble men, first class Commercial trouble men, first class Commercial trouble men, second class Trimmers Underground department employees: Foreman Cable splicers Helpers, class A Helpers, class B Fulton County plant employees: Armature winders First-class helpers, armature room Second-class helpers, armature room Foreman of wiremen Wiremen Controller repairmen Butler Street plant employees: Power-house operator Assistant power-house operator Water tenders Davis Street plant employees: Assistant power-house operator Water tenders Davis Street plant employees: Assistant power-house operator Water tenders	. 671 . 50 . 35 . 85 . 80 . 561 . 50 1. 081 . 971 . 50 . 35	

# Men's Clothing Industry-New York City

HE terms of the new agreement made between the New York Clothing Manufacturers' Exchange and the Amalgamated Clothing Workers were discussed by representatives of both sides

during the month of July.

The union made six demands, most of which were granted: Minimum wage scales for the entire market; all work cut, made, and carted to be handled by union labor only; elimination of superfluous contractors; registration of contractors and the manufacturers for whom they work; 25 per cent price differential between grades; and fines for manufacturers who send work to nonunion shops. The agreement which was ratified by the workers July 26, is to run for two years and reads as follows:

1. The agreement that all work cut, made and carted shall be handled only

by union labor shall be rigidly enforced.

2. (a) The scales of wages hereinafter specified shall be established in the coat, pants, and vest shops engaged in the manufacture of men's clothing; the scales committee to continue conferences for the purpose of working out scales for helpers. These scales shall apply to all new workers hired by established shops and to all workers employed in new shops.

(b) All workers covered by the scales below \$40 a week and receiving less than the established scale shall receive an increase of \$2 per week; all workers

covered by the scales below \$44 a week, shall receive a raise of \$1 per week, and

all those receiving less than the \$48 scale, shall be given an increase of \$1 per week.

(c) A joint investigation shall begin into the question of scales in the shops manufacturing children's clothing. Pending determination of these scales the men working in the children's jacket shops receiving below \$40 per week shall receive a \$2 per week increase and the women an increase of \$1.

(d) These scales and increases shall become effective for the pay-roll week

beginning August 2, 1926.

(e) It is understood that production cost to the manufacturers shall not be

increased above the rise required by the aforesaid increase in wages.

3. (a) It is agreed that manufacturers who employ contractors will be permitted only the number of contractors required to do their work and that superfluous contractors will be eliminated.

(b) There will be a complete registration of contractors. It is recognized that the manufacturer is responsible for carrying out the terms of this agreement, whether the work is made in an inside shop or contracting shop.

(c) No present contractors can be released or new ones taken on without the

consent of the parties of this agreement.

4. In the event of the violation of any of the terms of this agreement, the parties to it shall be subject to penalty to be determined by the impartial

chairman.

5. This agreement shall run for two years to expire June 30, 1928, with the provision that the questions of wages and hours can be raised by either party annually on the anniversary date of this agreement. Either party may give notice to that effect not later than 90 days prior to the anniversary date of this agreement.

#### WAGE SCALE

#### Coats

Operators: Pocket makers, sleeve sewers, general operators, and tape sewers, \$48.

Lining makers, closers or joiners, stitchers, and assistant pocket makers, \$44. Binders or pipers, sleeve makers, collar stitchers, and pocket sewers, general helper on minor operations, \$40.

Tailors: Edge baster by machine, shapers, capel [sic] basters and under bast-

ers, and fitters, \$48. Edge basters by hand, bushelman and examiner, canvas basters, collar maker, and lining baster, \$44.

General tailor, brushers, and armhole basters, \$40.
Pressers: Pressers, \$48; edge pressers, \$44; machine sponger, \$44; under pressers, \$40; bushel girls, \$25; button sewers, \$28.

#### Pants

Class C. Serging fronts-backs, trimmings put together, crutch-front and backs, and back piecing, \$40.

Class B. Loop tacker, fly raiser, fly stitcher and chopper, pocket serger F. B.

seats, bar tackers 11 tacks, tops machine, and leg presser by hand, \$44.

Class A. Front pockets, back pockets, closing—high speed—outside seams, joining on plain machine, band stitching—and sewing, lining sewer, and leg machine presser, \$48.

# Metal Polishers—South Pittsburg, Tenn.

THE following extracts are taken from a copy of an agreement made between Metal Polishers' Local No. 28 and a stove manufacturer in South Pittsburg, Tenn., for the year 1926:

1. Eight hours shall constitute a day's work.
2. Time and one-half or price and one-half shall be paid for all overtime. Double time for Sundays and the following legal holidays: New Year's Day, Fourth of July, Thanksgiving Day, and Christmas Day. No work to be done on Labor Day. The polishers agree not to attempt to lay off in a body on any other days but these, except on the day of the funeral of one of their members.

3. An equal division of work to be had at all times. In case there is not enough work to give all men work at the same time, they will be rotated so as

to give each man work.

4. Apprentices shall be required to serve an apprenticeship of 3 years. No more apprentices to be employed until the apprentice ratio of 1 to the shop and 1 to 8 journeymen regularly employed is reached, unless this local is unable to secure journeymen.

5. New work shall be done by the day and tried out, by at least 2 journeymen

before the final price or prices are definitely decided upon.

6. A percentage of 15 per cent shall be paid on the board price of pieceworker.8. The minimum day rate of wages for journeymen shall be 90 cents per hour. Wages of apprentices shall be  $37\frac{1}{2}$  cents per hour after serving 3 months; after serving 6 months his wages shall be  $46\frac{1}{4}$  cents per hour, and an additional increase of  $8\frac{3}{4}$  cents each 6 months thereafter until the apprenticeship of 3 years has been served, when they shall receive the prevailing journeymen's rate of wages. When anyone is taken from piecework and put on daywork temporary (temporary meaning 3 days or less), he shall be paid at the rate of his previous 6 days' earnings.

9. After a full discussion between the company and the polishers' committee it was agreed that the maximum pay on the top-polishing machine will be \$4 per

day, effective Monday, March 15.
This \$4 maximum will be arrived at as follows:

 New men going on machine will receive the prevailing common labor scale.
 After serving 3 months on top machine they will receive 37½ cents per hour which is \$3 per day

3. At the end of next 2 months pay will be \$3.33 per day; at end of next 2 months pay will be \$3.66 per day; at end of next 2 months pay will be \$4 per day.

4. After this period of time should the machine operator desire to transfer to the polishing room he will be given the next opening in this department.

After a discussion between the company and polishers' committee it was agreed that buffing would be put on piecework.

If any stove parts are buffed that have only a one or two wheel price the

company will put a special buff board price on such work to protect the buffer.

Buffer's time will be figured as follows: Full polishing board price plus 15 per cent and then less 70 per cent.

# Plumbers and Steam Fitters—Jacksonville, Fla.

THE agreement under which local No. 234 of the United Association of Journeymen Plumbers and Steam Fitters is working in Jacksonville contains several provisions reflecting the growing tendency of unions to recognize the interests of the public, and to accept

responsibility for the conduct of their members.

The usual provisions as to hours and wages are made. are \$12 a day for an 8-hour day, with double rates for work at night or on Sundays, holidays, and Saturday afternoons. Negotiations are under way for increasing the rate to \$14 a day. Provision is made for an adjustment board, consisting of 3 master plumbers and 3 journeymen, to deal with all questions concerning working conditions. Should the board be unable to adjust any difficulty, arbitration is arranged for; the decision of the arbitrators is to be final, and there is to be no cessation of work pending a decision.

The agreement is entered into, it is stated, because of a realization "that the best interests and the elevation of the plumbing business in the city of Jacksonville can be best served through the medium of a cooperative agreement, assuring the public of good workmanship, fair competition, and a measure of protection from unsanitary plumbing installations, thereby protecting the health of the community as a whole through the protective measure of a double guaranty by the members of the Master Plumbers' Association and

the members of the journeymen's association."

It is stipulated that journeymen who are not required to report at the shop will be at the job by 7.45 a.m., ready to start work at 8. While at the job, they are expected to give close attention to their work.

"Any journeyman found absent from the job with no legal excuse shall be fined double time to the extent of time absent from job."

Also, the union undertakes to see that its members shall do good work, and makes itself responsible for any failure on their part to observe this provision:

ARTICLE 14. Any careless or inferior work installed by a journeyman subject to this agreement, he shall be required to make same good in his own time. Local union agrees to reimburse the employer for the cost of the damage.

### AWARDS AND DECISIONS

# Clothing Industry—Baltimore

NE case of lay off, case 81, and another of stoppage, case 88, have recently been decided by the trade board of the Baltimore clothing industry. The cases are here given practically in full as regards these questions.

Case No. 81

The union complains that the cutters were laid off at 4 p. m. instead of finishing their day up to 4.45, and requested that they be paid for the full day.

The answer of the firm was that the situation was unusual, the floor had run out of work almost completely; but when the men were told they could stay till the end of the day if they would make up the work later, they refused to agree to this. Therefore, they were laid off.

It is agreed by both parties that the situation is unprecedented. Never

before had the cutters been laid off in this way. If a few men ran out of work late in the day, usually they were put to helping some other men. At the end of the season if the floor was running out of work, by mutual agreement arrangements were sometimes made for men to make up the time they were paid for when there was no work.

The trade board can not change a custom that has existed in the house for many years. It is agreed that never before were the cutters laid off before the end of the day. It is also agreed that sometimes the men made up their waiting time by mutual consent and that sometimes the time was not made up.

It is clear, therefore, that for the firm to deduct the three-fourths of an hour from the men's pay is contrary to established practice, and unwarranted. Whether the men should make up this time or not is a question that is usually settled by mutual agreement. The board feels that it would have been so settled had it not been for bad feeling that had arisen because of other matters.

In the absence of a mutual agreement with respect to making up the time, the trade board will rule that in the present case the cutters should make up the three-fourths of an hour. But this ruling, it should be clearly understood, is for the present case only. The practice as it has been in the past on the is for the present case only. The cutting floor must be maintained.

Case No. 88

A request of the union for pay for time lost because the firm gave the operators no work at all when they refused to work on the overcoats whose price was in dispute.

It appears that when the union and the firm could not agree on a temporary price, the workers were told by their representative not to do any of the work on which there was no price. In retaliation for this, the firm then refused to give them any other work, although there was plenty available about which

there was no dispute.

The trade board can see no reason why any dispute should arise about a temporary price. Both sides have had enough experience to know this and the board can not allow pay to workers for lost time caused by their own refusal to work. On the other hand the firm is equally guilty with the union. It had no right to stop people from working when there was work for them to do. If the workers were wrong, it does not justify the firm to do the same wrong act in retaliation.

To discourage any future actions of this kind, the board rules that the workers are not entitled to pay for the time lost, and the firm for their side must pay a

are not entitled to pay for the time lost, and the firm for their side must pay a fine of \$20 to be used by the trade board for the relief of needy workers.

# Clothing Industry-New York City

THE impartial chairman in the New York clothing industry, June 12, 1926, considered in Case No. 226, a demand by the union that certain employees of a contract shop be given employment in the inside shop which a firm had recently organized.

The firm produces two grades of clothing and has opened an inside

shop to manufacture the cheaper grade.

On the better grade the firm had originally had three contractors. One of the contractors is still supplied with work. The working force of the second contractor had been taken over as a unit into the firm's inside shop.

The union demanded that the employees of the third, 50 in number, which had worked for the firm seven years, should also be given employment in the latter's inside shop, inasmuch as they were en-

titled to the work by right of seniority.

The firm refused to employ them on the ground that their workmanship had been very poor in the past and the firm had discontinued sending work there. The opinion of the impartial chairman is as follows:

It is obvious from the testimony and from the history of this case that the firm opened the inside shop in order to obtain better workmanship. It is also obvious that the firm is manufacturing less of the better grade than formerly and can not therefore supply the N. Y. T. Co. as in the past. It would also seem clear that the N. Y. T. Co. was never entirely dependent on this firm for work. Nevertheless, in the opinion of the impartial chairman, these people, who have really been working for Mr. Z. for seven years, are entitled to employment in his inside shop. It can not be that all of them are "no good" as alleged. In view of the fact that the entire force of F. & M. was taken over as a complete unit, this unit must remain undisturbed that its efficiency may not be interfered with. But there is no reason why as many of the workers as possible should not be absorbed into the inside shop which manufactures the cheaper grade, and the impartial chairman accordingly directs that this be done.

# Collective Agreements in Germany in 1924

THE German Ministry of Labor has recently published the statistics of collective agreements in Germany as of January 1, 1925, with certain comparative data for earlier years. The following table shows the changes in the number of establishments and number of employees covered by years from 1912 to January 1, 1925.

 $<sup>^{1}</sup>$  Germany. Reichsarbeitsministerium. Reichsarbeitsverwaltung. 35. Sonderheft zum Reichsarbeitsblatt: Die Tarifverträge im Deutschen Reiche am 1. Januar 1925. Berlin, 1926.

#### GROWTH OF COLLECTIVE BARGAINING IN GERMANY, 1912 TO JANUARY 1, 1925

	Collective	Establish-	Workers covered			
Date	agreements in force	ments covered	Total	Female		
End of:						
1912	10, 739	159, 930	1, 574, 285			
1913	10, 885	143, 088	1, 398, 597			
1914	10, 840	143, 650	1, 395, 723			
1915	10, 171	121, 697	943, 442			
1916	9, 435	104, 179	740, 074			
1917	8,854	91, 313	905, 670			
1918	7,819	107, 503	1, 127, 690			
1919	11,009	272, 251	5, 986, 475			
1920	11, 624	434, 504	9, 561, 323	1, 665, 115		
1921	11, 488	697, 476	12, 882, 874	2, 729, 788		
1922	10, 768	890, 237	14, 261, 106	3, 161, 268		
January 1:	20,100	2.0,20,	,, 200	2, 202, 200		
1924	1 8, 790	1 812, 671	1 13, 135, 384	1 3, 039, 205		
1925	2 7, 099	2 785, 945	2 11, 904, 159	2 2, 959, 489		

<sup>1</sup> Exclusive of building trades, all agreements for the building trades based on the national agreement having expired on Mar. 31, 1924.

According to the preceding table, collective bargaining experienced a considerable decline in 1923 and 1924 as compared with 1922. The number of workers covered by collective agreements which at the end of 1922 was 14,261,106 fell on January 1, 1924, to 13,-135,384, and on January 1, 1925, to 11,904,159. If the figure for January 1, 1924, is left out of consideration, because it is based on estimates, the number of persons covered by collective agreements on January 1, 1925, has decreased by 2.4 million as compared with December 31, 1922. A large part of this decrease is due to the fact that the 600,000 building-trades workers included in the total at the end of 1922 are not covered by the figure for January 1, 1925, because their collective agreements lapsed on March 31, 1924, and were not renewed. A similar decline, however, also occurred in all other industry groups, with the sole exception of the metalworking and machinery industries, in which there was a slight increase.

Taking the number of persons insured in sick funds on January 1, 1925, about 18,000,000, as the total number of workers (practically every worker in Germany is subject to compulsory sickness insurance), then, on that date, 66.1 per cent of all German workers were

covered by collective agreements.

The Ministry of Labor ascribes the decrease in 1923 and 1924 in the number of collective agreements in force and in the number of establishments covered to progressive concentration and to the unfavorable economic situation. As proof of the steady concentration in industry the following data are given: At the end of 1914 each collective agreement covered on an average 13.3 establishments and 128.8 workers; in 1919 the corresponding figures were 24.7 and 543.8; in 1920, 37.4 and 822.6; in 1921, 60.7 and 1,121.4; in 1922, 82.7 and 1,324.4; and on January 1, 1925, 110.7 and 1,676.9.

Of the 7,099 collective agreements in force on January 1, 1925, 1,434, or 20.2 per cent, covered exclusively salaried employees. These agreements covered 218,749 establishments and 1,833,895

employees, of whom 514,017 were women.

The following table shows the distribution of collective agreements in force on January 1, 1925, by industry group, and also show the extent to which the workers covered were members of trade-unions.

COLLECTIVE AGREEMENTS IN FORCE IN GERMANY JANUARY 1, 1925, BY INDUSTRY GROUP

	Collec-	TI-4-1	Number of workers covered					
Industry group	tive agree- ments in force	Estab- lish- ments covered	Total	Females	Organized works			
	intorco			remaies	Total	Female		
Agriculture, livestock, forestry, fishing	207	244, 801	1,500,690	625, 843	373, 909	58, 840		
Mining, smelting, salt works, peat digging	133	3, 220	1,163,858	16,052	404, 165	4, 256		
Industries of stones and earths	468	9,483	354,000	55, 832	228, 283	38, 549		
Metal working, machinery, etc	844	54, 167	3,090,014	346, 582	950, 810	88, 12		
Chemical	59	10,721	326, 702	59, 500	142, 228	24, 88		
Forestal by-products	61	490	24,570	6, 883	11,506	3, 114		
Pextiles	338	20,818	1,001,859	591,444	523, 411	294, 379		
Paper	93	9, 256	204, 390	90,019	108, 422	45, 748		
zeatner	135	5,037	80,388	18,468	54, 367	11, 148		
Woodworking		25, 694	323,672	44,047	219, 627	23, 733		
Foodstuffs and beverages	974	56,001	456, 130	213,065	249, 445	95, 550		
Clothing	623	52,065	421,848	261, 161	258, 338	136, 70		
Cleaning	99	11,040	19,780	10,016	8,598	3,47		
Building trades	790	75, 934	230, 597	6, 527	105, 484	1,55		
Printing	61	19,497	164, 831	43,345	133, 894	31, 24		
Art	8	863	3,609	92	2, 252	2		
Commerce	651	76, 365	587, 638	219, 729	377, 966	112, 634		
insurance	20	2,888	67, 593	13,895	34, 421	5, 229		
Pransport	279	12, 226	643, 151	16, 737	432, 838	8,39		
Hotel and restaurant trade	106	17,068	106, 200	50,000	41,812	10, 95		
Amusements	98	1,654	43, 134	17,677	33, 357	13,760		
Miscellaneous	734	76, 657	1,089,505	252, 575	599, 448	122, 314		
Total	7,099	785, 945	11, 904, 159	2, 959, 489	5, 294, 581	1, 134, 627		

Judged by the number of workers covered by agreements, collective bargaining was most extensive at the beginning of 1925 in the metal working and machinery industry. Next in importance come, in the order named, the group comprising agriculture, livestock raising, fishing, and forestry, then mining and smelting, the textile industry, and transport. A noteworthy fact shown in the above table is that of a total of 11,904,159 workers covered by collective agreements on January 1, 1925, only 5,294,581, or less than half were organized workers. Thus unorganized labor had benefited even more from collective bargaining than had trade-unionists.

# Scope of Collective Agreements

IN GERMANY a collective agreement may cover an individual firm, a locality, a district, or the entire country. Agreements covering individual firms have steadily decreased in importance since 1917. On January 1, 1925, such agreements covered only 3.5 per cent of all the workers covered by collective agreements. The importance of agreements covering a locality has also steadily decreased since 1918. The workers covered by them on January 1, 1925, formed only 6.9 per cent of the total number of workers covered; on the other hand, the district collective agreements on that date covered 77 per cent of all workers, while the national agreements covered 12.6 per cent of all the German workers covered by agreements.

There is now a marked tendency in Germany to conclude "basic agreements" (Mantel- or Rahmentarifvertrage) for large districts or the entire country and to supplement these by local or district agreements regulating wages in the individual localities or districts.

### Hours of Labor

THE decree of December 21, 1923,2 regulating the hours of labor, exercised considerable influence on the regulation of hours of labor by collective agreements. In so far as agreements concluded in 1923 were carried over into 1924 the contractual parties tried to adjust themselves to the changed conditions by supplementary agreements as to the hours of labor. Although most of the agreements recognized the 48-hour week as the maximum "regular" working hours, they generally provided that overtime could be worked in accordance with the provisions of the above decree. labor were therefore not the same in all the establishments covered by an agreement but varied within the limits laid down in the agreement and were conditioned on the degree of employment of the industry group and of the individual establishment and on the general situation of the labor market. Conclusions as to the actual hours of labor can therefore not be drawn from the provisions on hours of labor contained in collective agreements in force during 1924 and the statistics of collective agreements for that year do not show the actual hours worked per week or day.

Of the agreements concluded during 1924, 22 per cent, covering 38 per cent of all workers, provided for shorter hours of labor on Saturdays. The corresponding percentages for 1922 were 14.5 and 20.5. The practice of closing earlier on Saturdays seems therefore

on the increase.

# Vacations with Pay

REGULATION of vacations with pay through collective agreements, which in pre-war times was very rare, has become the rule to-day. Of the agreements in force on January 1, 1925, 6,151 (86.6 per cent), covering 719,935 establishments (91.3 per cent), and 11,125,069 workers (93.5 per cent) contained provisions as to vacations. In the case of agreements covering salaried employees exclusively the proportion was even greater, 91.4 per cent of such agreements covering 96.8 per cent of all salaried workers providing for vacations. Nearly all agreements containing provisions as to vacations fix a minimum duration of these. For 56.2 per cent of the workers covered this minimum was 3 days or less, for 40.2 per cent over 3 to 6 days, and for 3.6 per cent over 6 days. For 48.9 per cent of all workers covered, the maximum duration of vacations was fixed at from over 6 to 12 days. In the case of salaried employees, the maximum period for 63.7 per cent was fixed at from over 12 to 18 days, and 29.8 per cent of the employees covered were granted over 18 days.

<sup>&</sup>lt;sup>2</sup> See Labor Review, March, 1924, pp. 65-87.

### Conciliation and Arbitration

OF THE agreements in force on January 1, 1925, 4,940 (69.6 per cent) covering 10,566,696 workers (88.8 per cent) provided for conciliation or arbitration boards for the settlement of disputes.

### Piecework

REMUNERATION of workers on a piecework basis was provided in 37.4 per cent of all agreements in force on January 1, 1925, covering 61.6 per cent of all workers. The per cent of persons covered by agreements providing for piecework rates has fluctuated too much during recent years to make it possible to draw any general conclusions on the change of the form of remuneration.

### Apprenticeship

COMPARED with 1922, apprenticeship has been regulated in an increasing measure in collective agreements in 1924. Of the agreements concluded in 1924, 16.5 per cent covering 38 per cent of the workers contained such regulations, as against 8.5 and 27.6 per cent, respectively, in 1922. Most of these agreements regulate merely the wages of apprentices, but agreements containing provisions as to number of apprentices that may be kept, the duration of apprenticeship (as a rule 3 years), and as to vacations for apprentices are becoming quite frequent.

### Wage Changes

IN THE case of 4,375 collective agreements (61.6 per cent of those in force on January 1, 1925) wage and salary changes took place during the year 1924. Most of these changes were made under agreements concluded prior to 1924. As regards agreements concluded during 1924, the wages and salaries stipulated in these agreements underwent a change in rare instances only; in most instances the wages and salaries agreed upon were still in force on January 1, 1925.

### IMMIGRATION AND EMIGRATION

# Statistics of Immigration for June, 1926

By J. J. Kunna, Chief Statistician, U. S. Bureau of Immigration

IN JUNE, 1926, a total of 43,319 (24,790 immigrant and 18,529 nonimmigrant) aliens were admitted and 25,650 (7,575 emigrant and 18,075 nonemigrant) departed, an increase in our alien population of 17,669 for the month. Aliens debarred this month numbered 1,279 male and 500 female, a total of 1,779.

The principal sources of the immigrants admitted during June, 1926, were Canada (7,116), Mexico (5,824), Germany (2,899), Irish Free State (2,386), Great Britain and Northern Ireland (1,595), the Scandinavian countries (811), Italy (754), and Poland (421).

The other countries contributed less than 400 each.

The high-water mark in deportations for any one month was reached in June last, 1,924 aliens having been deported from the United States for various causes under the immigration laws, mainly for surreptitious entry. Aliens deported during the fiscal year ended June 30, 1926, reached a total of 10,904, which is greater than the number deported during any two years prior to 1925 or any three years prior to 1921. The principal races involved were the Mexican (2,567), English, Irish, Scotch, and Welsh (2,379), Italian (939), German (855), and Scandinavian (548). These deportees were sent to nearly every part of the world. Nearly one-half of the total went to Europe, with Great Britain and Ireland receiving 998; Italy, 911; Germany, 662, and the other countries on that Continent less than 500 each. Mexico was the destination of 2,588 of the year's deportees; 2,102 went to Canada and Newfoundland; 248 to the West Indies; 182 to Central and South America; 589 to Asia, and 107 to Africa, Australia, and the Pacific Islands.

In the fiscal year just ended 304,488 immigrant and 191,618 non-immigrant aliens were admitted, a total of 496,106. Aliens who departed this year numbered 76,992 emigrant and 150,763 nonemigrant, a total of 227,755. The increase of admissions over departures for the past year was 268,351, compared to 232,945 for the previous

fiscal year.

About three-fourths of the present-day immigrant aliens are in the prime of life—16 to 44 years old. In the fiscal year just ended only 16 per cent were under 16 years of age and only 10 per cent 45 years and over. While the immigrant aliens coming during this period were 170,567 male and 133,921 female, the present outward movement

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of emigrant aliens is very largely one of males (54,989 male and 22,003 female), the men exceeding the women by nearly 2½ to 1. Of the 76,992 emigrants departed this year, 75 per cent were from 16 to 44 years of age and 20 per cent were 45 years and over, while only 5 per cent were children under 16 years old. These data show that the outward movement is essentially one of individuals rather than families, and that the individuals are for the most part of the

working age.

That the alien emigration movement from the United States during the year considered was composed for the most part of recent immigrants is shown by the fact that of the 76,992 leaving, 66 per cent, or 50,701, of the total reporting length of residence had been here not over five years, and 77 per cent, or 59,046, had resided here not over 10 years. Common laborers predominate among the outgoing aliens. Fifty-eight per cent, or 33,107, of the total emigrants leaving the country during the fiscal year 1926 and reporting occupations, were of this class. Skilled workers, numbering 9,680, rank second among those having an occupational status, and servants, 4,446, are third in number.

Less than one-third of the 496,106 aliens admitted during the fiscal year 1926 were immigrants charged to the quota under the immigration act of 1924. The number so charged was 157,432, or 95 per cent of the annual quota of 164,667, an increase over the previous year when 145,971 quota immigrants, or 89 per cent of the annual quota were admitted. With few exceptions most of the European countries exhausted their quotas during the past year, but those with the largest quotas did not reach their maximum

until the latter part of June.

Natives of nonquota countries, principally Canada and Mexico, admitted during the last fiscal year, numbered 150,299; returning residents of the United States, 83,754; visitors on business or pleasure, 56,614; and transits passing through the country, 25,574. Other classes admitted this year included 5,666 Government officials, their families, attendants, servants, and employees; 11,154 wives and children of United States citizens; 1,920 students; 1,551 ministers and professors and their wives and children; 1,155 wives and children (born in quota countries) of natives of nonquota countries; and 904 aliens to carry on trade under existing treaty. There were also admitted during the past fiscal year 83 veterans of the World War and their wives and children, 67 of these being natives of Italy, 7 of England, 3 of France, 2 of Russia, and 1 each of Canada, Poland, Germany, and Syria.

Of the 496,106 aliens admitted in the past fiscal year, 289,589 were born in European countries, Germany leading the list from that continent with 62,980 and followed by England with 37,175, Irish Free State with 32,737, Italy with 31,739, and Scotland with 23,100, the other countries in Europe sending less than 20,000 each. Natives of Canada numbered 91,894; Mexico, 60,620; Other America, 30,297; Asia, 18,284; Africa, 1,025; and Australia and the Pacific islands,

4,397.

Table 1.—INWARD AND OUTWARD PASSENGER MOVEMENT, JULY 1, 1925, TO JUNE 30, 1926

Inward							1				
Aliens admitted		United   States		Aliens de- barred	Aliens departed			United States		Aliens de- ported	
Immi- grant	Non- immi- grant	Total	citi- zens ar- rived	Total	from enter- ing <sup>1</sup>	Emi- grant	Non- emi- grant	Total	citi- zens de- parted	Total	after land-ing 2
18, 590 22, 421 26, 721 28, 685 26, 642 21, 089	23, 081 19, 427 14, 860	39, 473 49, 802 48, 112 41, 502	49, 922 68, 500 35, 413 23, 118	89, 395 118, 302 83, 525 64, 620	1,774 1,429 1,965 1,951	7, 539 7, 200 7, 674	12, 978 12, 485 13, 264 11, 915	20, 517 19, 685 20, 938 18, 470	37, 185 24, 369 24, 227 18, 039	57, 702 44, 054 45, 165 36, 509	940 855 909
20, 041 29, 504 33, 400 33, 533 24, 790	10, 632 15, 182 17, 557 19, 244 18, 529	30, 673 44, 686 50, 957 52, 777 43, 319	23, 687 29, 987 28, 931 22, 719 24, 432	54, 360 74, 673 79, 888 75, 496 67, 751	1, 453 1, 404 1, 470 1, 731 1, 779	3, 232 3, 457 4, 989 5, 861 7, 575	8, 451 8, 982 10, 780 13, 660 18, 075	11, 683 12, 439 15, 769 19, 521 25, 650	29, 108 25, 215 26, 312 28, 913 47, 715	40, 791 37, 654 42, 081 48, 434 73, 365	342 938 -1, 052 1, 063 1, 924
122222	mmi-rant  8, 590 12, 421 16, 721 18, 685 16, 642 11, 089  9, 072 10, 041 13, 400 13, 533 14, 790	Non- rant grant s, 590 14, 177 22, 421 17, 052 66, 721 23, 081 88, 685 19, 427 66, 642 14, 860 11, 089 11, 216 10, 632 33, 400 17, 557 33, 533 19, 244 44, 790 18, 529	Mmilgrant   Non- mant   Non- mant   Total   Total   Non- 12, 421   17, 052   39, 473   47, 66, 721   23, 081   49, 802   8, 685   19, 427   48, 112   46, 642   14, 560   41, 502   10, 632   30, 673   99, 072   10, 632   30, 673   99, 504   15, 182   44, 686   34, 400   17, 557   50, 957   33, 533   19, 244   22, 777   44, 790   18, 529   43, 319   344   345	Allehs admitted    States citizens	Non-rant   Non-rant   Total   States   citi-zens   ar-rived	States cities   States cities   Total grant   Total gran	States   Citation   Color   Color	States   Column   States   C	States citizens   Total   To	States citizens   Total   States citizens	States citizens   Total grant   Total gran

<sup>&</sup>lt;sup>1</sup> These aliens are not included among arrivals, as they were not permitted to enter the United States.

<sup>2</sup> These aliens are included among aliens deported, they having entered the United States, legally or illegally, and later being deported.

TABLE 2.—IMMIGRANT ALIENS ADMITTED TO AND EMIGRANT ALIENS DEPARTED FROM THE UNITED STATES DURING JUNE, 1926, AND DURING FISCAL YEARS 1924-25, 1925-26, BY RACE OR PEOPLE, SEX, AND AGE GROUP

	I	mmigrant			Emigrant	
Race or people	Fiscal year, 1925	Fiscal year, 1926	June, 1926	Fiscal year, 1925	Fiscal year, 1926	June, 1926
African (black)	791	894	54	1,094	865	40
Armenian	576	741	65	100	90	
Bohemian and Moravian (Czech)	1,833	2, 494	78	2, 128	1,468	32
Bulgarian, Serbian, and Montenegrin	418	532	73	1,741	1,681	20.
Chinese	1, 721	1,375	112	3, 263	2, 873	22
Croatian and Slovenian	520	692	45	767	592	4
Cuban	912	1,476	242	1, 287	1, 287	8
Dalmatian, Bosnian, and Herzegovinian	51	75	1	467	545	9
Dutch and Flemish	3, 189	3, 156	186	1, 238	993	12
East Indian	45	50	7	91	69	
English.	50, 580	44, 206	3, 539	9, 108	6, 935	84
Finnish	689	674	39	476	560	14
French	23, 240	22, 237	1,643	1, 261	1, 277	18
German	54, 215	58, 675	3, 489	4, 352	4, 509	74
Greek	1, 068	1, 385	169	6, 659	5, 188	30
Hebrew	10, 292	10, 267	601	291	341	1
	42, 661	42, 475	3, 847	1, 432	1, 225	15
	1, 784	1, 486	144		3, 036	31
Italian (north)		7, 888	707	4, 601 22, 651	16, 968	
	5, 512	598	59		1, 201	1, 07
Japanese	682			1, 170	1, 201	8
Korean	26	52	5	31	27	
Lithuanian	329	393	22	527	439	5
Magyar	885	1,076	62	1, 030	1,063	14
Mexican	32, 378	42, 638	5, 760	2, 875	3, 158	29
Pacific Islander	3	2		0 000	1	
Polish	3, 178	3, 175	220	3, 693	2, 823	29
Portuguese	720	793	39	3, 653	2, 989	14
Rumanian	391	319	29	1, 343	1, 302	16
Russian	1, 225	938	66	887	581	5
Ruthenian (Russniak)	667	505	37	76	65	
Scandinavian (Norwegians, Danes, and		22 500		2000		
Swedes)	20, 146	19, 418	978	3, 811	4, 188	57
Scotch	27, 503	27, 298	1,861	2, 555	1, 912	22
Slovak	620	534	8	635	850	6
Spanish	588	699	82	4, 661	2, 972	25
Spanish-American	2, 349	2, 519	265	1, 322	1, 404	18
Syrian	450	488	70	420	260	1
Turkish	87	97	7	153	201	2
Welsh	1, 167	1, 414	62	81	76	
West Indian (except Cuban)	. 325	373	71	446	660	3
Other peoples	498	381	46	345	318	1
Total	294, 314	304, 488	24, 790	92, 728	76, 992	7, 57
Male	163, 252	170, 567	14, 857	70, 865	54, 989	4, 43
Female	131, 062	133, 921	9, 933	21, 863	22, 003	3, 14
Under 16 years	50, 722	47, 347	3, 654	4, 414	3, 347	37
16 to 44 years	213, 980	228, 527	18, 816	68, 403	57, 986	5, 56
45 years and over	210,000		20,020			

TABLE 3.—LAST PERMANENT RESIDENCE OF IMMIGRANT ALIENS ADMITTED TO AND FUTURE PERMANENT RESIDENCE OF EMIGRANT ALIENS DEPARTED FROM THE UNITED STATES DURING JUNE, 1926, AND DURING FISCAL YEARS 1924-25, 1925-26, BY COUNTRY

[Residence for a year or more is regarded as permanent residence]

		Immigran	t		Emigrant	
Country	Fiscal year, 1925	Fiscal year, 1926	June, 1926	Fiscal year, 1925	Fiscal year, 1926	June, 1926
AlbaniaAustria_ Belgium Bulgaria	79 899 726 140 2, 462 243 2, 444 131 480 3, 906 46, 068	158 1, 102 718 175 2, 953 210 2, 549 132 491 4, 181 50, 421	36 48 31 15 77 13 150 18 16 273 2,899	334 466 459 208 2, 723 5 562 464 1, 205 3, 646	314 487 491 88 2, 301 1 691 15 519 1, 011 3, 908	3 10 8 39: 
England Northern Ireland Scotland Wales Greece Hungary Irish Free State Italy, including Sicily and Sardinia Latvia Lithuania Luxemburg Netherlands Norway Poland Portugal, including Azores, Cape Verde,	13, 897 1, 210 12, 378 897 826 616 25, 440 6, 203 263 472 150 1, 723 5, 975 5, 341	10, 599 419 13, 661 1, 268 1, 121 906 24, 478 8, 253 298 636 127 1, 753 5, 756 7, 126	746 12 771 666 141 57 2,386 754 19 29 9 83 339 421	6, 681 212 1, 958 53 6, 574 875 921 27, 151 29 511 18 743 1, 765 3, 721	4, 921 208 1, 332 37 5, 164 871 851 19, 980 58 408 7 379 2, 087 2, 881	666 19 144 300 137 144 1, 394 16 41 198 288
and Madeira Islands Rumania Russia Spain, including Canary and Balearic	619 1, 163 1, 775	666 1, 211 1, 766	34 131 75	3, 600 1, 433 539	2, 926 1, 404 181	138 168 36
Islands. Sweden Switzerland Turkey in Europe Yugoslavia Other Europe	275 8, 391 2, 043 263 724 144	326 8, 513 1, 994 210 1, 059 326	35 322 117 26 104 38	3, 982 1, 167 423 100 2, 464 67	2, 465 1, 150 486 30 2, 342 46	193 274 76 1 241
Total, Europe	148, 366	155, 562	10, 291	75, 064	60, 040	6, 204
Armenia China India Japan Palestine Persia Syria Turkey in Asia Other Asia	13 1, 937 65 723 301 32 369 38 100	16 1, 751 93 654 250 56 429 21 143	127 8 58 35 2 50 3 15	3, 412 128 1, 212 110 25 369 40 66	43 2, 989 113 1, 208 173 27 208 126 44	234 2 81 7 1 10 16
Total, Asia	3, 578	3, 413	298	5, 411	4, 931	351
Cenada Newfoundland Mexico Cuba Other West Indies British Honduras Other Central America Brazil Other South America Other America	100, 895 1, 858 32, 964 1, 430 676 42 1, 157 534 1, 936 4	91, 019 2, 349 43, 316 2, 281 941 39 1, 335 877 2, 230 6	7, 116 314 5, 824 330 97 3 103 61 254	2, 127 453 2, 954 1, 959 2, 076 19 642 169 1, 162	2, 173 283 3, 198 1, 922 1, 917 45 521 210 1, 215	178 34 301 151 109 5 77 14 125
Total, America	141, 496	144, 393	14, 102	11, 561	11, 485	994
Egypt Other Africa Australia New Zealand Other Pacific Islands	142 270 273 143 46	214 315 376 180 35	13 42 28 10 6	19 135 344 159 35	38 88 257 134 19	1 4 17 4
Total, others	874	1, 120	99	692	536	26
Grand total, all countries	294, 314	304, 488	24, 790	92, 728	76, 992	7, 575

TABLE 4.—ALIENS ADMITTED TO THE UNITED STATES UNDER THE IMMIGRATION ACT OF 1924 DURING JUNE, 1926, AND FROM JULY 1, 1925, TO JUNE 30, 1926, BY COUNTRY OR AREA OF BIRTH

[Quota immigrant aliens are charged to the quota; nonimmigrant and nonquota immigrant aliens are not charged to the quota]

Country or area of birth	Annual quota	Admitted						
		Quota immigrant		Nonimmigrant and nonquota immigrant		Total	Grand total	
		July 1, 1925, to June 30, 1926	June, 1926	July 1, 1925, to June 30, 1926	June, 1926	during June, 1926	July 1, 1925, to June 30, 1926	
Albania Andorra Austria Belgium Bulgaria Czechoslovakia Danzig, free city of Denmark Esthonia Finland France Germany	100 100 785 1512 100 3,073 228 12,789 124 471 13,954 51,227	119 1 902 521 105 3, 159 216 2, 712 116 468 3, 718 50, 956	27 23 26 8 65 7 150 15 15 214 3,016	541 5 1, 407 1, 555 162 2, 783 39 2, 066 78 1, 293 5, 676 12, 024	78 2 110 111 21 290 5 152 5 95 471 1,253	105 2 133 137 29 355 12 302 20 110 685 4, 269	660 6 2, 309 2, 076 267 5, 942 255 4, 778 194 1, 761 9, 394 62, 980	
Great Britain and Northern Ireland: England Northern Ireland Scotland Wales Greece Hungary Iceland Irish Free State Italy Latvia Lichtenstein Lithuania Luxemburg Monaco Notherlands Norway Poland Portugal Rumania Russia San Marino Spain Sweden Switzerland Turkey in Europe Yugoslavia Other Europe	\$\\ \begin{array}{c} \begin{array}{c} \begin{array}{c} 100 & 473 & 100 & 28,567 & 13,845 & 1422 & 100 & 344 & 100 & 10,648 & 6,453 & 5,982 & 1503 & 6033 & 12,248 & 1000 & 1311 & 9,561 & 2,081 & 1000 & 671 & (4) & 671 & (4) & 671 & (4) & 671 & (4) & 671 & (4) & 673	12, 741 14, 764 1, 336 112 563 3, 807 137 12, 390 9, 57 7, 590 6, 095 6, 386 492 709 2, 057 78 160 9, 166 1, 910 1, 910 1, 917 589 240	758 34 817 62 2 13 25 4* 2,664 266 5 1 1 22 7 1 76 344 252 14 73 3 101 22 22 21 388 107 7 7 7 7 7 7 7 7 8 8 8 8 8 8 8 8 8 8 8 8 8	24, 434 512 8, 336 955 3, 030 1, 515 29 5, 147 27, 932 235 1 671 94 111 2, 319 3, 543 5, 434 2, 877 1, 462 3, 295 1, 536 3, 543 4, 319 3, 543 1, 543	1, 910 44 668 72 355 149 2 2 530 530 2, 803 51 1 58 12 229 356 492 269 134 278 644 270 192 121 377 15	2, 668 78 1, 485 1, 485 368 174 6 3, 184 3, 069 56 2 2 80 19 1 305 700 744 283 207 379 222 665 638 299 128 429 16	37, 175 1, 453 23, 100 2, 2919 3, 142 2, 078 32, 737 31, 737 31, 739 31, 739 31, 739 31, 739 31, 739 31, 739 31, 739 31, 739 31, 740 31, 741 4, 243 4, 243 4, 200 3, 304 4, 243 4, 243 4, 244 4, 444 417	
Total Europe	1 161, 422	155, 118	9, 673	134, 471	12, 625	22, 298	289, 589	
Afghanistan Arabia Armenia	100 100 124 100	7 57	4	2 3 146	9	13	10 208	
Bhutan China India Iraq (Mesopotamia) Japan Muscat Nepal	100 100 100 100 100 100	119 98 41 20	3 3 12 1	8, 766 547 22 5, 897 1	1,375 57 3 491	1, 378 60 15 492	8, 885 645 63 5, 917	
Persia Siam	100 100 100 100	113 107 83 30	17 7 5 6	266 106 22 950 392	29 4 90 43	46 11 95 49	379 213 22 1, 033 425	
Turkey in AsiaOther Asia	(1)	260	16	228	20	36	48	
Total Asia	1, 424	935	74	17, 349	2, 122	2, 196	18, 28	
	1	1	1		1	1		

<sup>&</sup>lt;sup>1</sup> Annual quota for colonies, dependencies, or protectorates in Other Europe, Other Asia, Other Africa, Other Pacific, and in America, is included with the annual quota for the European country to which they belong. Quota for Turkey in Asia is included with that for Turkey in Europe.

TABLE 4.—ALIENS ADMITTED TO THE UNITED STATES UNDER THE IMMIGRATION ACT OF 1924 DURING JUNE, 1926, AND FROM JULY 1, 1925, TO JUNE 30, 1926, BY COUNTRY OR AREA OF BIRTH—Continued

Country or area of birth	Annual quota	Admitted						
		Quota immigrant		Nonimmigrant and nonquota immigrant		Total	Grand total	
		July 1, 1925, to June 30, 1926	June, 1926	July 1, 1925, to June 30, 1926	June, 1926	during June, 1926	July 1, 1925, to June 30, 1926	
Cameroon (British)	100			3	2	2		
Egypt	100 100	98	7	148	13	20	246	
EthiopiaLiberia	100	1		3			4	
Morocco.	100 100	6 19	4 2	9 27	8	10	11	
Ruanda and Urundi South Africa, Union of	100 100	140	14	011				
South West Africa	100	140	14	311	28	42	451	
Tanganyika	100 100							
Togoland (British) Togoland (French)	100			1				
Other Africa	(1)	65	7	190	84	91	25	
Total Africa	1, 200	330	34	695	135	169	1, 025	
Australia	121	153	11	2,877	198	209	3, 030	
Nauru New Zealand	100 100	109	10	1, 044	101	111	1, 153	
New Guinea	100			1,011	101	111	1, 106	
Samoa Yap	100	1	1	2 16	1 2	2 2	3	
Other Pacific	(1)	22	2	173	26	28	16 195	
Total Pacific	621	285	24	4, 112	328	352	4, 397	
Canada				91, 894	7, 556	7, 556	91, 894	
Newfoundland				4, 089	477	477	4, 089	
Mexico Cuba				60, 620 9, 855	7, 162 1, 288	7, 162 1, 288	60, 620 9, 855	
Dominican Republic				933	141	141	932	
Haiti British West Indies		1 604	34	207	42	42	207	
Dutch West Indies		1 17	9.4	4,309	486 10	520 10	4, 913 148	
French West Indies		1 27	2	52	8	10	79	
British Honduras		1 40	2	101	4	6	141	
Canal Zone Other Central America				16 3, 173	2 348	348	3, 173	
Deceil								
Brazil British Guiana		1 58	1	1, 244 151	123 18	123 19	1, 244 209	
Dutch Guiana		14	2	41	3	5	45	
French Guiana Other South America		(1)		5, 196	595	595	5, 196	
Greenland Miquelon and St. Pierre		(1) 1 14		6 28			6 42	
Total America		764	41	182, 047	18, 263	18, 304	182, 811	
Grand total, all countries	164, 667	<sup>2</sup> 157, 432						
Grand total, all countries	104, 007	107, 432	9, 846	338, 674	33, 473	43, 319	496, 106	

<sup>&</sup>lt;sup>1</sup> Annual quota for colonies, dependencies, or protectorates in Other Europe, Other Asia, Other Africa, Other Pacific, and in America, is included with the annual quota for the European country to which they belong. Quota for Turkey in Asia is included with that for Turkey in Europe.

<sup>2</sup> Includes aliens to whom visas were issued during the latter part of the fiscal year ended June 30, 1925, and charged to the quota for that year. (Nationality for quota purposes does not always coincide with actual nationality. See section 12 of the immigration act of 1924.)

TABLE 5.—ALIENS ADMITTED TO THE UNITED STATES UNDER THE IMMIGRATION ACT OF 1924, DURING JUNE, 1926, AND FROM JULY 1, 1925, TO JUNE 30, 1926, BY SPECIFIED CLASSES

[The number of immigrants appearing in this table and in Table 4 is not comparable with the number of statistical immigrant aliens shown in the other tables, by races, etc.]

Class	Fiscal year, 1925	Fiscal year, 1926	June, 1926
Nonimmigrants			
Government officials, their families, attendants, servants, and employees.	1,950	5, 666	582
Temporary visitors for— Business.———————————————————————————————————	14, 461 20, 865 22, 697 230	19, 951 36, 663 25, 574 904	2, 191 5, 471 2, 687 107
Total	60, 203	88, 758	11,038
Nonquota immigrants  Wives of United States citizens Children of United States citizens Residents of the United States returning from a visit abroad. Natives of Canada, Newfoundland, Mexico, Cuba, Haiti, Dominican Republic, Canal Zone, or an independent country of Central or South America. Their wives Their children Ministers of religious denominations. Wives of ministers. Children of ministers. Professors of colleges, academies, seminaries, or universities. Wives of professors Students. Veterans of the World War. Wives of veterans. Children of veterans.		6, 810 4, 344 83, 754 1150, 299 965 190 664 235 436 6 151 39 26 1, 920 72 3 3 8	649 449 6,180 114,758 90 53 17 33 6 3 3 92 72
Total	250, 912	249, 916	22, 435
Quota immigrants (charged to quota)	145, 971 1, 349	157, 432	9,846
Grand total admitted	458, 435	496, 106	43, 319

<sup>&</sup>lt;sup>1</sup> Does not include aliens born in nonquota countries who were admitted as Government officials, visitors, transits, returning residents, etc.

# World Migration Congress 1

THE World Migration Congress called by the International Federation of Trade-Unions and the Labor and Socialist International met in London June 22 to 25, 1926. The 120 delegates in attendance were from the following countries and international trade secretariats: Australia, Austria, Belgium, Canada, Czechoslovakia, Denmark, Finland, France, Germany, Georgia, Great Britain, Holland, Hungary, India, Italy, Luxemburg, Mexico, New Zealand, Palestine, Poland, Russia, Spain, Sweden, and Yugoslavia. Among the recommendations made in five resolutions of the

Congress were the following:

That every country should have a government migration office in which the trade-unions should be adequately represented. That an international migration office with sufficient trade-union representation should be established "within the framework of the International"

<sup>&</sup>lt;sup>1</sup> International Federation of Trade Unions. Press Reports, No. 24, Amsterdam, July 1, 1926, pp. 3-6.

Labor Office" to (a) formulate international recommendations and conventions regarding migration, and (b) provide full and dependable data on migration.

That all emigration propaganda by private transport undertakings be strictly prohibited and that all private migration agencies be

abolished.

That the function of State government migration offices shall be "to prepare and secure the passing of legislation providing for the abolition of all private migration agencies, and also to provide for the supply of full and reliable information concerning wages, etc., in the countries of immigration, the medical examination of emigrants before departure, the provision of good traveling conditions, the reception of the emigrants in the countries of immigration and their conveyance to the places where they will live and work."

That the legislation of every country must extend to every immigrant worker, male or female, the same rights accorded national

workers concerning wages and conditions of labor.

That emigration agents and their auxiliaries must be made accountable "for all prejudice caused to emigrants through the violation of existing regulations or interstate agreements."

That passport and visa charges for emigrants be eliminated.

That all labor bodies cooperate for the purpose of securing for immigrant workers full equality of treatment under the various forms of social insurance created by law in the country of immigration.

That the efforts of the International Labor Office to standardize social legislation should be expedited and extended to all forms of

social insurance.

That the International Federation of Trade-Unions take all neces-

sary measures to organize immigrant workers.

That all restrictions on the right of certain classes of workers to work be abrogated where such restrictions result in driving these workers from their own country.

That passports should be provided by some international body for emigrant workers who are, for political reasons, unable to establish

their nationality.

### FACTORY INSPECTION

#### Tennessee

THE number of Tennessee establishments, including manufacturing plants, retail and wholesale stores, shops, dairies, laundries, etc., inspected in 1925 was 1,985, according to the third annual report of the department of labor of that State. They employed 110,191 persons (71,172 males and 39,019 females) over 16 years of age and 473

persons (210 males and 263 females) under that age.

The conditions in nearly all of the factories of Tennessee have wonderfully improved in the last few years, according to the report. "Practically all hazardous places and machinery in the different factories and workshops have been guarded, lockers installed, shower baths and toilets provided, and floors swept daily." The policy of the division of factories and workshops is to bring about the necessary improvements through cooperation with the manufacturers so far as possible. This procedure has resulted successfully in most cases.

A special bulletin on industrial safety standards has been published and distributed by this division. Various other pamphlets dealing

with safety and sanitation are distributed on request.

There were several violations of the woman and child labor laws in 1925.

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# WHAT STATE LABOR BUREAUS ARE DOING

A MONG the activities of State labor bureaus, the following, reported either directly by the bureaus themselves or through the medium of their printed reports, are noted in the present issue of the Labor Review:

California.—Recent statistics of employment and pay roll in various

industries, page 136.

Illinois.—Changes in employment and earnings, page 138.

Iowa.—Data on number of persons employed in specified indus-

tries, page 140.

Massachusetts.—Women's wages in the manufacture of jewelry, page 32; and recent statistics of changes in volume of employment in various industries, page 141.

New York.—Relative earnings and employment of women in factories, page 33; report of operations under the State workmen's compensation act, page 49; and changes in number of employees and amounts paid in wages in certain industries in the State, page 142.

Oklahoma. - Data on changes in volume of employment and pay-

roll totals, in industries in the State, page 143.

Tennessee.—Wages in 1925, page 116; and factory inspection, page 203.

Wisconsin.—Volume of employment in industries in the State,

page 144.

Wyoming.—Report of operations under the State workmen's compensation act, page 51.

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Report of the general executive board to the seventeenth convention, Boston, May, 1924.

The section on the International Union Bank (pp. 142-145) includes brief history. For resolution of convention appealing for wider support by membership see Proceedings, pp. 118, 233.

<sup>&</sup>lt;sup>1</sup> Cooperating unions: International Fur Workers' Union, United Cloth Hat and Cap Makers' Union, and International Pocketbook Workers' Union.

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<sup>&</sup>lt;sup>2</sup> Under the joint control of the New York State Federation of Labor, the Central Trades and Labor Council of Greater New York, and the New York Building Trades Council.

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- NEW YORK.—Department of Labor. Special bulletin No. 142: Compensation awards, year ended June 30, 1924; compensated accidents, July, 1914, to June, 1922. Albany, 1926. 189 pp., charts.
  - Data from this report are given on page 49 of the present issue.

- Pennsylvania.—Department of Labor and Industry. Decisions of the courts of Pennsylvania in workmen's compensation cases during the year 1924. Harrisburg, 1925. 310 pp.
- A reproduction of the decisions of the supreme, superior, and common pleas courts of the State during the year on cases under the Pennsylvania compensation act. An index of titles and a subject index are included.
- Tennessee.—Department of Labor. Third annual report [1925]. Nashville, 1925. 104 pp.
  - Statistics from this publication are given on pages 116 and 203 of this issue.
- Wyoming.—Workmen's Compensation Department. Tenth report, January 1 to December 31, 1925; Third report, Wyoming Peace Officers' Indemnity Fund, January 1 to December 31, 1925. Cheyenne, 1926. 164 pp.
  - A summary of this report is to be found on page 51 of this issue.
- United States.—Congress. House. Committee on the District of Columbia.

  Report No. 859: Workmen's accident compensation for the District of Columbia.

  Washington, 1926. 7 pp. 69th Cong., 1st sess.
- ————— Senate. Committee on Immigration. Deportation of certain alien seamen. Hearings on S. 3574, March 25 and April 15, 1926. Washington, 1926. 62 pp. 69th Cong., 1st sess.
- — Committee on the Judiciary. Compensation for employees in certain maritime employments. Hearings on S. 3170, March 16 and April 2 1926. Washington, 1926. 104 pp. 69th Cong., 1st sess.
- Department of Commerce. Bureau of Mines. Bulletin 263: Quarry accidents in the United States during the calendar year 1924, by William W. Adams. Washington, 1926. v, 76 pp.
  - This bulletin is reviewed on page 38 of this issue.
- —— Department of Labor. Bureau of Labor Statistics. Bulletin No. 403: Labor legislation of 1925. Washington, 1926. iv, 92 pp.
- - A brief review of the findings of this study is given on page 37 of this issue.

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UNITED STATES.—Department of Labor. Bureau of Labor Statistics. Bulletin No. 413: Wages and hours of labor in the lumber industry in the United States, 1925. Washington, 1926. iii, 88 pp.

Advance data from this bulletin, on wages and hours of labor in sawmills, were published in the Labor Review for November, 1925 (pp. 71-75).

# Official—Foreign Countries

- Australia.—Court of Conciliation and Arbitration. Commonwealth arbitration reports, vol. 21: A report of cases decided and awards made, including conferences convened by the president and deputy presidents, from January 1, 1925, to July 31, 1925. [Melbourne, 1925?] xxiii, 1055 pp.
- (South Australia).—[Statistical Department.] Statistical register of the State of South Australia for the year 1924–25. Part V: Production. Section 1.—Report on agricultural, livestock, and manufactory statistics, year 1924–25. Adelaide, 1926. 30 pp.

Includes data on number of persons employed and aggregate amounts paid in wages and salaries.

Austria.—Kammer für Arbeiter und Angestellte in Wien. Wirtschaftsstatistisches Jahrbuch, 1925. Vienna, Arbeit und Wirtschaft, 1926. 348 pp.

The second issue of an economic-statistical yearbook published by the Vienna Chamber of Labor and covering the year 1925 and preceding years. The present issue and the preceding one have as their principal object the provision of a reference book for the economic training of workers and salaried employees and the facilitating and promoting of the cooperation of these in the various fields of public life.

The volume contains a general economic survey of the world and discusses in text and table form Austrian statistics on population, State finances, social insurance, the labor market, wages and salaries, strikes, wholesale and retail prices, cost of living, household budgets, commerce, transportation and communication, agriculture, mining, and the various branches of industry.

Belgium.—Caisse Générale d'Épargne et de Retraite. Compte rendu des opérations et de la situation, année 1925. [Brussels, 1926?] 102 pp.

The report of the operations of the General Savings and Retirement Fund of Belgium for the year 1925.

Bulgaria.—Direction Générale de la Statistique. Résultats généraux du recensement de la population dans le royaume de Bulgarie au 31 Décembre 1920. Tome III—Statistique des professions (d'après la profession principale). Sofia, 1926. vii, 340 pp.

Results of the official census of the professions.

- Statistique des coopératives dans le royaume de Bulgarie pendant l'année 1921. Sofia, 1926. 108 pp.
- ———— Statistique des coopératives dans le royaume de Bulgarie pendant l'année 1922. Sofia, 1926. 119 pp.

Certain data compiled from these reports are given on page 57 of this issue.

CANADA (ALBERTA).—Workmen's Compensation Board. Seventh annual report, for the year ended December 31, 1924. Edmonton, 1925. 44 pp.

This report is reviewed briefly on page 52 of this issue.

Germany.—Reichsarbeitsministerium. Reichsarbeitsverwaltung. 33. Sonderheft zum Reichsarbeitsblatt: Regierungsentwurf eines Arbeitsgerichtsgesetzes nebst amtlicher Begründung. Berlin, 1925. 123 pp.

The draft of a Government bill on labor courts with explanatory memorandum.

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Germany.—Reichsarbeitsministerium. Reichsarbeitsverwaltung. 34. Sonderheft zum Reichsarbeitsblatt: Regierungsentwurf eines Gesetzes über Arbeitslosenversicherung nebst amtlicher Begründung. Berlin, 1926. 302 pp.

The draft of a Government bill on unemployment insurance with explanatory memorandum.

the development of collective bargaining in Germany during 1924. The contents of this bulletin are summarized on page 190 in the present issue.

— Reichsversicherungsamt. Amtliche Nachrichten, 1925. Beiheft: Jahresberichte der gewerblichen Berufsgenossenschaften über Unfallverhütung für 1923. Berlin, 1925. iv, 299 pp.

The annual report of the German trade accident insurance associations, the carriers of industrial accident insurance, on accident prevention during 1923.

— (Baden).—Gewerbeaufsichtsamt. Die wirtschaftlichen, sozialen und gesundheitlichen Verhältnisse der Zigarrenarbeiter in Baden. Karlsruhe, 1925. 271 pp.

A special report of the factory inspection service of Baden on the economic, social, and hygienic conditions of cigar makers in Baden. The report was made on order of the Diet of the State of Baden in view of the importance of the cigar manufacturing industry (in 1924 there were 1,143 cigar factories operating in the State, employing 40,218 workers), the crisis in the industry, the low wages earned by the cigar workers, and the extensive unemployment prevailing among them.

- Great Britain.—Mines Department. Fourth annual report of the Secretary for Mines for the year ended December 31, 1924, and the annual report of the chief inspector of mines for the same period. London, 1925. 197 pp., charts.
  - Some data from this report are given on page 46 of this issue.
- ———— Regulations and orders relating to mines under the coal mines act, 1911. 1925 edition (including orders up to December 31, 1925). London, 1926. vi, 189 pp.
- Ministry of Labor. Report of an investigation into the rates of wages, the hours of employment and the degree of industrial organization in the wholesale and retail meat distributive trade. London, 1926. 37 pp.

Gives data covering approximately 20 per cent of the total workers in the trade. Details are given by age and sex of worker, and by locality, but not by occupation.

- India (Bengal).—[Registrar of Cooperative Societies.] Annual report on the working of cooperative societies in the Presidency of Bengal, for the year 1924—25. Calcutta, 1926. [Various paging.]
- —— (Ceylon).—Department of Census and Statistics. The Ceylon blue book, 1925. Colombo, 1926. [Various paging.]

A statistical summary dealing with the ecomomic, financial, social, and vital data of the country for the year 1925, including wages and retail prices.

- International Labor Office.—Studies and reports, series P (seamen), No. 1: Seamen's articles of agreement. Collection of laws and regulations on the engagement, dismissal, repatriation, and discipline of seamen. Geneva, 1926. xi, 890 pp.
- Sweden.—[Socialdepartementet.] Socialstyrelsen. Kooperativ verksamhet i Sverige år 1924. Stockholm, 1926. [Various paging.]

Data from this report are given on page 60 of this issue.

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SWITZERLAND.—Office Fédéral du Travail. Rapport provisoire sur la question de la céruse. Berne, 1925. 34, xvi pp.

A preliminary report by the Swiss Federal Labor Bureau on the use of white lead in painting. The report shows what has been done toward limiting the use of white lead, by decrees and ordinances, in the different cities and cantons, and gives the results of various studies of the extent of lead poisoning among painters. The appendix contains the text of the international convention concerning the use of white lead in painting and data regarding lead poisoning cases for the years 1920 to 1923.

Union of South Africa.—Economic and Wage Commission (1925). Report. Cape Town, 1926. vi, 392 pp.

A short summary of this report appears on page 29 of this issue.

## Unofficial

Abbott, Edith. Historical aspects of the immigration problem: Select documents. Chicago, University of Chicago Press, 1926. xx, 881 pp.

Adams, Romanzo, and others. The peoples of Hawaii. Honolulu, Institute of Pacific Relations, 1925. 42 pp.

The purpose of this statistical study is to indicate the general character of the social trends proceeding from the multiplication of interracial relations in Hawaiian life. It is suggested that some of the experiments in Hawaii may be of importance in connection with the broader problems of the Pacific region.

American Federation of Musicians. Official proceedings, thirty-first annual convention, Salt Lake City, Utah, May 10 to 15, 1926. Newark, N. J., 1926. 251 pp.

One of the interesting statements in the president's report to this meeting was that the phonograph and picture shows had been advantageous to the musical profession. This official also was of the opinion that radio in broadening the knowledge and love of music among the people would eventually increase the employment of musicians.

AMERICANA ANNUAL, 1926. New York, Americana Corporation, 1926. 852 pp.

The fourth issue of this annual reference book. Contains a section on labor conditions in the United States in 1925.

Boody, Bertha M. A psychological study of immigrant children at Ellis Island.
Baltimore, Williams & Wilkins Co., 1926. 163 pp. Mental measurement
monographs, No. 3.

Bowley, A. L., and Hogg, Margaret H. Has poverty diminished? London, P. S. King & Son (Ltd.), 1925. viii, 236 pp.

This study of primary poverty is reviewed on page 21 of this issue.

Brizon, Pierre. Histoire du travail et des travailleurs. Brussels, Édition de l'Églantine, 1926. 595 pp. 4th edition.

A history of labor in France from the eleventh century through the first years of the twentieth. The development of industry, working conditions at different periods, and the evolution of the trade-union movement are described. Other subjects dealt with include wages, strikes, women and children in industry, cooperation, and labor legislation.

Burns, E. M. Wages and the State. London, P. S. King & Son (Ltd.), 1926. ix, 443 pp.

A study of the various systems of State regulation of wages, with an appraisal of their success.

Canadian Council on Child Welfare. Proceedings and papers, fifth annual conference, held at Ottawa, September 28-October 1, 1925. Ottawa, 1926. 290

Discussion of various problems centering in the development, physically, mentally, and morally, of the children of the Dominion. Includes a brief résumé of the child labor laws of the Dominion and of the various Provinces.

CHAUVEAU, C. Les assurances sociales. Paris, Payot, 1926. 283 pp.

An exposition of the social insurance law which was passed by the French Chamber of Deputies in 1924 and of the amendments proposed by the Senate.

L'Enseignement de la coopération en Angleterre et en France. Paris, Les Presses Universitaires de France, 1925. 156 pp.

A history of the development of the teaching of cooperation in England and France written with the twofold purpose of showing the successful work being done in England and of pointing out the tardiness of French cooperation in this

COMMISSION SYNDICALE DE BELGIQUE. Rapport annuel pour 1925. Brussels, Édition L'Églantine, 1926. 168 pp.

This report of the Trade-Union Committee of Belgium for the year 1925 contains an account of the twenty-fourth trade-union congress and of the activities of the various unions during the year. It also contains a statement of the finances and membership of the affiliated organizations.

Confédération Générale du Travail. Historique des fédérations nationales des unions departementales—Leur administration, leur action, leurs militants. Paris, 211 Rue Lafayette, 1925. 699 pp., illustrated.

A review of the organization and work of the French Confederation of Labor during the past 30 years.

Conférence internationale des Organisations Privées pour la Protection DES MIGRANTS. L'inspection des émigrants à bord des navires. Rapport du comité et résolution de la conférence (10-11 Décembre 1925). Geneva, 1926.

The report not only points out the importance of further protecting migrants, particularly women and children, during their sea voyage, but also emphasizes the need for simplifying and coordinating the great variety of systems already established for such protection.

Czarnomski, Francis B. The Polish handbook, 1925. London, Eyre & Spottiswoode (Ltd.), 1925. xxxv, 704 pp., map.

One section of this volume deals with labor and social welfare and includes such subjects as factory inspection, wages and hours, woman and child labor, vacations with pay, trade-union organization, social insurance, cost of living, prices, housing, and cooperation.

Trade Union Mission to United States. Full story of the tour and members' reports. London, 1926. 111 pp.

Data from this report appear on page 19 of this issue.

Eckert, J., and others. Handbuch der Reichsversicherung, 1925–26. Berlin, Reimar Hobbing, 1926. 807 pp.

The first edition of a yearbook on German social insurance in all its branches. The present volume covers the year 1925 and preceding years. It contains all the laws, decrees, orders, etc., on social insurance issued during the year under review, the financial statistics as well as morbidity, accident, and mortality statistics of all the insurance branches, and a directory of the Federal, State, and provincial authorities, insurance authorities, insurance carriers and their federations, employers' and workers' central organizations, and welfare associations.

Egli, Karl. Die Unfälle beim chemischen Arbeiten. Stark vermehrt und umgearbeitet von Dr. Ernst Rüst. Leipzig, Rascher & Cie., 1925. vii, 261 pp.

A handbook on accidents in chemical work based on 1,600 actual accidents. The accidents are arranged under four groups: (1) Injuries caused by machinery, tools, materials, etc., (2) burns and corrosions, (3) poisonings, and (4) explosions. The book is intended to be of service in preventing accidents to all chemical workers, but chiefly to research chemists, teachers of chemistry, and laboratory workers.

Fallow, Val. Les allocations familiales en Belgique et en France. Louvain, E. Desbarax, 1926. 238 pp.

Among the subjects of discussion are the relations of family allowances to "the absolute family wage" and to "the relative family wage." The author is strongly in favor of the extension of the family-allowance system.

Gemähling, Paul. Statistiques choisies et annotées. Paris, Société Anonyme du Recueil Sirey, 1926. 150 pp.

A collection of selected and annotated statistics, including tables showing production, prices, and wages in different countries and at different periods.

Hammond, J. L., and Barbara. The rise of modern industry. London, Methuen & Co. (Ltd.), 1925. xi, 280 pp.

A study of the industrial revolution with particular reference to its effects upon the social and cultural life of the working people.

Hexner, Erwin. Das Dienstvertragsrecht in der Slowakei und Karpathorussland. Brünn, Rudolf M. Rohrer, 1925. x, 234 pp.

A compilation of all the laws, decrees, etc., relating to the contract of employment that are in force in Slovakia and Russinia, with introduction and commentaries.

Iснок, G. La protection sociale de la santé. Paris, Marcel Rivière, 1925. 420 pp. A general survey of the different branches of social medicine in France as they relate to the domain of labor, to family life, and to the health of women and children.

Institut Lannelongue d'Hygiène sociale. L'orientation professionnelle—contribution à l'étude des métiers: L'ouvrier fourreur, par Gabrielle Letellier. Paris, Librairie Félix Alcan, 1926. 51 pp.

This is the first of a series of monographs to be published on occupational placement in different industries in France all of which are to follow the same general plan. The present study relates to the fur trade and includes a general summary of the nature of the trade and physical conditions of employment, and a discussion of the physical and intellectual requirements of the job and of the educational qualifications considered indispensable for apprenticeship. Conditions of apprenticeship are given and the probability of employment after apprenticeship is discussed.

METROPOLITAN LIFE INSURANCE Co. Industrial health series No. 1: First aid rooms in small plants. New York [1926?]. 12 pp., illustrated.

This is the first of a series of bulletins to be issued by this company dealing with the health of the worker. It is designed to furnish information for the small plant interested in installing a first-aid station, on the points to be considered in instituting such a service. The information is based on recent recommendations of authorities on the subject, regulations of State departments of labor, safety associations, and on the experience of individual plants. The points to be considered, as outlined in the bulletin, are the type of service to be rendered; the person to be in charge, whether a trained nurse or a first-aid attendant; the loca-

tion of the first-aid room; the kind of equipment; and the kind of records to be kept. The States having laws in force covering first-aid rooms in factories or regulating the type or amount of first-aid equipment are listed.

MIXER, KNOWLTON. Porto Rico: History and conditions, social, economic and political. New York, Macmillan Co., 1926. xx, 329 pp., illus.

Despite the striking progress of Porto Rico as a United States possession, the solution of the basic problem of the island—the regeneration of the farm laborer—the author declares has only just begun. He states, however, that "all political parties have accepted this problem as their responsibility."

Mounier, André. A perçu sur la législation algérienne du travail. Algiers, Jules Carbonel, 1925. 32 pp.

A summary of French labor legislation which is applicable in Algeria.

Najjar, M. Étude sur l'évolution des salaires dans ces dix dernières années. Montpellier, Imprimerie Causse, Graille et Castelnau, 1925. 96 pp.

A study of the wage question in France during the past 10 years as affected by legislative and trade-union action.

Nathan, Maud. The story of an epoch-making movement. New York, Doubleday, Page & Co., 1926. xx, 245 pp., illustrated.

The history of the organization and development of the Consumer's League, especially its work in improving sanitary and working conditions in mercantile and other establishments. The author is honorary president of the New York Consumer's League and vice president of the National Consumers' League.

NATIONAL FARMERS' UNION. The year book of the National Farmers' Union for 1926. London, 45 Bedford Square, W. C. 1, 1926. 352 pp.

A résumé of the year's activities, as far as they affected farmers. The minimum wage rates for adult agricultural workers are shown to range from 28s. (shilling at par=24.3 cents) for a 48-hour week in winter in Norfolk and Suffolk to 42s. for a 60-hour week all the year in eastern Lancashire. The average as of December, 1925, was 31s. 4d. for 49 hours. This, the union estimates, is an increase of approximately 105 per cent over the pre-war cost of labor.

NATIONAL INDUSTRIAL CONFERENCE BOARD. Medical care of industrial workers New York, 247 Park Avenue, 1926. ix, 112 pp.

This work gives a general survey and summary of the organization, of the methods, and of the accomplishments of industrial medical departments. The study contains information obtained from 501 establishments employing more than a million workers and includes data regarding staff and equipment, physical examination of employees, industrial accidents and their treatment, the diagnosis and treatment of illness, systems of keeping medical records, and a general analysis of the work of the medical departments.

—— The agricultural problem in the United States. New York, 247 Park Avenue, 1926. xiv, 157 pp., charts.

This volume seeks to analyze the main features of the agricultural situation in the United States from the economic viewpoint. Includes sections on labor and labor costs.

—— The cost of living in the United States, 1914–1926. New York, 247 Park Avenue, 1926. xviii, 233 pp., charts.

This book constitutes a revision of the study published in 1925 with a similar title. It presents and analyzes the various cost-of-living index numbers over a series of years, and compares the methods used in their preparation.

NATIONAL SAFETY COUNCIL. Chemical and Rubber Sections. Committee on Benzol. Final report. [Chicago] National Bureau of Casualty and Surety Underwriters, 1926. 128 pp.

A review of this report is given on page 39 of this issue.

Pease, Edward R. The history of the Fabian Society. London, Fabian Society, 25 Tothill Street, Westminster, S. W. 1, 1925. 306 pp., illustrated. Second edition, with supplementary chapter.

Of interest to labor is the tracing of the society's position and researches on minimum wage, unemployment, methods of the control of industry, social problems, housing, etc.

Piriou, Henri. Contribution à l'étude des maladies professionelles. Loi du 25 Octobre 1919. Paris, Adrien Muzard, 1924. iii, 236 pp.

The writer discusses the causes of occupational diseases, industrial disease legislation in foreign countries and the state of French jurisprudence, and analyzes the law of October 25, 1919, which provides for compensation for certain forms of lead and mercury poisoning. The appendixes contain the text of the law, and of the various decrees issued since its enactment, the list of industries covered by the law, etc. There is also a bibliography.

Rees, J. Morgan. Unemployment as an international problem. London, P. S. King & Son (Ltd.), 1926. xv, 188 pp., chart.

Sée, Henri. Quelques aperçus sur la condition de la classe ouvrière et sur le mouvement ouvrier en France de 1815 à 1848. Paris, Marcel Rivière [1925?]. 31 pp.

A brief study of working-class conditions and the labor movement in France from 1815 to 1848.

Seidel, Richard. Die Gewerkschaften nach dem Kriege. Berlin, J. H. W. Dietz Nachfolger, 1925. viii, 248 pp.

This volume is a sequel to a volume entitled "The trade-unions, their development and their struggle (Die Gewerkschaften ihre Entwicklung und Kämpfe)." The present volume deals with the postwar problems of the German trade-union movement. Among the problems discussed are: The labor and social policy of the Government, the employers and the trade-unions, collective bargaining, works councils, relations of trade-unions and works councils, concentration of organization, the industrial union versus crafts union, education work, the trade-unions and the Social Democratic Party, international relations, and the trade-union movement of salaried private and public employees.

Shipbuilding Employers' Federation and Shippard Trade-unions. Report of joint inquiry into foreign competition and conditions in the shipbuilding industry. London, 1926. 53 pp.

This study is briefly reviewed on page 25 of this issue.

Social Institute of the Czechoslovak Republic. Social policy in the Czechoslovak Republic. Prague, 1924. 261 pp.

This publication was written on the occasion of the International Congress on Social Policy at Prague with the object of providing foreign delegates to the congress with concise and general information concerning the previous course and present tendencies of Czechoslovak social policy. The booklet concentrates its information mainly on questions that were to be discussed by the congress, such as the eight-hour day and its practical results, the democratization of industry, workers' councils and committees, workers' leisure time, unemployment, emigration, social insurance, land reform, and trade-unions. It also describes the organization and activities of the social institute. A bibliography of Czechoslovak socio-political laws and of books containing comments on these laws concludes the volume.

Union suisse des Paysans. Secrétariat des Paysans suisses. Publication No. 81: L'Utilisation coopérative du lait en Suisse—resultats de l'enquête faite en 1924. Brugg, 1925. 147 pp.

Results of an inquiry, made in 1924 and covering the year 1922-23, to determine the position and extent of the cooperative utilization of milk and its prod-

ucts. The inquiry covered 3,571 societies controlling the product of 548,700 cows, or 70 per cent of the total in the country. Of these societies, 1,362 market their milk directly to the consumer and 2,209 sell it to cheese factories, manufacturers, dairies, etc.

Universität Leipzig. Institut für Arbeitsrecht. Schriften, 11. Heft: Die Grundformen des Arbeitsvertrags und der Anstellungsvertrag, von Arthur Nikisch. Berlin, Reimar Hobbing, 1926. 206 pp.

A monograph on the laws governing the main forms of the labor contract and the contract of employment.

Valdour, Jacques. "Le Faubourg." Paris, Éditions Spes, 1925. viii, 234 pp. A study of the living and working conditions of workers in a section of Paris which is entirely given over to the furniture industry, and to the making of bronze and gold and silver or other art objects.

Veiligheidsmuseum. Jaarverslag, 1925. Amsterdam [1926?]. 49 pp., illustrated.

The annual report for the year 1925 of the Amsterdam Safety Museum, an institute subsidized by the State and the commune of Amsterdam and supported by annual contributions of employers' and workers' organizations, industrial and commercial establishments, and private donations.

Vibart, Hugh H. R. Family allowances in practice. London, P. S. King & Son (Ltd.), 1926. x, 237 pp.

A study of the reactions and problems arising from the development of family-allowance systems in Belgium, France, Germany, and Holland.

The author holds that the problem of what labor's share should be in the total product of industry involves the consideration of the output capacity of the industry, of the matter of foreign competition, and of capital's rights. On the other hand, the problem of how labor's share when finally determined upon shall be distributed among the workers—skilled and unskilled, young and adult, married and unmarried—is more a question "of expediency, social purpose, and productive efficiency." Emphasis on the distinction between these two problems, the author thinks, "will draw attention to the need of precision in establishing the exact standard of living to be aimed at." According to him, the family-allowance system is no panacea for wage evils, but does seem to suggest a way by which it might be possible, without undue strain on industry, to enable wage earners charged with the rearing of the rising generation "to live at a higher and, from a national standpoint, a more desirable standard."

